

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1239795
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 Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |
|-----------------------------------|-----------------|---|

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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: _____

1239795

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 <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No 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: _____ | <input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample 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 <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 Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

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

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

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



INVOICE

| | |
|-----------|-----------|
| DATE | INVOICE # |
| 10/8/2014 | 5166 |

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

| |
|---|
| REMIT TO |
| EDGE SERVICES, INC. PO BOX 609 WOODWARD, OK 73802 |

| COUNTY | STARTING D... | WORK ORDER | RIG NUMBER | LEASE NAME | Terms |
|---------|---------------|------------|------------|------------------|---------------|
| ALFALFA | 10/7/2014 | 3781 | LATSHAW 27 | TERESA 3509 2-9H | 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 20' MOUSE HOLE SHUCK
 FURNISHED MUD, WATER, AND TRUCKING
 FURNISHED WELDER AND MATERIALS
 FURNISHED 9 YARDS OF 10 SACK GROUT FOR CONDUCTOR HOLE
 FURNISHED 4 YARDS OF 10 SACK GROUT FOR MOUSE HOLE
 FURNISHED GROUT PUMP
 DRILL MOUSE HOLE
 FURNISHED 75' OF 16" CONDUCTOR PIPE

TOTAL BID \$20,000.00

AFE Number: DC 14283
 Well Name: TERESA 3509 2-9H
 Code: 850.010
 Amount: \$20,284.02
 Co. Man: JOHN FORBEN
 Co. Man Sig: [Signature]
 Notes: _____

| | |
|------------------|----------|
| Sales Tax (6.5%) | \$284.02 |
|------------------|----------|

| | |
|--------------|--------------------|
| TOTAL | \$20,284.02 |
|--------------|--------------------|

JOB SUMMARY

| | | | | | |
|-----------------------------------|--|-------------------------|---|-----------------------------------|--------------------------------|
| COURTY Harper | | State Kansas | COMPANY Bridge Exploration & Produc | PROJECT NUMBER SOK 4317 | TICKET DATE 10/12/14 |
| LEASE NAME Teresia 3509 | | Well No. 2-9H | JOB TYPE Surface | CUSTOMER REP Jerry Bias | |
| EMP NAME | | | | EMPLOYEE NAME 0 | |

| | | | |
|------|---|--|--|
| 0.00 | 0 | | |
| 0.00 | | | |
| 0.00 | | | |
| 0.00 | | | |

Form. Name _____ Type: _____

Packer Type _____ Set At **0**

Bottom Hole Temp. **80** Pressure _____

Retainer Depth _____ Total Depth **688**

| Date | Called Out | On Location | Job Started | Job Completed |
|------|-------------------|-------------------|-------------------|-------------------|
| | 10/11/2014 | 10/11/2014 | 10/12/2014 | 10/12/2014 |
| Time | 1200 | 1800 | 0230 | 0500 |

| Type and Size | Qty | Make |
|--------------------------|-----|------|
| Auto Fill Tube | 0 | IR |
| Insert Float Va | 0 | IR |
| Centralizers | 0 | IR |
| Top Plug | 1 | IR |
| HEAD | 1 | 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 | 36# | 9 5/8" | | Surface | 688 | 1,500 |
| Liner | | | | | | |
| Liner | | | | | | |
| Tubing | | 0 | | | | |
| Drill Pipe | | | | | | |
| Open Hole | | | 12 1/4" | Surface | 688 | Shots/Ft. |
| Perforations | | | | | | |
| Perforations | | | | | | |
| Perforations | | | | | | |

| Materials | | | |
|---------------|------------------|---------|--------------------|
| Mud Type | WBM | Density | 9 Lb/Gal |
| Disp. Fluid | Fresh Water | Density | 8.33 Lb/Gal |
| Spacer type | Fresh Water 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 | | | |
| Other | | | |

| Hours On Location | | Operating Hours | | Description of Job |
|-------------------|------------|-----------------|------------|--------------------|
| Date | Hours | Date | Hours | |
| 10/11 | | 10/12 | | Surface |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | 0.0 | Total | 0.0 | |

| Pressures | | | |
|----------------------|------------------|--------|-------------------|
| MAX | 1,500 PSI | AVG. | 250 |
| Average Rates in BPM | | | |
| MAX | 6 BPM | AVG | 4 |
| Cement Left in Pipe | | | |
| Feet | 45 | Reason | SHOE JOINT |

| Cement Data | | | | | | |
|-------------|-------------|---------------------------------|---|--------------|--------------|--------------|
| Stage | Sacks | Cement | Additives | W/Rq. | Yield | Lbs/Gal |
| 1 | 215 | TEX Lite Premium Plus 65 | (6% Gel) 2% Calcium Chloride - 1/4pps Cello-Flake - 0.2% X-Air | 11.11 | 2.01 | 12.40 |
| 2 | 165 | 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 | H2O | Type: | | Preflush: | BBI 10.00 Type: Fresh Water |
| Breakdown | | MAXIMUM | 1,500 PSI | Load & Bkdn: | Gal - BBI N/A Pad:Bbl -Gal N/A |
| | | Lost Returns-N | NO/FULL | Excess /Return BBI | 50 Calc. Disp Bbl 52.00 |
| | | Actual TOC | SURFACE | Calc. TOC: | SURFACE Actual Disp. 52.00 |
| Average | | Bump Plug PSI: | | Final Circ. PSI: | |
| ISIF | 5 Min. | 10 Min | 15 Min | Cement Slurry BBI | 116.0 Disp:Bbl |
| | | | | Total Volume BBI | 178.00 |

CUSTOMER REPRESENTATIVE

JOA

SIGNATURE

| | | | | |
|-----------------------------------|-------------------------|--|---------------------------------------|--------------------------------|
| JOB SUMMARY | | | PROJECT NUMBER SOK 4348 | TICKET DATE 10/19/14 |
| COUNTY Harper | State Kansas | COMPANY Sandridge Exploration & Production | CUSTOMER REP Jerry Bias | |
| LEASE NAME Teresia 3509 | Well No. 2-9H | JOB TYPE Intermediate | EMPLOYEE NAME Bryan Douglas | |

| | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|
| EMP NAME Bryan Douglas | | | | | | | | | |
| Dustin Odom | | | | | | | | | |
| Chris Looney | | | | | | | | | |
| 0.00 | | | | | | | | | |

