



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1148405  
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: \_\_\_\_\_



1148405

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

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

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

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

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

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used  |                   |                           |                   |               |                |              |                            |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. |                   |                           |                   |               |                |              |                            |
| Purpose of String   | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |

| ADDITIONAL CEMENTING / SQUEEZE RECORD   |                  |                |              |                            |
|---|------------------|----------------|--------------|----------------------------|
| Purpose:                                | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate      |                  |                |              |                            |
| <input type="checkbox"/> Protect Casing |                  |                |              |                            |
| <input type="checkbox"/> Plug Back TD   |                  |                |              |                            |
| <input type="checkbox"/> Plug Off Zone  |                  |                |              |                            |

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

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

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

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

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

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

|  |   |   |
|--|---|---|
| <b>DISPOSITION OF GAS:</b><br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | <b>METHOD OF COMPLETION:</b><br><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____<br><i>(Submit ACO-4)</i> | <b>PRODUCTION INTERVAL:</b><br>_____<br>_____ |
|--|---|---|

|           |  |
|-----------|--|
| Form      | ACO1 - Well Completion                   |
| Operator  | SandRidge Exploration and Production LLC |
| Well Name | 4J Ranch 3408 2-33H                      |
| Doc ID    | 1148405                                  |

All Electric Logs Run

|             |
|-------------|
|             |
| Porosity    |
| Mud Log     |
| Boresight   |
| Prizm Log   |
| Resistivity |

|           |  |
|-----------|--|
| Form      | ACO1 - Well Completion                   |
| Operator  | SandRidge Exploration and Production LLC |
| Well Name | 4J Ranch 3408 2-33H                      |
| Doc ID    | 1148405                                  |

#### Perforations

| Shots Per Foot | Perforation Record | Material Record   | Depth |
|----------------|--------------------|---|-------|
| 5              | 9070-9312          | 1500 gals 15% HCL Acid, 6914 bbls Fresh Slickwater, Running TLTR 7096 bbls  |       |
| 5              | 8732-8990          | 1500 gals 15% HCL Acid, 6327 bbls Fresh Slickwater, Running TLTR 13489 bbls |       |
| 5              | 8378-8656          | 1500 gals 15% HCL Acid, 6507 bbls Fresh Slickwater, Running TLTR 20088 bbls |       |
| 5              | 8070-8296          | 1500 gals 15% HCL Acid, 6392 bbls Fresh Slickwater, Running TLTR 26360 bbls |       |
| 5              | 7700-7966          | 1500 gals 15% HCL Acid, 6480 bbls Fresh Slickwater, Running TLTR 32814 bbls |       |
| 5              | 7373-7624          | 1500 gals 15% HCL Acid, 6263 bbls Fresh Slickwater, Running TLTR 39129 bbls |       |
| 5              | 6999-7303          | 1500 gals 15% HCL Acid, 6289 bbls Fresh Slickwater, Running TLTR 45425 bbls |       |
| 5              | 6574-6900          | 1500 gals 15% HCL Acid, 6308 bbls Fresh Slickwater, Running TLTR 51798 bbls |       |

|           |  |
|-----------|--|
| Form      | ACO1 - Well Completion                   |
| Operator  | SandRidge Exploration and Production LLC |
| Well Name | 4J Ranch 3408 2-33H                      |
| Doc ID    | 1148405                                  |

Perforations

| Shots Per Foot | Perforation Record | Material Record   | Depth |
|----------------|--------------------|---|-------|
| 5              | 6180-6512          | 1500 gals 15% HCL Acid, 6255 bbls Fresh Slickwater, Running TLTR 57948 bbls |       |
| 5              | 5906-6130          | 1500 gals 15% HCL Acid, 6263 bbls Fresh Slickwater, Running TLTR 64020 bbls |       |
| 5              | 5520-5734          | 1500 gals 15% HCL Acid, 6292 bbls Fresh Slickwater, Running TLTR 70158 bbls |       |

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

June 17, 2013

Tiffany Golay  
SandRidge Exploration and Production LLC  
123 ROBERT S. KERR AVE  
OKLAHOMA CITY, OK 73102-6406

Re: ACO1  
API 15-077-21917-01-00  
4J Ranch 3408 2-33H  
SW/4 Sec.33-34S-08W  
Harper County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Tiffany Golay



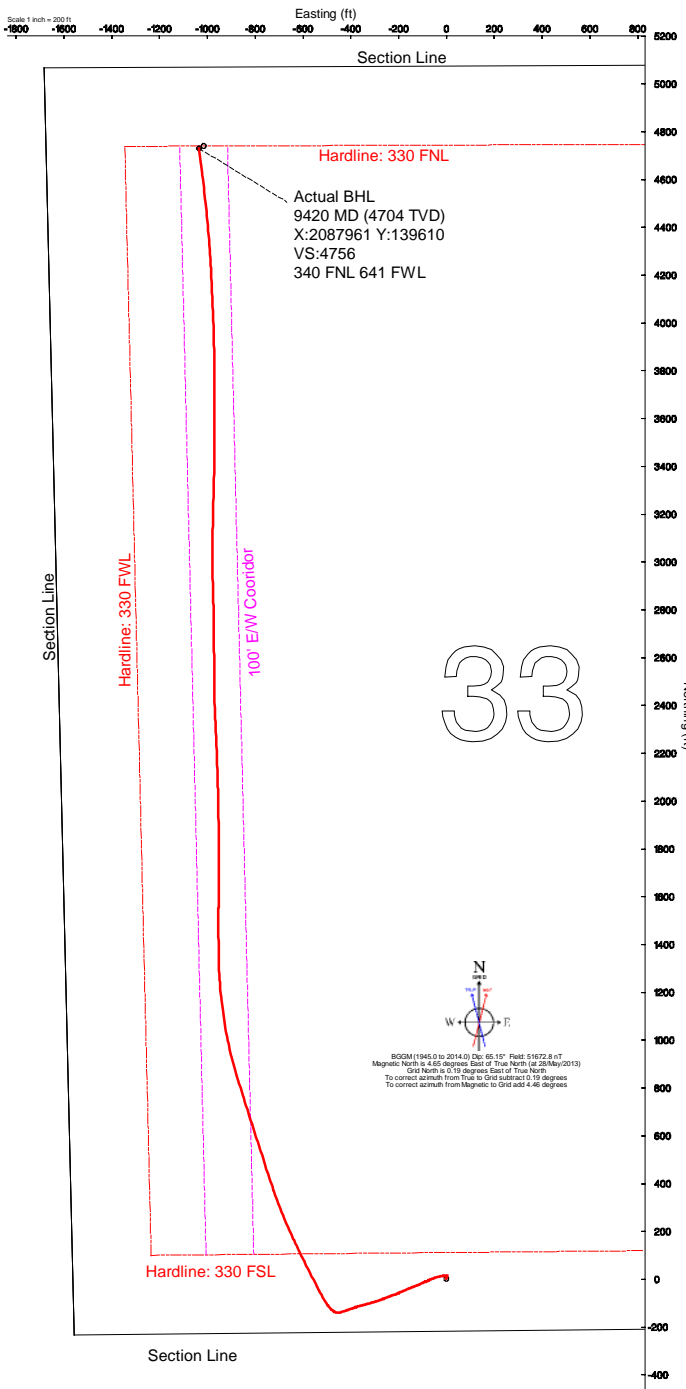
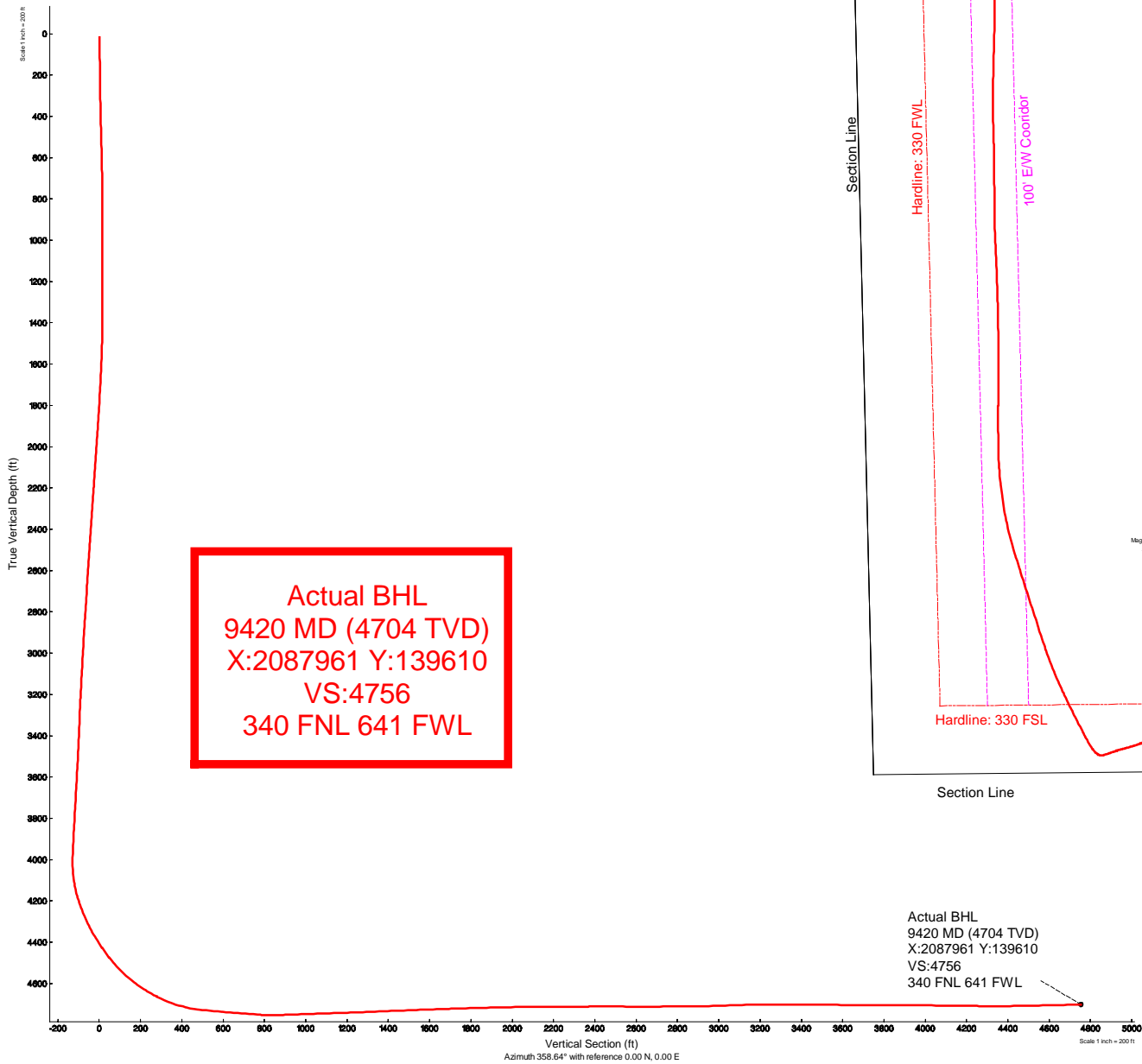
# Sandridge Energy