Form. Name _____ Type: _____

Packer Type _____ Set At **0**

Bottom Hole Temp. **155** Pressure _____

Retainer Depth _____ Total Depth **5707**

| Type and Size | Qty | Make |
|--------------------------|-----|------|
| Auto Fill Tube | 0 | IR |
| Insert Float Val | 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 |

| Materials | | | |
|---------------|-----------------|---------|-----------------------|
| Mud Type | WBM | Density | 9 Lb/Gal |
| Disp. Fluid | Fresh Water | Density | 8.33 Lb/Gal |
| Spacer type | GEL BBL. | | 30 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 | |
| Other | |

| Date | Called Out | On Location | Job Started | Job Completed |
|------|-------------------|-------------------|-------------------|-------------------|
| | 10/18/2014 | 10/18/2014 | 10/18/2014 | 10/19/2014 |
| Time | 1500 | 1800 | 2200 | 0100 |

| Well Data | | | | | | |
|--------------|----------|------------|---------------|-------|----------------|------------------------|
| | New/Used | Weight | Size | Grade | From To | Max. Allow |
| Casing | | 26# | 7" | | Surface | 5,000 |
| Liner | | | | | | |
| Liner | | | | | | |
| Tubing | | | 0 | | | |
| Drill Pipe | | | | | | |
| Open Hole | | | 8 3/4" | | Surface | 5,731 Shots/Ft. |
| Perforations | | | | | | |
| Perforations | | | | | | |
| Perforations | | | | | | |

| Hours On Location | | Operating Hours | | Description of Job |
|-------------------|------------|-----------------|------------|------------------------|
| Date | Hours | Date | Hours | |
| 10/18 | 6.0 | 10/18 | 2.0 | Intermediate |
| 10/19 | 1.0 | 10/19 | 1.0 | 1 1/2 BBLs BACK |
| | | | | FLOATS HELD |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Total | 7.0 | Total | 3.0 | |

| | |
|----------------------|--------------------------|
| Pressures | |
| MAX 5,000 PSI | AVG 1000 |
| Average Rates in BPM | |
| MAX 8 BPM | AVG 5 |
| Cement Left in Pipe | |
| Feet 88 | Reason SHOE JOINT |

| Cement Data | | | | | | | |
|-------------|------------|--------------------------|--|-------------|-------------|--------------|-------------|
| Stage | Sacks | Cement | Additives | W/Rq. | Yield | Lbs/Gal | |
| 1 | 235 | 50/50 POZ PREMIUM | 4% Gel - 0.2% FL-17 - 0.1% C-51 - 0.15% C-20 - 0.1% C-37 - 0.2% X-Air | 6.93 | 1.43 | 13.60 | |
| 2 | 110 | Premium | 0.2% FL-17 - 0.1% C-51 - 0.15% C-20 - 0.2% X-Air | 5.19 | 1.19 | 15.60 | |
| 3 | 0 | 0 | | 0 | 0.00 | 0.00 | 0.00 |

| Summary | | | | | | | |
|-----------|---------------|----------------|------------------|----------------|-----------|---------------|----------------------------|
| Preflush | 30 | Type: | Gel | Preflush: | BBI | 30.00 | Type: Gel Spacer |
| Breakdown | | MAXIMUM | 5,000 PSI | Load & Bkdn: | Gal - BBI | N/A | Pad:Bbl -Gal N/A |
| | | Lost Returns-N | NO/FULL | Excess /Return | BBI | N/A | Calc. Disp Bbl 215 |
| | | Actual TOC | 2.749 | Calc. TOC: | | 2.749 | Actual Disp. 215.22 |
| Average | | Bump Plug PSI: | 1,800 | Final Circ. | PSI: | 1,200 | Disp:Bbl 215.22 |
| ISIP | 5 Min. | 10 Min | | Cement Slurry: | BBI | 83.2 | |
| | | 15 Min | | Total Volume | BBI | 328.38 | |

CUSTOMER REPRESENTATIVE *JD Be* SIGNATURE _____

11) Frac the MISSISSIPPI (Stage 1) as follows using the chemical concentrations below:

| | Surfactant (gpt) | ClO ₂ (ppm) | Scale Inhibitor (gpt) |
|-----------------|------------------|------------------------|-----------------------|
| Archer/Bosque | 0 | 2-3 | 0.1 |
| Cimarron/Bosque | 0 | 2-3 | 0.25 |

NOTE: Pump FR as required to obtain minimum rate of 75 bpm. DO NOT EXCEED 0.75 gal/1000 concentration of FR without prior discussion with engineer.

| STAGE 1 | | | | | | | | |
|---------------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| P-Sleeve @ 11,195 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 1000 | 24 | | | | | 1.2 |
| Slickwater | 70 | 17211 | 410 | | | | | 5.9 |
| Slickwater | 70 | 12800 | 305 | 40/70 | 0.25 | Garnet | 3200 | 4.4 |
| Slickwater | 70 | 13000 | 310 | 40/70 | 0.50 | Genoa | 6500 | 4.4 |
| Slickwater | 70 | 3150 | 75 | | | | | 1.1 |
| Slickwater | 70 | 12933 | 308 | 40/70 | 0.75 | Genoa | 9700 | 4.4 |
| Slickwater | 70 | 3150 | 75 | | | | | 1.1 |
| Slickwater | 70 | 9700 | 231 | 40/70 | 1.00 | Genoa | 9700 | 3.3 |
| Slickwater | 70 | 3150 | 75 | | | | | 1.1 |
| Slickwater | 70 | 3200 | 76 | 40/70 | 1.00 | Garnet | 3200 | 1.1 |
| Slickwater | 70 | 14699 | 350 | | | | | 5.0 |
| TOTAL | | 93,994 | 2,238 | | | | 32,300 | 32.8 |

Frac the MISSISSIPPI (Stage 2) as follows:
Drop 2.000" ball. Reduce rate to 5-10 bpm at +/- 247 bbls (50 bbls before ball seats).

| STAGE 2 | | | | | | | | |
|-----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 11,052 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 750 | 18 | | | | | 0.9 |
| Slickwater | 75 | 19344 | 461 | | | | | 6.1 |
| Slickwater | 75 | 14400 | 343 | 40/70 | 0.25 | Garnet | 3600 | 4.6 |
| Slickwater | 75 | 14600 | 348 | 40/70 | 0.50 | Genoa | 7300 | 4.6 |
| Slickwater | 75 | 3150 | 75 | | | | | 1.0 |
| Slickwater | 75 | 14533 | 346 | 40/70 | 0.75 | Genoa | 10900 | 4.6 |
| Slickwater | 75 | 3150 | 75 | | | | | 1.0 |
| Slickwater | 75 | 10900 | 260 | 40/70 | 1.00 | Genoa | 10900 | 3.5 |
| Slickwater | 75 | 3150 | 75 | | | | | 1.0 |
| Slickwater | 75 | 3600 | 86 | 40/70 | 1.00 | Garnet | 3600 | 1.1 |
| Slickwater | 75 | 14606 | 348 | | | | | 4.6 |
| TOTAL | | 102,184 | 2,433 | | | | 36,300 | 33.1 |

Frac the MISSISSIPPI (Stage 3) as follows:
Drop 2.063" ball. Reduce rate to 5-10 bpm at +/- 244 bbls (50 bbls before ball seats).

| STAGE 3 | | | | | | | | |
|-----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 10,866 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 500 | 12 | | | | | 0.6 |
| Slickwater | 80 | 19878 | 473 | | | | | 5.9 |
| Slickwater | 80 | 14800 | 352 | 40/70 | 0.25 | Garnet | 3700 | 4.4 |
| Slickwater | 80 | 15000 | 357 | 40/70 | 0.50 | Genoa | 7500 | 4.5 |
| Slickwater | 80 | 3150 | 75 | | | | | 0.9 |
| Slickwater | 80 | 14933 | 356 | 40/70 | 0.75 | Genoa | 11200 | 4.4 |
| Slickwater | 80 | 3150 | 75 | | | | | 0.9 |
| Slickwater | 80 | 11200 | 267 | 40/70 | 1.00 | Genoa | 11200 | 3.3 |
| Slickwater | 80 | 3150 | 75 | | | | | 0.9 |
| Slickwater | 80 | 3700 | 88 | 40/70 | 1.00 | Garnet | 3700 | 1.1 |
| Slickwater | 80 | 14485 | 345 | | | | | 4.3 |
| TOTAL | | 103,946 | 2,475 | | | | 37,300 | 31.4 |

Frac the MISSISSIPPI (Stage 4) as follows:
 Drop 2.125" ball. Reduce rate to 5-10 bpm at +/- 241 bbls (50 bbls before ball seats).

| STAGE 4 | | | | | | | | |
|----------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 10,635' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 85 | 18322 | 365 | | | | | 4.3 |
| Slickwater | 85 | 11600 | 276 | 40/70 | 0.25 | Garnet | 2900 | 3.2 |
| Slickwater | 85 | 11400 | 271 | 40/70 | 0.50 | Genoa | 5700 | 3.2 |
| Slickwater | 85 | 3150 | 75 | | | | | 0.9 |
| Slickwater | 85 | 11467 | 273 | 40/70 | 0.75 | Genoa | 8600 | 3.2 |
| Slickwater | 85 | 3150 | 75 | | | | | 0.9 |
| Slickwater | 85 | 8600 | 205 | 40/70 | 1.00 | Genoa | 8600 | 2.4 |
| Slickwater | 85 | 3150 | 75 | | | | | 0.9 |
| Slickwater | 85 | 2900 | 69 | 40/70 | 1.00 | Garnet | 2900 | 0.8 |
| Slickwater | 85 | 14335 | 341 | | | | | 4.0 |
| TOTAL | | 85,324 | 2,032 | | | | 28,700 | 24.1 |

Frac the MISSISSIPPI (Stage 5) as follows:
 Drop 2.188" ball. Reduce rate to 5-10 bpm at +/- 238 bbls (50 bbls before ball seats).

| STAGE 5 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 10,444' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 90 | 24678 | 588 | | | | | 6.5 |
| Slickwater | 90 | 18400 | 438 | 40/70 | 0.25 | Garnet | 4600 | 4.9 |
| Slickwater | 90 | 18600 | 443 | 40/70 | 0.50 | Genoa | 9300 | 4.9 |
| Slickwater | 90 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 90 | 18533 | 441 | 40/70 | 0.75 | Genoa | 13900 | 4.9 |
| Slickwater | 90 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 90 | 13900 | 331 | 40/70 | 1.00 | Genoa | 13900 | 3.7 |
| Slickwater | 90 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 90 | 4600 | 110 | 40/70 | 1.00 | Garnet | 4600 | 1.2 |
| Slickwater | 90 | 14210 | 338 | | | | | 3.8 |
| TOTAL | | 122,622 | 2,920 | | | | 46,300 | 32.7 |

Frac the MISSISSIPPI (Stage 6) as follows:
 Drop 2.250" ball. Reduce rate to 5-10 bpm at +/- 236 bbls (50 bbls before ball seats).

| STAGE 6 | | | | | | | | |
|----------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 10,303' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 95 | 15078 | 359 | | | | | 3.8 |
| Slickwater | 95 | 11200 | 267 | 40/70 | 0.25 | Garnet | 2800 | 2.8 |
| Slickwater | 95 | 11400 | 271 | 40/70 | 0.50 | Genoa | 5700 | 2.9 |
| Slickwater | 95 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 95 | 11333 | 270 | 40/70 | 0.75 | Genoa | 8500 | 2.8 |
| Slickwater | 95 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 95 | 8500 | 202 | 40/70 | 1.00 | Genoa | 8500 | 2.1 |
| Slickwater | 95 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 95 | 2800 | 67 | 40/70 | 1.00 | Garnet | 2800 | 0.7 |
| Slickwater | 95 | 14119 | 336 | | | | | 3.5 |
| TOTAL | | 84,130 | 2,003 | | | | 28,300 | 21.3 |