4J Ranch 3408 2-33H (Final)  
4J Ranch 3408 2-33H SL 220 FSL 1565 FWL  
Harper County, Kansas (Sandridge Energy) NAD27 / Grid

|   |   |
|---|---|
| P3d reference wellbath is Plan 1  |   |
| True vertical depths are referenced to Unit 310 (RT)                                      | Grid System: NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet |
| Measured depths are referenced to Unit 310 (RT)   | North Reference: Grid north   |
| Unit 310 (RT) to Mean Sea Level: 1262 feet  | Scale: True Distance  |
| Mean Sea Level to Mud line (in Slot: 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL): -1247 feet | Depths are in feet  |
| Coordinates are in feet referenced to Slot  | Created by: bouglac on 26/May/2013                                    |

### Location Information

| Facility Name   | Grid East (US ft) | Grid North (US ft) | Latitude          | Longitude          |
|---|-------------------|--------------------|-------------------|--------------------|
| 4J Ranch 3408 2-33H Sec. 33-34S-8W  | 2088997.000       | 1348777.000        | 37°02'12.066"N    | 98°11'42.454"W     |
| Slot  | Local N (ft)      | Local E (ft)       | Grid East (US ft) | Grid North (US ft) |
| 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL                                       | 0.00              | 0.00               | 2088997.000       | 1348777.000        |
| Unit 310 (RT) to Mud line (in Slot: 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL)  |                   |                    |                   | 156                |
| Mean Sea Level to Mud line (in Slot: 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL) |                   |                    |                   | -1247ft            |
| Unit 310 (RT) to Mean Sea Level   |                   |                    |                   | 1262ft             |



33



BIGM (1945.0 to 2014.0) Dec: 65.15° Field: 51672.8 mT  
Magnetic North is 4.65 degrees East of True North (in 26/May/2013)  
Grid North is 0.19 degrees East of True North  
To correct azimuth from True to Grid subtract 0.19 degrees  
To correct azimuth from Magnetic to Grid add 4.46 degrees





## Actual Wellpath Report

Sandridge 4J Ranch 3408 2-33H\_Final Surveys.  
Page n of nn



| REFERENCE WELLPATH IDENTIFICATION |   |          |   |
|-----------------------------------|---|----------|---|
| Operator                          | Sandridge Energy                                      | Slot     | 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL |
| Area                              | Kansas  | Well     | Subject                                 |
| Field                             | Harper County, Kansas (Sandridge Energy) NAD27 / Grid | Wellbore | 4J Ranch 3408 2-33H Actual              |
| Facility                          | 4J Ranch 3408 2-33H Sec. 33-34S-8W                    |          |   |

| REPORT SETUP INFORMATION |  |                      |                           |
|--------------------------|--|----------------------|---------------------------|
| Projection System        | NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet |                      |                           |
| North Reference          | Grid   | Software System      | WellArchitect™ 3.0.0      |
| Convergence at slot      | 0.19° East   | User                 | Adammic                   |
| Scale                    | 1.00005  | Report Generated     | 13/Aug/2013 at 2:27:16 PM |
| Wellbore last revised    | 05-28-2013   | Database/Source file | intokcapp01               |

| WELLPATH LOCATION     |                   |          |                  |                 |                        |                |
|-----------------------|-------------------|----------|------------------|-----------------|------------------------|----------------|
|                       | Local coordinates |          | Grid coordinates |                 | Geographic coordinates |                |
|                       | North[ft]         | East[ft] | Easting[US ft]   | Northing[US ft] | Latitude               | Longitude      |
| Slot Location         | 0.00              | 0.00     | 2088997.00       | 134877.00       | 37°02'12.066"N         | 98°11'42.454"W |
| Facility Reference Pt |                   |          | 2088997.00       | 134877.00       | 37°02'12.066"N         | 98°11'42.454"W |
| Field Reference Pt    |                   |          | 2132248.82       | 161602.28       | 37°06'34.560"N         | 98°02'47.460"W |

| WELLPATH DATUM           |                   |   |                   |
|--------------------------|-------------------|---|-------------------|
| Calculation method       | Minimum curvature | Unit 310 (RT) to Facility Vertical Datum                                    | 15.00ft           |
| Horizontal Reference Pt  | Slot              | Unit 310 (RT) to Mean Sea Level   | 1262.00ft         |
| Vertical Reference Pt    | Unit 310 (RT)     | Unit 310 (RT) to Mud Line at Slot (4J Ranch 3408 2-33H SL 220 FSL 1565 FWL) | 15.00ft           |
| MD Reference Pt          | Unit 310 (RT)     | Section Origin  | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level    | Section Azimuth   | 358.64°           |





## Actual Wellpath Report

Sandridge 4J Ranch 3408 2-33H\_Final Surveys.  
Page n of nn



| REFERENCE WELLPATH IDENTIFICATION |   |          |   |
|-----------------------------------|---|----------|---|
| Operator                          | Sandridge Energy                                      | Slot     | 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL |
| Area                              | Kansas  | Well     | Subject                                 |
| Field                             | Harper County, Kansas (Sandridge Energy) NAD27 / Grid | Wellbore | 4J Ranch 3408 2-33H Actual              |
| Facility                          | 4J Ranch 3408 2-33H Sec. 33-34S-8W                    |          |   |