Frac the MISSISSIPPI (Stage 7) as follows:
 Drop 2.313" ball. Reduce rate to 5-10 bpm at +/- 232 bbls (50 bbls before ball seats).

| STAGE 7 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 10,079' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 24389 | 581 | | | | | 5.8 |
| Slickwater | 100 | 18400 | 438 | 40/70 | 0.25 | Garnet | 4600 | 4.4 |
| Slickwater | 100 | 18200 | 433 | 40/70 | 0.50 | Genoa | 9100 | 4.3 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 18267 | 435 | 40/70 | 0.75 | Genoa | 13700 | 4.3 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 13700 | 326 | 40/70 | 1.00 | Genoa | 13700 | 3.3 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 4600 | 110 | 40/70 | 1.00 | Garnet | 4600 | 1.1 |
| Slickwater | 100 | 13973 | 333 | | | | | 3.3 |
| TOTAL | | 121,228 | 2,886 | | | | 45,700 | 29.1 |

Frac the MISSISSIPPI (Stage 8) as follows:
 Drop 2.375" ball. Reduce rate to 5-10 bpm at +/- 229 bbls (50 bbls before ball seats).

| STAGE 8 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 9,892 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 20122 | 479 | | | | | 4.8 |
| Slickwater | 100 | 15200 | 362 | 40/70 | 0.25 | Garnet | 3800 | 3.6 |
| Slickwater | 100 | 15000 | 357 | 40/70 | 0.50 | Genoa | 7500 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 15067 | 359 | 40/70 | 0.75 | Genoa | 11300 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11300 | 269 | 40/70 | 1.00 | Genoa | 11300 | 2.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3800 | 90 | 40/70 | 1.00 | Garnet | 3800 | 0.9 |
| Slickwater | 100 | 13851 | 330 | | | | | 3.3 |
| TOTAL | | 104,040 | 2,477 | | | | 37,700 | 25.0 |

Frac the MISSISSIPPI (Stage 9) as follows:
 Drop 2.438" ball. Reduce rate to 5-10 bpm at +/- 226 bbls (50 bbls before ball seats).

| STAGE 9 | | | | | | | | |
|----------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 9,698 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 15544 | 370 | | | | | 3.7 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.25 | Garnet | 2900 | 2.8 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.50 | Genoa | 5800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11733 | 279 | 40/70 | 0.75 | Genoa | 8800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 8800 | 210 | 40/70 | 1.00 | Genoa | 8800 | 2.1 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 2900 | 69 | 40/70 | 1.00 | Garnet | 2900 | 0.7 |
| Slickwater | 100 | 13725 | 327 | | | | | 3.3 |
| TOTAL | | 85,603 | 2,038 | | | | 29,200 | 20.6 |

Frac the MISSISSIPPI (Stage 10) as follows:
 Drop 2.500" ball. Reduce rate to 5-10 bpm at +/- 223 bbls (50 bbls before ball seats).

| STAGE 10 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 9,505 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 25600 | 610 | | | | | 6.1 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.25 | Garnet | 4800 | 4.6 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.50 | Genoa | 9600 | 4.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.75 | Genoa | 14400 | 4.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14400 | 343 | 40/70 | 1.00 | Genoa | 14400 | 3.4 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 4800 | 114 | 40/70 | 1.00 | Garnet | 4800 | 1.1 |
| Slickwater | 100 | 13599 | 324 | | | | | 3.2 |
| TOTAL | | 125,699 | 2,993 | | | | 48,000 | 30.2 |

Frac the MISSISSIPPI (Stage 11) as follows:
 Drop 2.563" ball. Reduce rate to 5-10 bpm at +/- 220 bbls (50 bbls before ball seats).

| STAGE 11 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 9,313 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 24989 | 595 | | | | | 5.9 |
| Slickwater | 100 | 18800 | 448 | 40/70 | 0.25 | Garnet | 4700 | 4.5 |
| Slickwater | 100 | 18800 | 448 | 40/70 | 0.50 | Genoa | 9400 | 4.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 18667 | 444 | 40/70 | 0.75 | Genoa | 14000 | 4.4 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14000 | 333 | 40/70 | 1.00 | Genoa | 14000 | 3.3 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 4700 | 112 | 40/70 | 1.00 | Garnet | 4700 | 1.1 |
| Slickwater | 100 | 13474 | 321 | | | | | 3.2 |
| TOTAL | | 123,130 | 2,932 | | | | 46,800 | 29.6 |

Frac the MISSISSIPPI (Stage 12) as follows:
 Drop 2.625" ball. Reduce rate to 5-10 bpm at +/- 217 bbls (50 bbls before ball seats).

| STAGE 12 | | | | | | | | |
|---------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 9,125' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 15611 | 372 | | | | | 3.7 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.25 | Garnet | 2900 | 2.8 |
| Slickwater | 100 | 11800 | 281 | 40/70 | 0.50 | Genoa | 5900 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11733 | 279 | 40/70 | 0.75 | Genoa | 8800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 8800 | 210 | 40/70 | 1.00 | Genoa | 8800 | 2.1 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 2900 | 69 | 40/70 | 1.00 | Garnet | 2900 | 0.7 |
| Slickwater | 100 | 13352 | 318 | | | | | 3.2 |
| TOTAL | | 85,496 | 2,036 | | | | 29,300 | 20.6 |

Frac the MISSISSIPPI (Stage 13) as follows:
 Drop 2.688" ball. Reduce rate to 5-10 bpm at +/- 214 bbls (50 bbls before ball seats).