| WELLPATH DATA (133 stations) † = interpolated/extrapolated station |                 |             |          |                |            |           |                   |                    |               |          |
|--|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|---------------|----------|
| MD [ft]  | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | DLS [°/100ft] | Comments |
| 0.00†  | 0.000           | 18.440      | 0.00     | 0.00           | 0.00       | 0.00      | 2088997.00        | 134877.00          | 0.00          |          |
| 15.00  | 0.000           | 18.440      | 15.00    | 0.00           | 0.00       | 0.00      | 2088997.00        | 134877.00          | 0.00          |          |
| 500.00   | 1.750           | 18.440      | 499.92   | 6.97           | 7.03       | 2.34      | 2088999.34        | 134884.03          | 0.36          |          |
| 775.00   | 0.750           | 18.440      | 774.86   | 12.61          | 12.72      | 4.24      | 2089001.24        | 134889.72          | 0.36          |          |
| 810.00   | 0.250           | 18.440      | 809.85   | 12.90          | 13.01      | 4.34      | 2089001.34        | 134890.01          | 1.43          |          |
| 901.00   | 0.040           | 253.480     | 900.85   | 13.08          | 13.19      | 4.37      | 2089001.37        | 134890.19          | 0.30          |          |
| 993.00   | 0.100           | 34.880      | 992.85   | 13.13          | 13.24      | 4.38      | 2089001.38        | 134890.24          | 0.15          |          |
| 1085.00  | 0.030           | 201.570     | 1084.85  | 13.18          | 13.29      | 4.42      | 2089001.42        | 134890.29          | 0.14          |          |
| 1177.00  | 0.310           | 273.320     | 1176.85  | 13.18          | 13.28      | 4.16      | 2089001.16        | 134890.28          | 0.33          |          |
| 1208.00  | 0.940           | 270.700     | 1207.85  | 13.19          | 13.29      | 3.83      | 2089000.83        | 134890.29          | 2.03          |          |
| 1238.00  | 1.620           | 267.640     | 1237.84  | 13.19          | 13.27      | 3.16      | 2089000.16        | 134890.27          | 2.28          |          |
| 1269.00  | 2.160           | 268.940     | 1268.83  | 13.19          | 13.24      | 2.13      | 2088999.13        | 134890.24          | 1.75          |          |
| 1299.00  | 3.130           | 268.070     | 1298.79  | 13.18          | 13.20      | 0.75      | 2088997.75        | 134890.21          | 3.24          |          |
| 1330.00  | 4.180           | 267.010     | 1329.73  | 13.14          | 13.12      | -1.22     | 2088995.78        | 134890.12          | 3.39          |          |
| 1360.00  | 5.330           | 265.990     | 1359.63  | 13.05          | 12.96      | -3.71     | 2088993.29        | 134889.96          | 3.84          |          |
| 1391.00  | 6.380           | 265.220     | 1390.47  | 12.88          | 12.72      | -6.86     | 2088990.14        | 134889.72          | 3.40          |          |
| 1421.00  | 7.250           | 263.740     | 1420.25  | 12.62          | 12.37      | -10.40    | 2088986.60        | 134889.37          | 2.96          |          |
| 1452.00  | 8.100           | 261.850     | 1450.97  | 12.19          | 11.85      | -14.51    | 2088982.49        | 134888.85          | 2.86          |          |
| 1513.00  | 9.630           | 258.600     | 1511.24  | 10.79          | 10.23      | -23.76    | 2088973.23        | 134887.23          | 2.64          |          |
| 1543.00  | 9.560           | 257.040     | 1540.83  | 9.86           | 9.18       | -28.65    | 2088968.35        | 134886.18          | 0.90          |          |
| 1637.00  | 9.370           | 254.060     | 1633.55  | 6.36           | 5.33       | -43.62    | 2088953.38        | 134882.33          | 0.56          |          |
| 1732.00  | 9.360           | 247.790     | 1727.28  | 1.66           | 0.28       | -58.20    | 2088938.79        | 134877.28          | 1.07          |          |
| 1827.00  | 9.490           | 245.290     | 1821.00  | -4.19          | -5.91      | -72.47    | 2088924.52        | 134871.09          | 0.45          |          |
| 1922.00  | 9.160           | 246.350     | 1914.74  | -10.16         | -12.22     | -86.51    | 2088910.48        | 134864.78          | 0.39          |          |
| 2016.00  | 10.000          | 246.460     | 2007.43  | -16.08         | -18.48     | -100.85   | 2088896.15        | 134858.52          | 0.89          |          |
| 2111.00  | 10.980          | 247.260     | 2100.84  | -22.49         | -25.27     | -116.75   | 2088880.24        | 134851.73          | 1.04          |          |
| 2206.00  | 10.920          | 249.180     | 2194.11  | -28.79         | -31.97     | -133.51   | 2088863.48        | 134845.03          | 0.39          |          |
| 2301.00  | 10.810          | 247.200     | 2287.41  | -35.04         | -38.62     | -150.13   | 2088846.86        | 134838.38          | 0.41          |          |
| 2395.00  | 10.720          | 247.740     | 2379.76  | -41.38         | -45.35     | -166.35   | 2088830.64        | 134831.65          | 0.14          |          |
| 2490.00  | 10.660          | 245.350     | 2473.11  | -48.01         | -52.36     | -182.51   | 2088814.48        | 134824.64          | 0.47          |          |
| 2585.00  | 10.720          | 246.090     | 2566.46  | -54.87         | -59.60     | -198.58   | 2088798.41        | 134817.39          | 0.16          |          |
| 2679.00  | 10.370          | 252.440     | 2658.88  | -60.58         | -65.70     | -214.63   | 2088782.35        | 134811.30          | 1.29          |          |
| 2774.00  | 10.690          | 248.550     | 2752.28  | -65.99         | -71.50     | -230.99   | 2088766.00        | 134805.50          | 0.82          |          |
| 2869.00  | 10.760          | 248.630     | 2845.62  | -72.06         | -77.95     | -247.45   | 2088749.54        | 134799.04          | 0.08          |          |
| 2963.00  | 10.820          | 249.200     | 2937.96  | -77.99         | -84.29     | -263.87   | 2088733.12        | 134792.71          | 0.13          |          |
| 3058.00  | 10.660          | 252.110     | 3031.29  | -83.46         | -90.15     | -280.56   | 2088716.42        | 134786.84          | 0.60          |          |
| 3153.00  | 10.530          | 251.680     | 3124.67  | -88.49         | -95.58     | -297.17   | 2088699.82        | 134781.42          | 0.16          |          |
| 3248.00  | 10.470          | 253.950     | 3218.08  | -93.21         | -100.69    | -313.70   | 2088683.28        | 134776.30          | 0.44          |          |
| 3343.00  | 10.280          | 255.470     | 3311.53  | -97.33         | -105.21    | -330.20   | 2088666.78        | 134771.79          | 0.35          |          |
| 3438.00  | 10.570          | 256.120     | 3404.96  | -101.15        | -109.42    | -346.87   | 2088650.11        | 134767.57          | 0.33          |          |
| 3532.00  | 10.440          | 253.160     | 3497.39  | -105.30        | -113.96    | -363.39   | 2088633.59        | 134763.03          | 0.59          |          |
| 3627.00  | 10.590          | 251.150     | 3590.79  | -110.22        | -119.27    | -379.89   | 2088617.09        | 134757.72          | 0.42          |          |
| 3722.00  | 10.360          | 250.720     | 3684.21  | -115.47        | -124.91    | -396.21   | 2088600.77        | 134752.08          | 0.26          |          |
| 3817.00  | 10.570          | 250.630     | 3777.63  | -120.79        | -130.62    | -412.50   | 2088584.48        | 134746.37          | 0.22          |          |
| 3912.00  | 10.790          | 253.460     | 3870.98  | -125.81        | -136.05    | -429.24   | 2088567.74        | 134740.95          | 0.60          |          |



## Actual Wellpath Report

Sandridge 4J Ranch 3408 2-33H\_Final Surveys.  
Page n of nn



| REFERENCE WELLPATH IDENTIFICATION |   |          |   |
|-----------------------------------|---|----------|---|
| Operator                          | Sandridge Energy                                      | Slot     | 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL |
| Area                              | Kansas  | Well     | Subject                                 |
| Field                             | Harper County, Kansas (Sandridge Energy) NAD27 / Grid | Wellbore | 4J Ranch 3408 2-33H Actual              |
| Facility                          | 4J Ranch 3408 2-33H Sec. 33-34S-8W                    |          |   |

| WELLPATH DATA (133 stations) |                 |             |          |                |            |           |                   |                    |               |          |
|------------------------------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|---------------|----------|
| MD [ft]                      | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | DLS [°/100ft] | Comments |
| 4007.00                      | 10.480          | 253.390     | 3964.35  | -130.41        | -141.05    | -446.04   | 2088550.93        | 134735.95          | 0.33          |          |
| 4038.00                      | 10.310          | 262.800     | 3994.84  | -131.44        | -142.20    | -451.50   | 2088545.48        | 134734.79          | 5.50          |          |
| 4070.00                      | 10.780          | 277.960     | 4026.31  | -131.24        | -142.15    | -457.30   | 2088539.67        | 134734.85          | 8.77          |          |
| 4102.00                      | 11.790          | 290.140     | 4057.70  | -129.56        | -140.61    | -463.34   | 2088533.64        | 134736.39          | 8.07          |          |
| 4133.00                      | 13.020          | 299.470     | 4087.97  | -126.61        | -137.80    | -469.35   | 2088527.62        | 134739.20          | 7.57          |          |
| 4165.00                      | 14.810          | 307.490     | 4119.04  | -122.20        | -133.53    | -475.74   | 2088521.24        | 134743.46          | 8.21          |          |
| 4197.00                      | 17.140          | 314.030     | 4149.80  | -116.27        | -127.77    | -482.37   | 2088514.60        | 134749.23          | 9.19          |          |
| 4228.00                      | 19.830          | 319.560     | 4179.20  | -108.94        | -120.59    | -489.07   | 2088507.90        | 134756.41          | 10.35         |          |
| 4259.00                      | 22.440          | 323.560     | 4208.12  | -100.01        | -111.82    | -496.00   | 2088500.98        | 134765.17          | 9.61          |          |
| 4291.00                      | 24.430          | 326.410     | 4237.48  | -89.41         | -101.40    | -503.29   | 2088493.69        | 134775.60          | 7.16          |          |
| 4323.00                      | 25.900          | 329.680     | 4266.44  | -77.70         | -89.85     | -510.48   | 2088486.50        | 134787.15          | 6.32          |          |
| 4355.00                      | 26.850          | 330.830     | 4295.11  | -65.19         | -77.51     | -517.53   | 2088479.45        | 134799.49          | 3.37          |          |
| 4386.00                      | 28.510          | 331.330     | 4322.56  | -52.43         | -64.90     | -524.49   | 2088472.48        | 134812.10          | 5.41          |          |
| 4418.00                      | 31.820          | 332.070     | 4350.22  | -38.09         | -50.74     | -532.11   | 2088464.87        | 134826.25          | 10.41         |          |
| 4449.00                      | 33.590          | 332.630     | 4376.31  | -23.07         | -35.91     | -539.88   | 2088457.09        | 134841.09          | 5.79          |          |
| 4481.00                      | 35.480          | 333.050     | 4402.67  | -6.74          | -19.77     | -548.16   | 2088448.81        | 134857.23          | 5.95          |          |
| 4512.00                      | 37.510          | 333.170     | 4427.59  | 9.90           | -3.32      | -556.50   | 2088440.48        | 134873.68          | 6.55          |          |
| 4544.00                      | 39.280          | 332.530     | 4452.66  | 27.79          | 14.36      | -565.57   | 2088431.40        | 134891.36          | 5.67          |          |
| 4576.00                      | 41.260          | 332.960     | 4477.08  | 46.40          | 32.75      | -575.04   | 2088421.93        | 134909.75          | 6.25          |          |
| 4607.00                      | 43.350          | 333.130     | 4500.01  | 65.21          | 51.35      | -584.49   | 2088412.48        | 134928.35          | 6.75          |          |
| 4639.00                      | 45.860          | 333.040     | 4522.79  | 85.49          | 71.38      | -594.67   | 2088402.30        | 134948.38          | 7.85          |          |
| 4671.00                      | 48.440          | 333.910     | 4544.55  | 106.72         | 92.37      | -605.14   | 2088391.83        | 134969.38          | 8.31          |          |
| 4702.00                      | 50.860          | 334.080     | 4564.62  | 128.19         | 113.60     | -615.50   | 2088381.47        | 134990.61          | 7.82          |          |
| 4734.00                      | 53.010          | 334.230     | 4584.35  | 151.12         | 136.28     | -626.48   | 2088370.49        | 135013.28          | 6.73          |          |
| 4766.00                      | 55.570          | 334.780     | 4603.02  | 174.83         | 159.73     | -637.66   | 2088359.31        | 135036.74          | 8.12          |          |
| 4797.00                      | 58.010          | 335.270     | 4620.00  | 198.59         | 183.24     | -648.61   | 2088348.36        | 135060.25          | 7.98          |          |
| 4829.00                      | 60.390          | 336.210     | 4636.38  | 223.91         | 208.30     | -659.90   | 2088337.07        | 135085.31          | 7.85          |          |
| 4861.00                      | 62.630          | 337.060     | 4651.65  | 249.99         | 234.11     | -671.05   | 2088325.92        | 135111.13          | 7.38          |          |
| 4893.00                      | 64.620          | 337.650     | 4665.86  | 276.70         | 260.57     | -682.08   | 2088314.88        | 135137.59          | 6.43          |          |
| 4924.00                      | 66.660          | 338.410     | 4678.65  | 303.13         | 286.76     | -692.65   | 2088304.32        | 135163.77          | 6.95          |          |
| 4956.00                      | 68.950          | 339.010     | 4690.74  | 330.98         | 314.37     | -703.40   | 2088293.56        | 135191.38          | 7.36          |          |
| 4988.00                      | 72.260          | 340.220     | 4701.36  | 359.52         | 342.66     | -713.91   | 2088283.05        | 135219.67          | 10.94         |          |
| 5019.00                      | 75.020          | 340.650     | 4710.09  | 387.77         | 370.68     | -723.87   | 2088273.09        | 135247.70          | 9.00          |          |
| 5051.00                      | 77.140          | 340.940     | 4717.79  | 417.33         | 400.01     | -734.09   | 2088262.87        | 135277.03          | 6.68          |          |
| 5114.00                      | 82.900          | 342.240     | 4728.70  | 476.63         | 458.86     | -753.67   | 2088243.29        | 135335.88          | 9.37          |          |
| 5145.00                      | 85.190          | 342.690     | 4731.92  | 506.24         | 488.26     | -762.96   | 2088234.00        | 135365.28          | 7.53          |          |
| 5240.00                      | 85.280          | 341.860     | 4739.81  | 597.08         | 578.43     | -791.78   | 2088205.18        | 135455.46          | 0.88          |          |
| 5335.00                      | 85.870          | 342.180     | 4747.14  | 687.84         | 668.52     | -821.02   | 2088175.94        | 135545.56          | 0.71          |          |
| 5430.00                      | 85.810          | 342.620     | 4754.03  | 778.80         | 758.84     | -849.67   | 2088147.29        | 135635.88          | 0.47          |          |
| 5498.00                      | 91.140          | 342.130     | 4755.84  | 844.04         | 823.60     | -870.24   | 2088126.71        | 135700.64          | 7.87          |          |
| 5545.00                      | 92.370          | 344.050     | 4754.40  | 889.29         | 868.54     | -883.91   | 2088113.05        | 135745.59          | 4.85          |          |
| 5606.00                      | 91.700          | 346.090     | 4752.24  | 948.55         | 927.44     | -899.61   | 2088097.34        | 135804.49          | 3.52          |          |
| 5670.00                      | 91.890          | 347.890     | 4750.23  | 1011.20        | 989.77     | -914.01   | 2088082.94        | 135866.82          | 2.83          |          |
| 5733.00                      | 91.970          | 350.360     | 4748.11  | 1073.29        | 1051.60    | -925.89   | 2088071.06        | 135928.65          | 3.92          |          |
| 5796.00                      | 91.880          | 352.060     | 4745.99  | 1135.72        | 1113.82    | -935.51   | 2088061.44        | 135990.88          | 2.70          |          |



## Actual Wellpath Report

Sandridge 4J Ranch 3408 2-33H\_Final Surveys.  
Page n of nn



| REFERENCE WELLPATH IDENTIFICATION |   |          |   |
|-----------------------------------|---|----------|---|
| Operator                          | Sandridge Energy                                      | Slot     | 4J Ranch 3408 2-33H SL 220 FSL 1565 FWL |
| Area                              | Kansas  | Well     | Subject                                 |
| Field                             | Harper County, Kansas (Sandridge Energy) NAD27 / Grid | Wellbore | 4J Ranch 3408 2-33H Actual              |
| Facility                          | 4J Ranch 3408 2-33H Sec. 33-34S-8W                    |          |   |