| STAGE 13 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 8,934' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 19344 | 461 | | | | | 4.6 |
| Slickwater | 100 | 14400 | 343 | 40/70 | 0.25 | Garnet | 3600 | 3.4 |
| Slickwater | 100 | 14600 | 348 | 40/70 | 0.50 | Genoa | 7300 | 3.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14533 | 346 | 40/70 | 0.75 | Genoa | 10900 | 3.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 10900 | 260 | 40/70 | 1.00 | Genoa | 10900 | 2.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3600 | 86 | 40/70 | 1.00 | Garnet | 3600 | 0.9 |
| Slickwater | 100 | 13227 | 315 | | | | | 3.1 |
| TOTAL | | 100,305 | 2,388 | | | | 36,300 | 24.1 |

Frac the MISSISSIPPI (Stage 14) as follows:
 Drop 2.750" ball. Reduce rate to 5-10 bpm at +/- 212 bbls (50 bbls before ball seats).

| STAGE 14 | | | | | | | | |
|---------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 8,758' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 18133 | 432 | | | | | 4.3 |
| Slickwater | 100 | 13600 | 324 | 40/70 | 0.25 | Garnet | 3400 | 3.2 |
| Slickwater | 100 | 13600 | 324 | 40/70 | 0.50 | Genoa | 6800 | 3.2 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 13600 | 324 | 40/70 | 0.75 | Genoa | 10200 | 3.2 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 10200 | 243 | 40/70 | 1.00 | Genoa | 10200 | 2.4 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3400 | 81 | 40/70 | 1.00 | Garnet | 3400 | 0.8 |
| Slickwater | 100 | 13113 | 312 | | | | | 3.1 |
| TOTAL | | 95,346 | 2,270 | | | | 34,000 | 22.9 |

Frac the MISSISSIPPI (Stage 15) as follows:
 Drop 2.813" ball. Reduce rate to 5-10 bpm at +/- 208 bbls (50 bbls before ball seats).

| STAGE 15 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 8,540' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 19733 | 470 | | | | | 4.7 |
| Slickwater | 100 | 14800 | 352 | 40/70 | 0.25 | Garnet | 3700 | 3.5 |
| Slickwater | 100 | 14800 | 352 | 40/70 | 0.50 | Genoa | 7400 | 3.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14800 | 352 | 40/70 | 0.75 | Genoa | 11100 | 3.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11100 | 264 | 40/70 | 1.00 | Genoa | 11100 | 2.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3700 | 88 | 40/70 | 1.00 | Garnet | 3700 | 0.9 |
| Slickwater | 100 | 12971 | 309 | | | | | 3.1 |
| TOTAL | | 101,604 | 2,419 | | | | 37,000 | 24.4 |

Frac the MISSISSIPPI (Stage 16) as follows:
 Drop 2.875" ball. Reduce rate to 5-10 bpm at +/- 206 bbls (50 bbls before ball seats).

| STAGE 16 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 8,398' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 20267 | 483 | | | | | 4.8 |
| Slickwater | 100 | 15200 | 362 | 40/70 | 0.25 | Garnet | 3800 | 3.6 |
| Slickwater | 100 | 15200 | 362 | 40/70 | 0.50 | Genoa | 7600 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 15200 | 362 | 40/70 | 0.75 | Genoa | 11400 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11400 | 271 | 40/70 | 1.00 | Genoa | 11400 | 2.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3800 | 90 | 40/70 | 1.00 | Garnet | 3800 | 0.9 |
| Slickwater | 100 | 12878 | 307 | | | | | 3.1 |
| TOTAL | | 103,645 | 2,468 | | | | 38,000 | 24.9 |

Frac the MISSISSIPPI (Stage 17) as follows:
 Drop 2.938" ball. Reduce rate to 5-10 bpm at +/- 203 bbls (50 bbls before ball seats).

| STAGE 17 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 8,205' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 19733 | 470 | | | | | 4.7 |
| Slickwater | 100 | 14800 | 352 | 40/70 | 0.25 | Garnet | 3700 | 3.5 |
| Slickwater | 100 | 14800 | 352 | 40/70 | 0.50 | Genoa | 7400 | 3.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14800 | 352 | 40/70 | 0.75 | Genoa | 11100 | 3.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11100 | 264 | 40/70 | 1.00 | Genoa | 11100 | 2.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 6300 | 150 | 40/70 | 1.00 | Garnet | 3700 | 1.5 |
| Slickwater | 100 | 12753 | 304 | | | | | 3.0 |
| TOTAL | | 103,986 | 2,476 | | | | 37,000 | 25.0 |

Frac the MISSISSIPPI (Stage 18) as follows:
 Drop 3.000" ball. Reduce rate to 5-10 bpm at +/- 200 bbls (50 bbls before ball seats).

| STAGE 18 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 8,023' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 24922 | 593 | | | | | 5.9 |
| Slickwater | 100 | 18800 | 448 | 40/70 | 0.25 | Garnet | 4700 | 4.5 |
| Slickwater | 100 | 18600 | 443 | 40/70 | 0.50 | Genoa | 9300 | 4.4 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 18667 | 444 | 40/70 | 0.75 | Genoa | 14000 | 4.4 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14000 | 333 | 40/70 | 1.00 | Genoa | 14000 | 3.3 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 4700 | 112 | 40/70 | 1.00 | Garnet | 4700 | 1.1 |
| Slickwater | 100 | 12634 | 301 | | | | | 3.0 |
| TOTAL | | 122,023 | 2,905 | | | | 46,700 | 29.3 |

Frac the MISSISSIPPI (Stage 19) as follows:
 Drop 3.063" ball. Reduce rate to 5-10 bpm at +/- 197 bbls (50 bbls before ball seats).

| STAGE 19 | | | | | | | | |
|---------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 7,833' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 15544 | 370 | | | | | 3.7 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.25 | Garnet | 2900 | 2.8 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.50 | Genoa | 5800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11733 | 279 | 40/70 | 0.75 | Genoa | 8800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 8800 | 210 | 40/70 | 1.00 | Genoa | 8800 | 2.1 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 2900 | 69 | 40/70 | 1.00 | Garnet | 2900 | 0.7 |
| Slickwater | 100 | 12511 | 298 | | | | | 3.0 |
| TOTAL | | 84,388 | 2,009 | | | | 29,200 | 20.3 |

Frac the MISSISSIPPI (Stage 20) as follows:
 Drop 3.125" ball. Reduce rate to 5-10 bpm at +/- 194 bbls (50 bbls before ball seats).