| WELLPATH DATA (133 stations) |                 |             |          |                |            |           |                   |                    |               |  |
|------------------------------|-----------------|-------------|----------|----------------|------------|-----------|-------------------|--------------------|---------------|--|
| MD [ft]                      | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | DLS [°/100ft] | Comments   |
| 5859.00                      | 91.820          | 353.850     | 4743.96  | 1198.38        | 1176.31    | -943.23   | 2088053.72        | 136053.37          | 2.84          |  |
| 5923.00                      | 92.290          | 356.070     | 4741.66  | 1262.20        | 1240.01    | -948.85   | 2088048.10        | 136117.08          | 3.54          |  |
| 5986.00                      | 92.530          | 357.390     | 4739.01  | 1325.11        | 1302.86    | -952.44   | 2088044.51        | 136179.92          | 2.13          |  |
| 6049.00                      | 92.050          | 359.820     | 4736.50  | 1388.05        | 1365.78    | -953.97   | 2088042.98        | 136242.85          | 3.93          |  |
| 6114.00                      | 92.220          | 359.370     | 4734.08  | 1453.00        | 1430.73    | -954.43   | 2088042.52        | 136307.81          | 0.74          |  |
| 6176.00                      | 92.710          | 0.060       | 4731.41  | 1514.93        | 1492.68    | -954.74   | 2088042.21        | 136369.75          | 1.36          |  |
| 6239.00                      | 91.550          | 0.580       | 4729.07  | 1577.86        | 1555.63    | -954.39   | 2088042.56        | 136432.71          | 2.02          |  |
| 6302.00                      | 92.010          | 0.890       | 4727.11  | 1640.79        | 1618.59    | -953.58   | 2088043.37        | 136495.68          | 0.88          |  |
| 6365.00                      | 92.160          | 0.240       | 4724.82  | 1703.71        | 1681.55    | -952.96   | 2088043.99        | 136558.63          | 1.06          |  |
| 6460.00                      | 91.760          | 0.700       | 4721.57  | 1798.60        | 1776.49    | -952.18   | 2088044.77        | 136653.58          | 0.64          |  |
| 6555.00                      | 90.890          | 358.140     | 4719.37  | 1893.56        | 1871.45    | -953.14   | 2088043.81        | 136748.55          | 2.85          |  |
| 6650.00                      | 91.630          | 359.130     | 4717.28  | 1988.54        | 1966.40    | -955.41   | 2088041.54        | 136843.50          | 1.30          |  |
| 6745.00                      | 89.350          | 358.690     | 4716.47  | 2083.53        | 2061.37    | -957.21   | 2088039.74        | 136938.48          | 2.44          |  |
| 6839.00                      | 90.460          | 357.680     | 4716.63  | 2177.52        | 2155.32    | -960.19   | 2088036.76        | 137032.43          | 1.60          |  |
| 6934.00                      | 90.870          | 357.790     | 4715.52  | 2272.50        | 2250.24    | -963.95   | 2088033.01        | 137127.36          | 0.45          |  |
| 7029.00                      | 90.710          | 357.220     | 4714.21  | 2367.47        | 2345.14    | -968.08   | 2088028.87        | 137222.26          | 0.62          |  |
| 7123.00                      | 89.940          | 358.620     | 4713.68  | 2461.46        | 2439.07    | -971.49   | 2088025.46        | 137316.20          | 1.70          |  |
| 7218.00                      | 89.310          | 359.870     | 4714.30  | 2556.45        | 2534.06    | -972.74   | 2088024.21        | 137411.19          | 1.47          |  |
| 7313.00                      | 90.280          | 359.460     | 4714.64  | 2651.43        | 2629.06    | -973.30   | 2088023.65        | 137506.19          | 1.11          |  |
| 7407.00                      | 90.800          | 359.650     | 4713.76  | 2745.42        | 2723.05    | -974.03   | 2088022.92        | 137600.19          | 0.59          |  |
| 7502.00                      | 90.410          | 358.180     | 4712.75  | 2840.41        | 2818.03    | -975.83   | 2088021.12        | 137695.17          | 1.60          |  |
| 7597.00                      | 90.520          | 358.790     | 4711.98  | 2935.40        | 2912.99    | -978.34   | 2088018.61        | 137790.14          | 0.65          |  |
| 7692.00                      | 92.500          | 359.680     | 4709.48  | 3030.36        | 3007.94    | -979.61   | 2088017.34        | 137885.10          | 2.28          |  |
| 7755.00                      | 91.740          | 0.140       | 4707.15  | 3093.30        | 3070.90    | -979.71   | 2088017.24        | 137948.06          | 1.41          |  |
| 7819.00                      | 92.130          | 1.480       | 4704.99  | 3157.22        | 3134.85    | -978.80   | 2088018.15        | 138012.01          | 2.18          |  |
| 7882.00                      | 89.600          | 1.360       | 4704.04  | 3220.13        | 3197.82    | -977.24   | 2088019.71        | 138074.99          | 4.02          |  |
| 7977.00                      | 89.570          | 1.610       | 4704.72  | 3315.01        | 3292.79    | -974.78   | 2088022.17        | 138169.96          | 0.27          |  |
| 8072.00                      | 89.690          | 1.330       | 4705.34  | 3409.89        | 3387.75    | -972.34   | 2088024.61        | 138264.93          | 0.32          |  |
| 8167.00                      | 89.820          | 0.320       | 4705.74  | 3504.82        | 3482.74    | -970.97   | 2088025.98        | 138359.92          | 1.07          |  |
| 8262.00                      | 89.540          | 0.010       | 4706.28  | 3599.79        | 3577.74    | -970.70   | 2088026.25        | 138454.92          | 0.44          |  |
| 8357.00                      | 90.340          | 359.860     | 4706.37  | 3694.76        | 3672.74    | -970.81   | 2088026.14        | 138549.93          | 0.86          |  |
| 8451.00                      | 89.810          | 359.780     | 4706.25  | 3788.74        | 3766.74    | -971.10   | 2088025.85        | 138643.93          | 0.57          |  |
| 8546.00                      | 89.410          | 358.880     | 4706.90  | 3883.73        | 3861.73    | -972.22   | 2088024.74        | 138738.93          | 1.04          |  |
| 8641.00                      | 89.440          | 358.430     | 4707.85  | 3978.73        | 3956.70    | -974.44   | 2088022.51        | 138833.90          | 0.47          |  |
| 8736.00                      | 88.980          | 357.270     | 4709.16  | 4073.71        | 4051.62    | -978.01   | 2088018.94        | 138928.83          | 1.31          |  |
| 8831.00                      | 89.450          | 357.210     | 4710.46  | 4168.67        | 4146.50    | -982.58   | 2088014.37        | 139023.71          | 0.50          |  |
| 8926.00                      | 89.260          | 357.360     | 4711.53  | 4263.64        | 4241.39    | -987.08   | 2088009.87        | 139118.60          | 0.25          |  |
| 9021.00                      | 90.310          | 355.390     | 4711.89  | 4358.56        | 4336.19    | -993.09   | 2088003.86        | 139213.41          | 2.35          |  |
| 9116.00                      | 90.740          | 354.610     | 4711.02  | 4453.36        | 4430.82    | -1001.37  | 2087995.58        | 139308.05          | 0.94          |  |
| 9211.00                      | 91.420          | 353.740     | 4709.23  | 4548.05        | 4525.32    | -1011.01  | 2087985.94        | 139402.55          | 1.16          |  |
| 9306.00                      | 91.330          | 352.990     | 4706.95  | 4642.62        | 4619.65    | -1021.98  | 2087974.97        | 139496.89          | 0.79          |  |
| 9377.00                      | 91.550          | 352.850     | 4705.16  | 4713.25        | 4690.09    | -1030.73  | 2087966.22        | 139567.33          | 0.37          |  |
| 9420.00                      | 91.550          | 352.850     | 4704.00  | 4756.01        | 4732.74    | -1036.08  | 2087960.87        | 139609.98          | 0.00          | Actual BHL 9420 MD (4704 TVD) X:2087961 Y:139610 VS:4756 340 FNL 641 FWL |

| WELLPATH COMPOSITION - Ref Wellbore: 4J Ranch 3408 2-33H Actual |             |                              |  |                   | Ref Wellpath: AWP (Final) |                            |
|---|-------------|------------------------------|--|-------------------|---------------------------|----------------------------|
| Start MD [ft]   | End MD [ft] | Positional Uncertainty Model |  | Log Name/Comment  |                           | Wellbore                   |
| 15.00   | 775.00      | EMS (Standard)               |  | Rig Surveys       |                           | 4J Ranch 3408 2-33H Actual |
| 775.00  | 9377.00     | NaviTrak (Standard)          |  | INTEQ MWD         |                           | 4J Ranch 3408 2-33H Actual |
| 9377.00   | 9420.00     | Blind Drilling (std)         |  | Projection to bit |                           | 4J Ranch 3408 2-33H Actual |



**INVOICE**

|           |           |
|-----------|-----------|
| DATE      | INVOICE # |
| 5/20/2013 | 3949      |

|  |
|--|
| <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         |
|------------|---------------|------------|------------|---------------------|---------------|
| BARBER, KS | 5/20/2013     | 3126       | UNIT 310   | 4J RANCH 3408 2-33H | Due on rec... |

Description

DRILLED 90' OF 30" CONDUCTOR HOLE  
 DRILLED 6' OF 76" HOLE  
 FURNISHED AND SET 6' X 6' TINHORN CELLAR  
 FURNISHED 90' OF 20" CONDUCTOR PIPE  
 FURNISHED 1 LOAD(S) MUD  
 FURNISHED WELDER AND MATERIALS  
 FURNISHED 11 YARDS OF GRADE A CEMENT  
 FURNISHED GROUT PUMP  
 DRILL MOUSE HOLE  
 FURNISHED 80' OF 14" CONDUCTOR PIPE FOR MOUSE HOLE

TOTAL BID \$ 17,000.00

|                         |          |
|-------------------------|----------|
| <b>Sales Tax (7.3%)</b> | \$202.79 |
|-------------------------|----------|

|              |             |
|--------------|-------------|
| <b>TOTAL</b> | \$17,202.79 |
|--------------|-------------|

RECEIVED

JUN 6 2013

HALLIBURTON

## Cementing Job Summary

The Road to Excellence Starts with Safety

|   |                     |                                 |                          |
|---|---------------------|---------------------------------|--------------------------|
| Sold To #: 305021                                   | Ship To #: 3000762  | Quote #:                        | Sales Order #: 900471243 |
| Customer: SANDRIDGE ENERGY INC EBUSINESS            |                     | Customer Rep: Webster, John     |                          |
| Well Name: 4J Ranch 3408                            | Well #: 2-33H       | API/UWI #:                      |                          |
| Field:  | City (SAP): WALDRON | County/Parish: Harper           | State: Kansas            |
| Legal Description: Section 16 Township 33S Range 6W |                     |                                 |                          |
| Contractor: UNIT                                    |                     | Rig/Platform Name/Num: 310      |                          |
| Job Purpose: Cement Surface Casing                  |                     |                                 |                          |
| Well Type: Development Well                         |                     | Job Type: Cement Surface Casing |                          |
| Sales Person: FRENCH, JEREMY                        |                     | Srvc Supervisor: DAVIS, ROBERT  | MBU ID Emp #: 458886     |

## Job Personnel

| HES Emp Name    | Exp Hrs | Emp #  | HES Emp Name                | Exp Hrs | Emp #  | HES Emp Name       | Exp Hrs | Emp #  |
|-----------------|---------|--------|-----------------------------|---------|--------|--------------------|---------|--------|
| DAVIS, ROBERT T | 6       | 458886 | MARTIN, GREGORY<br>Franklin | 6       | 394376 | STOOPS, LEVI Keith | 6       | 523378 |
| TAVAI, MASON T  | 6       | 423521 |                             |         |        |                    |         |        |

## Equipment

| HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
|            |                |            |                |            |                |            |                |

## Job Hours

| Date       | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours |
|------------|-------------------|-----------------|------|-------------------|-----------------|------|-------------------|-----------------|
| 06-02-2013 | 6                 | 4               |      |                   |                 |      |                   |                 |

TOTAL Total is the sum of each column separately

## Job

## Job Times

| Formation Name         | Formation Depth (MD) | Top | Bottom            | Called Out  | Date            | Time            | Time Zone |
|------------------------|----------------------|-----|-------------------|-------------|-----------------|-----------------|-----------|
|                        |                      |     |                   |             | 02 - Jun - 2013 | 05:00           | CST       |
| Form Type              |                      |     | BHST              | On Location | 02 - Jun - 2013 | 11:15           | CST       |
| Job depth MD           | 788.7 ft             |     | Job Depth TVD     | 788.7 ft    | Job Started     | 02 - Jun - 2013 | 13:19     |
| Water Depth            |                      |     | Wk Ht Above Floor | 8. ft       | Job Completed   | 02 - Jun - 2013 | 14:17     |
| Perforation Depth (MD) | From                 |     | To                |             | Departed Loc    | 02 - Jun - 2013 | 16:00     |

## Well Data

| Description           | New / Used | Max pressure psig | Size in | ID in  | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
|-----------------------|------------|-------------------|---------|--------|---------------|--------|-------|-----------|--------------|------------|---------------|
| 12.25" Open Hole      |            |                   |         | 12.25  |               |        |       | 80.       | 800.         |            |               |
| 9.625" Surface Casing | Unknown    |                   | 9.625   | 8.921  | 36.           | LTC    | J-55  |           | 800.         |            |               |
| Preset Conductor      | Unknown    |                   | 20.     | 19.124 | 94.           |        |       |           | 80.          |            |               |

## Tools and Accessories

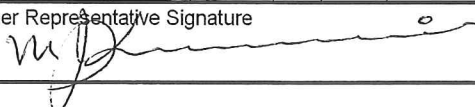
| Type         | Size | Qty | Make | Depth | Type        | Size | Qty | Make | Depth | Type           | Size  | Qty | Make |
|--------------|------|-----|------|-------|-------------|------|-----|------|-------|----------------|-------|-----|------|
| Guide Shoe   |      |     |      |       | Packer      |      |     |      |       | Top Plug       | 9.625 | 1   |      |
| Float Shoe   |      |     |      |       | Bridge Plug |      |     |      |       | Bottom Plug    |       |     |      |
| Float Collar |      |     |      |       | Retainer    |      |     |      |       | SSR plug set   |       |     |      |
| Insert Float |      |     |      |       |             |      |     |      |       | Plug Container | 9.625 | 1   |      |
| Stage Tool   |      |     |      |       |             |      |     |      |       | Centralizers   |       |     |      |

## Miscellaneous Materials

| Gelling Agt   | Conc | Surfactant | Conc | Acid Type | Qty  | Conc | % |
|---------------|------|------------|------|-----------|------|------|---|
| Treatment Fld | Conc | Inhibitor  | Conc | Sand Type | Size | Qty  |   |

## Fluid Data

| Stage/Plug #: 1 |            |            |     |         |                        |                           |                  |              |                        |  |
|-----------------|------------|------------|-----|---------|------------------------|---------------------------|------------------|--------------|------------------------|--|
| Fluid #         | Stage Type | Fluid Name | Qty | Qty uom | Mixing Density lbm/gal | Yield ft <sup>3</sup> /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |  |
|                 |            |            |     |         |                        |                           |                  |              |                        |  |

| Stage/Plug #: 1                          |              |   |        |  |                        |                           |                  |              |                        |
|--|--------------|---|--------|--|------------------------|---------------------------|------------------|--------------|------------------------|
| Fluid #                                  | Stage Type   | Fluid Name                                  | Qty    | Qty uom  | Mixing Density lbm/gal | Yield ft <sup>3</sup> /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |
| 1  | Fresh Water  |   | 10.00  | bbl  | 8.33                   | .0                        | .0               | .0           |                        |
| 2  | HLC STANDARD | EXTENDACEM (TM) SYSTEM (452981)             | 250.0  | sacks  | 12.4                   | 2.11                      | 11.64            |              | 11.64                  |
| 3 %                                      |              | CALCIUM CHLORIDE, PELLET, 50 LB (101509387) |        |  |                        |                           |                  |              |                        |
| 0.25 lbm                                 |              | POLY-E-FLAKE (101216940)                    |        |  |                        |                           |                  |              |                        |
| 11.637 Gal                               |              | FRESH WATER                                 |        |  |                        |                           |                  |              |                        |
| 3  | STANDARD     | SWIFTCEM (TM) SYSTEM (452990)               | 150.0  | sacks  | 15.6                   | 1.2                       | 5.32             |              | 5.32                   |
| 2 %                                      |              | CALCIUM CHLORIDE, PELLET, 50 LB (101509387) |        |  |                        |                           |                  |              |                        |
| 0.125 lbm                                |              | POLY-E-FLAKE (101216940)                    |        |  |                        |                           |                  |              |                        |
| 5.319 Gal                                |              | FRESH WATER                                 |        |  |                        |                           |                  |              |                        |
| 4  | Displacement |   |        | bbl  | 8.33                   | .0                        | .0               | .0           |                        |
| <b>Calculated Values</b>                 |              | <b>Pressures</b>                            |        |  | <b>Volumes</b>         |                           |                  |              |                        |
| Displacement                             | 57           | Shut In: Instant                            |        | Lost Returns   | 0                      | Cement Slurry             | 126              | Pad          |                        |
| Top Of Cement                            | 0            | 5 Min                                       |        | Cement Returns   | 68                     | Actual Displacement       | 57               | Treatment    |                        |
| Frac Gradient                            |              | 15 Min                                      |        | Spacers  | 10                     | Load and Breakdown        |                  | Total Job    | 193                    |
| <b>Rates</b>                             |              |   |        |  |                        |                           |                  |              |                        |
| Circulating                              |              | Mixing                                      | 5      | Displacement   | 5.5                    | Avg. Job                  |                  |              | 5                      |
| Cement Left In Pipe                      | Amount       | 42 ft                                       | Reason | Shoe Joint   |                        |                           |                  |              |                        |
| Frac Ring # 1 @                          | ID           | Frac ring # 2 @                             | ID     | Frac Ring # 3 @  | ID                     | Frac Ring # 4 @           | ID               |              |                        |
| The Information Stated Herein Is Correct |              |   |        | Customer Representative Signature<br> |                        |                           |                  |              |                        |