| STAGE 20 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 7,598 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 20122 | 479 | | | | | 4.8 |
| Slickwater | 100 | 15200 | 362 | 40/70 | 0.25 | Garnet | 3800 | 3.6 |
| Slickwater | 100 | 15000 | 357 | 40/70 | 0.50 | Genoa | 7500 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 15067 | 359 | 40/70 | 0.75 | Genoa | 11300 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11300 | 269 | 40/70 | 1.00 | Genoa | 11300 | 2.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3800 | 90 | 40/70 | 1.00 | Garnet | 3800 | 0.9 |
| Slickwater | 100 | 12358 | 294 | | | | | 2.9 |
| TOTAL | | 102,547 | 2,442 | | | | 37,700 | 24.7 |

Frac the MISSISSIPPI (Stage 21) as follows:
 Drop 3.188" ball. Reduce rate to 5-10 bpm at +/- 191 bbls (50 bbls before ball seats).

| STAGE 21 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 7,452 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 20722 | 493 | | | | | 4.9 |
| Slickwater | 100 | 15600 | 371 | 40/70 | 0.25 | Garnet | 3900 | 3.7 |
| Slickwater | 100 | 15600 | 371 | 40/70 | 0.50 | Genoa | 7800 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 15467 | 368 | 40/70 | 0.75 | Genoa | 11600 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 1.00 | Genoa | 11600 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3900 | 93 | 40/70 | 1.00 | Garnet | 3900 | 0.9 |
| Slickwater | 100 | 12263 | 292 | | | | | 2.9 |
| TOTAL | | 104,852 | 2,496 | | | | 38,800 | 25.2 |

Frac the MISSISSIPPI (Stage 22) as follows:
 Drop 3.250" ball. Reduce rate to 5-10 bpm at +/- 189 bbls (50 bbls before ball seats).

| STAGE 22 | | | | | | | | |
|----------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 7,264 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 19878 | 473 | | | | | 4.7 |
| Slickwater | 100 | 14800 | 352 | 40/70 | 0.25 | Garnet | 3700 | 3.5 |
| Slickwater | 100 | 15000 | 357 | 40/70 | 0.50 | Genoa | 7500 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14933 | 356 | 40/70 | 0.75 | Genoa | 11200 | 3.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11200 | 267 | 40/70 | 1.00 | Genoa | 11200 | 2.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3700 | 88 | 40/70 | 1.00 | Garnet | 3700 | 0.9 |
| Slickwater | 100 | 12140 | 289 | | | | | 2.9 |
| TOTAL | | 101,351 | 2,413 | | | | 37,300 | 24.4 |

Frac the MISSISSIPPI (Stage 23) as follows:
 Drop 3.313" ball. Reduce rate to 5-10 bpm at +/- 186 bbls (50 bbls before ball seats).

| STAGE 23 | | | | | | | | |
|----------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 7,071 ' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 15611 | 372 | | | | | 3.7 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.25 | Garnet | 2900 | 2.8 |
| Slickwater | 100 | 11800 | 281 | 40/70 | 0.50 | Genoa | 5900 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11733 | 279 | 40/70 | 0.75 | Genoa | 8800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 8800 | 210 | 40/70 | 1.00 | Genoa | 8800 | 2.1 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 2900 | 69 | 40/70 | 1.00 | Garnet | 2900 | 0.7 |
| Slickwater | 100 | 12015 | 286 | | | | | 2.9 |
| TOTAL | | 84,159 | 2,004 | | | | 29,300 | 20.3 |

Frac the MISSISSIPPI (Stage 24) as follows:
 Drop 3.375" ball. Reduce rate to 5-10 bpm at +/- 183 bbls (50 bbls before ball seats).

| STAGE 24 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 6,876' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 25678 | 611 | | | | | 6.1 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.25 | Garnet | 4800 | 4.6 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.50 | Genoa | 9600 | 4.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 19333 | 460 | 40/70 | 0.75 | Genoa | 14500 | 4.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14500 | 345 | 40/70 | 1.00 | Genoa | 14500 | 3.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 4800 | 114 | 40/70 | 1.00 | Garnet | 4800 | 1.1 |
| Slickwater | 100 | 11888 | 283 | | | | | 2.8 |
| TOTAL | | 124,299 | 2,959 | | | | 48,200 | 29.8 |

Frac the MISSISSIPPI (Stage 25) as follows:
 Drop 3.438" ball. Reduce rate to 5-10 bpm at +/- 180 bbls (50 bbls before ball seats).

| STAGE 25 | | | | | | | | |
|---------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 6,683' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 15544 | 370 | | | | | 3.7 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.25 | Garnet | 2900 | 2.8 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 0.50 | Genoa | 5800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11733 | 279 | 40/70 | 0.75 | Genoa | 8800 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 8800 | 210 | 40/70 | 1.00 | Genoa | 8800 | 2.1 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 2900 | 69 | 40/70 | 1.00 | Garnet | 2900 | 0.7 |
| Slickwater | 100 | 11762 | 280 | | | | | 2.8 |
| TOTAL | | 83,640 | 1,991 | | | | 29,200 | 20.2 |

Frac the MISSISSIPPI (Stage 26) as follows:
 Drop 3.500" ball. Reduce rate to 5-10 bpm at +/- 177 bbls (50 bbls before ball seats).

| STAGE 26 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 6,491' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 25600 | 610 | | | | | 6.1 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.25 | Garnet | 4800 | 4.6 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.50 | Genoa | 9600 | 4.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 19200 | 457 | 40/70 | 0.75 | Genoa | 14400 | 4.6 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 14400 | 343 | 40/70 | 1.00 | Genoa | 14400 | 3.4 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 4800 | 114 | 40/70 | 1.00 | Garnet | 4800 | 1.1 |
| Slickwater | 100 | 11637 | 277 | | | | | 2.8 |
| TOTAL | | 123,737 | 2,946 | | | | 48,000 | 29.7 |

Frac the MISSISSIPPI (Stage 27) as follows:
 Drop 3.563" ball. Reduce rate to 5-10 bpm at +/- 174 bbls (50 bbls before ball seats).