The Road to Excellence Starts with Safety

|   |                     |                                      |                          |
|---|---------------------|--------------------------------------|--------------------------|
| Sold To #: 305021                                   | Ship To #: 3004611  | Quote #:                             | Sales Order #: 900522954 |
| Customer: SANDRIDGE ENERGY INC EBUSINESS            |                     | Customer Rep: Webster, John          |                          |
| Well Name: 4J Ranch 3408                            | Well #: 3-33H       | API/UWI #: 15-077-21931              |                          |
| Field:  | City (SAP): WALDRON | County/Parish: Harper                | State: Kansas            |
| Legal Description: Section 33 Township 34S Range 8W |                     |                                      |                          |
| Contractor: UNIT                                    |                     | Rig/Platform Name/Num: 310           |                          |
| Job Purpose: Cement Intermediate Casing             |                     |                                      |                          |
| Well Type: Development Well                         |                     | Job Type: Cement Intermediate Casing |                          |
| Sales Person: FRENCH, JEREMY                        |                     | Srvc Supervisor: VAUGHAN, RYAN       | MBU ID Emp #: 453194     |

### Job Personnel

| HES Emp Name       | Exp Hrs | Emp #  | HES Emp Name        | Exp Hrs | Emp #  | HES Emp Name           | Exp Hrs | Emp #  |
|--------------------|---------|--------|---------------------|---------|--------|------------------------|---------|--------|
| STOOPS, LEVI Keith | 4       | 523378 | TORRES, DIEGO Lopez | 4       | 390647 | VAUGHAN, RYAN Nicholas | 4       | 453194 |

### Equipment

| HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
|            |                |            |                |            |                |            |                |

### Job Hours

| Date    | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours |
|---------|-------------------|-----------------|------|-------------------|-----------------|------|-------------------|-----------------|
| 6/22/13 | 4                 | 1               |      |                   |                 |      |                   |                 |

TOTAL Total is the sum of each column separately

| Job                    |                      |                   |          | Job Times     |                 |       |           |
|------------------------|----------------------|-------------------|----------|---------------|-----------------|-------|-----------|
| Formation Name         | Formation Depth (MD) | Top               | Bottom   | Called Out    | Date            | Time  | Time Zone |
| Form Type              | 5515. ft             | BHST              | 5514. ft | On Location   | 22 - Jun - 2013 | 18:00 | CST       |
| Job depth MD           | 5515. ft             | Job Depth TVD     | 5514. ft | Job Started   | 22 - Jun - 2013 | 00:00 | CST       |
| Water Depth            |                      | Wk Ht Above Floor | 5. ft    | Job Completed | 22 - Jun - 2013 | 02:00 | CST       |
| Perforation Depth (MD) | From                 | To                |          | Departed Loc  | 22 - Jun - 2013 | 00:00 | CST       |

### Well Data

| Description            | New / Used | Max pressure psig | Size in | ID in | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
|------------------------|------------|-------------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|
| 8.75" Open Hole        |            |                   |         | 8.75  |               |        |       | 800.      | 5515.        |            |               |
| 7" Intermediate Casing | Unknown    |                   | 7.      | 6.276 | 26.           | LTC    | P-110 | .         | 5515.        |            |               |
| 9.625" Surface Casing  | Unknown    |                   | 9.625   | 8.921 | 36.           | LTC    | J-55  | .         | 800.         |            |               |

### Tools and Accessories

| Type         | Size | Qty | Make | Depth | Type        | Size | Qty | Make | Depth | Type           | Size | Qty | Make |
|--------------|------|-----|------|-------|-------------|------|-----|------|-------|----------------|------|-----|------|
| Guide Shoe   |      |     |      |       | Packer      |      |     |      |       | Top Plug       | 7    | 1   | hes  |
| Float Shoe   |      |     |      |       | Bridge Plug |      |     |      |       | Bottom Plug    |      |     |      |
| Float Collar |      |     |      |       | Retainer    |      |     |      |       | SSR plug set   |      |     |      |
| Insert Float |      |     |      |       |             |      |     |      |       | Plug Container | 7    | 1   | hes  |
| Stage Tool   |      |     |      |       |             |      |     |      |       | Centralizers   |      |     |      |

### Miscellaneous Materials

| Gelling Agt   | Conc | Surfactant | Conc | Acid Type | Qty  | Conc | % |
|---------------|------|------------|------|-----------|------|------|---|
| Treatment Fld | Conc | Inhibitor  | Conc | Sand Type | Size | Qty  |   |

### Fluid Data

| Stage/Plug #: 1 |            |            |     |         |                        |                           |                  |              |                        |  |
|-----------------|------------|------------|-----|---------|------------------------|---------------------------|------------------|--------------|------------------------|--|
| Fluid #         | Stage Type | Fluid Name | Qty | Qty uom | Mixing Density lbm/gal | Yield ft <sup>3</sup> /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |  |
|                 |            |            |     |         |                        |                           |                  |              |                        |  |

Stage/Plug #: 1

| Stage/Plug #: 1                                 |                                       |                               |        |                                   |                        |                           |                  |              |                        |
|---|---------------------------------------|-------------------------------|--------|-----------------------------------|------------------------|---------------------------|------------------|--------------|------------------------|
| Fluid #   | Stage Type                            | Fluid Name                    | Qty    | Qty uom                           | Mixing Density lbm/gal | Yield ft <sup>3</sup> /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |
| 1   | Rig Supplied Gel Water                |                               | 30.00  | bbl                               | 8.33                   | .0                        | .0               | .0           |                        |
| 2   | 50/50 POZ STANDARD ( w/ 2% extra gel) | ECONOCEM (TM) SYSTEM (452992) | 140.0  | sacks                             | 13.6                   | 1.51                      | 7.34             |              | 7.34                   |
|   | 0.4 %                                 | HALAD(R)-9, 50 LB (100001617) |        |                                   |                        |                           |                  |              |                        |
|   | 2 %                                   | BENTONITE, BULK (100003682)   |        |                                   |                        |                           |                  |              |                        |
|   | 7.337 Gal                             | FRESH WATER                   |        |                                   |                        |                           |                  |              |                        |
| 3   | Premium                               | HALCEM (TM) SYSTEM (452986)   | 190.0  | sacks                             | 15.6                   | 1.18                      | 5.2              |              | 5.2                    |
|   | 0.4 %                                 | HALAD(R)-9, 50 LB (100001617) |        |                                   |                        |                           |                  |              |                        |
|   | 5.197 Gal                             | FRESH WATER                   |        |                                   |                        |                           |                  |              |                        |
| 4   | Displacement                          |                               | 206.00 | bbl                               | 8.33                   | .0                        | .0               | .0           |                        |
| Calculated Values                               |                                       | Pressures                     |        |                                   | Volumes                |                           |                  |              |                        |
| Displacement                                    | 206                                   | Shut In: Instant              |        | Lost Returns                      | 0                      | Cement Slurry             | 78               | Pad          |                        |
| Top Of Cement                                   | 3447                                  | 5 Min                         |        | Cement Returns                    | 0                      | Actual Displacement       | 206              | Treatment    |                        |
| Frac Gradient                                   |                                       | 15 Min                        |        | Spacers                           | 30                     | Load and Breakdown        |                  | Total Job    |                        |
| Rates   |                                       |                               |        |                                   |                        |                           |                  |              |                        |
| Circulating                                     |                                       | Mixing                        | 4.5    | Displacement                      | 7                      | Avg. Job                  |                  |              | 6                      |
| Cement Left In Pipe                             | Amount                                | 84 ft                         | Reason | Shoe Joint                        |                        |                           |                  |              |                        |
| Frac Ring # 1 @                                 | ID                                    | Frac ring # 2 @               | ID     | Frac Ring # 3 @                   | ID                     | Frac Ring # 4 @           | ID               |              |                        |
| <b>The Information Stated Herein Is Correct</b> |                                       |                               |        | Customer Representative Signature |                        |                           |                  |              |                        |