| STAGE 27 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 6,297' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 20722 | 493 | | | | | 4.9 |
| Slickwater | 100 | 15600 | 371 | 40/70 | 0.25 | Garnet | 3900 | 3.7 |
| Slickwater | 100 | 15600 | 371 | 40/70 | 0.50 | Genoa | 7800 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 15467 | 368 | 40/70 | 0.75 | Genoa | 11600 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 1.00 | Genoa | 11600 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3900 | 93 | 40/70 | 1.00 | Garnet | 3900 | 0.9 |
| Slickwater | 100 | 11511 | 274 | | | | | 2.7 |
| TOTAL | | 104,100 | 2,479 | | | | 38,800 | 25.0 |

Frac the MISSISSIPPI (Stage 28) as follows:
 Drop 3.625" ball. Reduce rate to 5-10 bpm at +/- 171 bbls (50 bbls before ball seats).

| STAGE 28 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 6,150' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 20656 | 492 | | | | | 4.9 |
| Slickwater | 100 | 15600 | 371 | 40/70 | 0.25 | Garnet | 3900 | 3.7 |
| Slickwater | 100 | 15400 | 367 | 40/70 | 0.50 | Genoa | 7700 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 15467 | 368 | 40/70 | 0.75 | Genoa | 11600 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11600 | 276 | 40/70 | 1.00 | Genoa | 11600 | 2.8 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3900 | 93 | 40/70 | 1.00 | Garnet | 3900 | 0.9 |
| Slickwater | 100 | 11416 | 272 | | | | | 2.7 |
| TOTAL | | 103,737 | 2,470 | | | | 38,700 | 24.9 |

Frac the MISSISSIPPI (Stage 29) as follows:
 Drop 3.688" ball. Reduce rate to 5-10 bpm at +/- 168 bbls (50 bbls before ball seats).

| STAGE 29 | | | | | | | | |
|---------------|------|----------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 5,911' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 20411 | 486 | | | | | 4.9 |
| Slickwater | 100 | 15200 | 362 | 40/70 | 0.25 | Garnet | 3800 | 3.6 |
| Slickwater | 100 | 15400 | 367 | 40/70 | 0.50 | Genoa | 7700 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 15333 | 365 | 40/70 | 0.75 | Genoa | 11500 | 3.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 11500 | 274 | 40/70 | 1.00 | Genoa | 11500 | 2.7 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 3800 | 90 | 40/70 | 1.00 | Garnet | 3800 | 0.9 |
| Slickwater | 100 | 11259 | 268 | | | | | 2.7 |
| TOTAL | | 102,604 | 2,443 | | | | 38,300 | 24.7 |

Frac the MISSISSIPPI (Stage 30) as follows:
 Drop 3.750" ball. Reduce rate to 5-10 bpm at +/- 165 bbls (50 bbls before ball seats).

| STAGE 30 | | | | | | | | |
|---------------|------|---------------|--------------|-------|----------|-----------|---------------|-------------|
| Port @ 5,765' | | | | | | | | |
| Fluid | Rate | Vol, gal | Vol, bbl | Prop | Prop Con | Prop type | Prop, lbs | Time, min |
| 15% HCl acid | 20 | 250 | 6 | | | | | 0.3 |
| Slickwater | 100 | 11589 | 276 | | | | | 2.8 |
| Slickwater | 100 | 8800 | 210 | 40/70 | 0.25 | Garnet | 2200 | 2.1 |
| Slickwater | 100 | 8800 | 205 | 40/70 | 0.50 | Genoa | 4300 | 2.0 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 8667 | 206 | 40/70 | 0.75 | Genoa | 6500 | 2.1 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 6500 | 155 | 40/70 | 1.00 | Genoa | 6500 | 1.5 |
| Slickwater | 100 | 3150 | 75 | | | | | 0.8 |
| Slickwater | 100 | 2200 | 52 | 40/70 | 1.00 | Garnet | 2200 | 0.5 |
| Slickwater | 100 | 11164 | 266 | | | | | 2.7 |
| TOTAL | | 67,220 | 1,600 | | | | 21,700 | 16.2 |

TOTAL FRAC JOB VOLUMES: 72,641 bbls 1,110,100 lbs, Prop

- 12) Suck manifold and iron dry with vacuum truck. RDMO frac crew. ND wellhead isolation tool. Transfer bottoms to 2 frac tanks.
- 13) Tie flowline to B-Section. Leave well shut in for 24 hrs for resin coat to activate before opening well to flowback. Keep line laid from B-Section and open to flowback tanks until production tree is installed. Send flowback reports to KSFlowback@sandrigeenergy.com at the following times: 5 am, 1 pm, and 9 pm.

Sandridge Energy

Harper County (NAD-27)

Sec 16-T35S-R09W

Teresia 3509 2-9H

Wellbore #1

Design: Wellbore #1

Standard Survey Report

03 November, 2014

Survey Report

| | |
|--|--|
| Company: Sandridge Energy | Local Co-ordinate Reference: Well Teresia 3509 2-9H |
| Project: Harper County (NAD-27) | TVD Reference: KB @ 1260.0usft |
| Site: Sec 16-T35S-R09W | MD Reference: KB @ 1260.0usft |
| Well: Teresia 3509 2-9H | North Reference: Grid |
| Wellbore: Wellbore #1 | Survey Calculation Method: Minimum Curvature |
| Design: Wellbore #1 | Database: EDM 5000.1 Single User Db |

| | |
|---|-------------------------------------|
| Project Harper County (NAD-27) | |
| Map System: US State Plane 1927 (Exact solution) | System Datum: Mean Sea Level |
| Geo Datum: NAD 1927 (NADCON CONUS) | |
| Map Zone: Kansas South 1502 | |

| | | |
|---------------------------------------|-----------------------------------|------------------------------------|
| Site Sec 16-T35S-R09W | | |
| Site Position: | Northing: 120,704.00 usft | Latitude: 36° 59' 52.814 N |
| From: Map | Easting: 2,055,609.00 usft | Longitude: 98° 18' 34.564 W |
| Position Uncertainty: 0.0 usft | Slot Radius: 13-3/16 " | Grid Convergence: 0.12 ° |