# Hydraulic Fracturing Fluid Product Component Information Disclosure

|                                |                     |
|--------------------------------|---------------------|
| Job Start Date:                | 7/10/2013           |
| Job End Date:                  | 7/13/2013           |
| State:                         | Kansas              |
| County:                        | Harper              |
| API Number:                    | 15-077-21917-01-00  |
| Operator Name:                 | SandRidge Energy    |
| Well Name and Number:          | 4J Ranch 3408 2-33H |
| Longitude:                     | -98.19512300        |
| Latitude:                      | 37.03668300         |
| Datum:                         | NAD27               |
| Federal/Tribal Well:           | NO                  |
| True Vertical Depth:           | 4,703               |
| Total Base Water Volume (gal): | 2,950,916           |
| 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                   | Operator | Carrier          | Water                                       | 7732-18-5                                | 100.00000  | 96.21431   |          |
| 40/70 White             | FTSI     | Proppant         | 40/70 White                                 | 14808-60-8                               | 100.00000  | 3.03726  |          |
| Hydrochloric Acid (HCl) | FTSI     | Acid             | Water                                       | 7732-18-5                                | 85.00000   | 0.50937  |          |
|                         |          |                  | Hydrogen Chloride                           | 7647-01-0                                | 15.00000   | 0.08989  |          |
| FRW-200                 | FTSI     | Friction reducer | Water                                       | 7732-18-5                                | 48.00000   | 0.03699  |          |
|                         |          |                  | Copolymer of acrylamide and sodium acrylate | 25987-30-8                               | 33.00000   | 0.02543  |          |
|                         |          |                  | Petroleum distillate hydrotreated light     | 64742-47-8                               | 26.00000   | 0.02004  |          |
|                         |          |                  | Acrylamide P/W acrylic acid, ammonium salt  | 26100-47-0                               | 25.00000   | 0.01927  |          |
|                         |          |                  | Ammonium Chloride                           | 12125-02-9                               | 12.00000   | 0.00925  |          |
|                         |          |                  | Surfactant                                  | Proprietary                              | 7.00000  | 0.00539  |          |
|                         |          |                  | Alcohols (C10-C16), ethoxylated             | 68002-97-1                               | 4.00000  | 0.00308  |          |
|                         |          |                  | Alcohols (C12-C16), ethoxylated             | 68551-12-2                               | 4.00000  | 0.00308  |          |
|                         |          |                  | Alcohols (C12-C14), ethoxylated             | 68439-50-9                               | 4.00000  | 0.00308  |          |

|           |      |                          |                                   |                       |          |         |
|-----------|------|--------------------------|-----------------------------------|-----------------------|----------|---------|
|           |      |                          | Sorbitan Monooleate               | 1338-43-8             | 3.00000  | 0.00231 |
|           |      |                          | Polyethylene glycol monooleate    | 9004-96-0             | 3.00000  | 0.00231 |
|           |      |                          | Sorbitol Tetraoleate              | 61723-83-9            | 2.00000  | 0.00154 |
|           |      |                          | Proprietary Component             | Proprietary           | 1.50000  | 0.00116 |
|           |      |                          | Alkyloxypolyethyleneoxyethanol    | 84133-50-6            | 1.00000  | 0.00077 |
|           |      |                          | Ammonium Acrylate                 | 10604-69-0            | 0.50000  | 0.00039 |
|           |      |                          | Acrylamide                        | 79-06-1               | 0.10000  | 0.00008 |
| NE-100    | FTSI | Non-emulsifier           |                                   |                       |          |         |
|           |      |                          | Water                             | 7732-18-5             | 90.00000 | 0.04258 |
|           |      |                          | 2-Propanol                        | 67-63-0               | 10.00000 | 0.00473 |
|           |      |                          | 2-Butoxyethanol                   | 111-76-2              | 10.00000 | 0.00473 |
|           |      |                          | Dodecylbenzenesulfonic acid       | 27176-87-0            | 5.00000  | 0.00237 |
|           |      |                          | Benzene, C10-16 Alkyl Derivatives | 68648-87-3            | 0.04200  | 0.00002 |
|           |      |                          | Unsulphonated Matter              | 3rd Party Proprietary | 0.02800  | 0.00001 |
|           |      |                          | Sulfuric Acid                     | 7664-93-9             | 0.01400  | 0.00001 |
|           |      |                          | Sulfur Dioxide                    | 7446-09-5             | 0.00140  | 0.00000 |
| CS-250 SI | FTSI | Scale Inhibitor          |                                   |                       |          |         |
|           |      |                          | Water                             | 7732-18-5             | 81.00000 | 0.00871 |
|           |      |                          | Sodium Polyacrylate               | 9003-04-7             | 10.00000 | 0.00108 |
|           |      |                          | Ethylene glycol                   | 107-21-1              | 10.00000 | 0.00108 |
|           |      |                          | Sodium chloride                   | 7647-14-5             | 6.00000  | 0.00065 |
| BIO-150   | FTSI | Biocide                  |                                   |                       |          |         |
|           |      |                          | Gluteral                          | 111-30-8              | 50.00000 | 0.00551 |
|           |      |                          | Water                             | 7732-18-5             | 50.00000 | 0.00551 |
|           |      |                          | Methanol                          | 67-56-1               | 0.50000  | 0.00006 |
| CI-150    | FTSI | Acid Corrosion Inhibitor |                                   |                       |          |         |
|           |      |                          | Organic amine resin salt          | Proprietary           | 30.00000 | 0.00053 |
|           |      |                          | Ethylene Glycol                   | 107-21-1              | 30.00000 | 0.00053 |
|           |      |                          | Isopropanol                       | 67-63-0               | 30.00000 | 0.00053 |
|           |      |                          | Alkylene Oxide Block Polymer      | Proprietary           | 10.00000 | 0.00018 |
|           |      |                          | Dimethylformamide                 | 68-12-2               | 10.00000 | 0.00018 |
|           |      |                          | Quaternary ammonium compound      | Proprietary           | 10.00000 | 0.00018 |
|           |      |                          | Aromatic aldehyde                 | Proprietary           | 10.00000 | 0.00018 |
|           |      |                          | Water                             | 7732-18-5             | 5.00000  | 0.00009 |
|           |      |                          | Diethylene glycol                 | 111-46-6              | 1.00000  | 0.00002 |
|           |      |                          | Fatty Acid Salt                   | Proprietary           | 0.10000  | 0.00000 |
|           |      |                          | Aliphatic alcohol                 | Proprietary           | 0.10000  | 0.00000 |
|           |      |                          | Fatty Acid                        | Proprietary           | 0.10000  | 0.00000 |
| FE-100L   | FTSI | Iron control             |                                   |                       |          |         |
|           |      |                          | Water                             | 7732-18-5             | 60.00000 | 0.00076 |
|           |      |                          | Citric acid                       | 77-92-9               | 55.00000 | 0.00070 |

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.

\* 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%

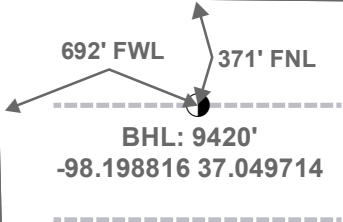
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

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

Section 29  
34S 8W

Section 28  
34S 8W

692' FWL      371' FNL



**BHL: 9420'**  
**-98.198816 37.049714**

**Bottom Perf: 9070'**  
**-98.198821 37.048625**

Section 32  
34S 8W

Section 33  
34S 8W

Harper County

**Top Perf: 5520'**  
**-98.198485 37.0391**

**Miss Entry: 4974'**  
**-98.197908 37.037655**

4J RANCH 3408 2-33H

4J RANCH 3408 3-33H

4J RANCH 3408 1-33H



Section 5  
35S 8W

Section 4  
35S 8W



**Actual Bottom-Hole Location of 4J Ranch 3408 2-33H**  
**Harper County, Kansas**  
**T&R: 34S 8W**  
**Section: 33, 692' FWL & 371' FNL**  
**-98.198816 37.049714**

1 in = 667 ft

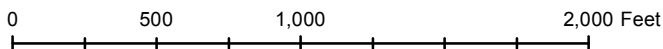


● Actual BH Location

\* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Aaron Birk

Draft Date: 9/4/2013

Drawing Name/Number:

Addendum\_4J Ranch 3408 2-33H.mxd

Coordinate System:

NAD 1927 State Plane  
Kansas South FIPS: 1502

## Remarks

---

Tiffany Golay  
08/19/013 09:33  
am

Well was completed using and open hole packer system. No liner was cemented.