| | | | |
|-------------------------------|-----------------------|-------------------------------------|-----------------------------------|
| Well Teresia 3509 2-9H | | | |
| Well Position | +N/-S 0.0 usft | Northing: 122,233.00 usft | Latitude: 37° 0' 7.884 N |
| | +E/-W 0.0 usft | Easting: 2,057,885.00 usft | Longitude: 98° 18' 6.470 W |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: 0.0 usft | Ground Level: 1,238.0 usft |

| | | | | | |
|-----------------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore Wellbore #1 | | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 9/26/2014 | 4.47 | 65.03 | 51,526 |

| | | | | | |
|---------------------------|--------------------------------|--------------------------|---------------------|----------------------|--|
| Design Wellbore #1 | | | | | |
| Audit Notes: | | | | | |
| Version: 1.0 | Phase: ACTUAL | Tie On Depth: 0.0 | | | |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 9.31 | |

| | | | | |
|-----------------------|------------------|--------------------------------------|------------------|--------------------|
| Survey Program | | Date 11/3/2014 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 887.0 | 11,258.0 | Drillright MWD Surveys (Wellbore #1) | MWD | MWD - Standard |

| Survey | | | | | | | | | | |
|------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 688.0 | 0.00 | 0.00 | 688.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 887.0 | 0.50 | 150.60 | 887.0 | -0.8 | 0.4 | -0.7 | 0.25 | 0.25 | 0.00 | |
| First Drillright MWD Survey | | | | | | | | | | |
| 1,161.0 | 0.80 | 184.00 | 1,161.0 | -3.7 | 0.9 | -3.5 | 0.17 | 0.11 | 12.19 | |
| 1,252.0 | 1.70 | 123.20 | 1,252.0 | -5.1 | 2.0 | -4.7 | 1.63 | 0.99 | -66.81 | |
| 1,343.0 | 4.10 | 105.90 | 1,342.8 | -6.7 | 6.2 | -5.6 | 2.78 | 2.64 | -19.01 | |
| 1,434.0 | 5.60 | 98.80 | 1,433.5 | -8.3 | 13.7 | -5.9 | 1.77 | 1.65 | -7.80 | |
| 1,529.0 | 7.60 | 105.30 | 1,527.9 | -10.6 | 24.4 | -6.6 | 2.24 | 2.11 | 6.84 | |
| 1,624.0 | 10.60 | 105.40 | 1,621.7 | -14.6 | 38.9 | -8.1 | 3.16 | 3.16 | 0.11 | |
| 1,718.0 | 11.50 | 94.80 | 1,713.9 | -17.7 | 56.5 | -8.3 | 2.36 | 0.96 | -11.28 | |

Survey Report

| | | | |
|------------------|------------------------|-------------------------------------|---------------------------|
| Company: | Sandridge Energy | Local Co-ordinate Reference: | Well Teresia 3509 2-9H |
| Project: | Harper County (NAD-27) | TVD Reference: | KB @ 1260.0usft |
| Site: | Sec 16-T35S-R09W | MD Reference: | KB @ 1260.0usft |
| Well: | Teresia 3509 2-9H | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 1,813.0 | 14.00 | 97.80 | 1,806.6 | -20.1 | 77.4 | -7.3 | 2.72 | 2.63 | 3.16 | |
| 1,908.0 | 13.50 | 96.60 | 1,898.9 | -22.9 | 99.8 | -6.5 | 0.61 | -0.53 | -1.26 | |
| 2,002.0 | 14.40 | 98.70 | 1,990.1 | -25.9 | 122.2 | -5.8 | 1.10 | 0.96 | 2.23 | |
| 2,097.0 | 13.00 | 95.20 | 2,082.4 | -28.7 | 144.5 | -4.9 | 1.71 | -1.47 | -3.68 | |
| 2,192.0 | 13.50 | 99.60 | 2,174.9 | -31.5 | 166.1 | -4.2 | 1.18 | 0.53 | 4.63 | |
| 2,286.0 | 13.80 | 99.70 | 2,266.2 | -35.2 | 188.0 | -4.3 | 0.32 | 0.32 | 0.11 | |
| 2,381.0 | 13.00 | 97.70 | 2,358.6 | -38.6 | 209.7 | -4.1 | 0.97 | -0.84 | -2.11 | |
| 2,475.0 | 14.70 | 105.90 | 2,449.9 | -43.2 | 231.7 | -5.2 | 2.76 | 1.81 | 8.72 | |
| 2,570.0 | 14.70 | 103.00 | 2,541.8 | -49.3 | 255.0 | -7.4 | 0.77 | 0.00 | -3.05 | |
| 2,664.0 | 13.90 | 99.90 | 2,632.9 | -53.9 | 277.8 | -8.2 | 1.18 | -0.85 | -3.30 | |
| 2,759.0 | 12.80 | 97.80 | 2,725.3 | -57.3 | 299.4 | -8.1 | 1.27 | -1.16 | -2.21 | |
| 2,853.0 | 14.00 | 101.50 | 2,816.7 | -60.9 | 320.9 | -8.2 | 1.57 | 1.28 | 3.94 | |
| 2,946.0 | 13.80 | 101.00 | 2,907.0 | -65.3 | 342.8 | -9.0 | 0.25 | -0.22 | -0.54 | |
| 3,040.0 | 13.40 | 99.60 | 2,998.4 | -69.3 | 364.6 | -9.4 | 0.55 | -0.43 | -1.49 | |
| 3,135.0 | 15.00 | 105.70 | 3,090.5 | -74.4 | 387.3 | -10.8 | 2.30 | 1.68 | 6.42 | |
| 3,230.0 | 13.50 | 104.00 | 3,182.6 | -80.4 | 409.8 | -13.1 | 1.64 | -1.58 | -1.79 | |
| 3,325.0 | 12.10 | 101.80 | 3,275.2 | -85.2 | 430.4 | -14.4 | 1.56 | -1.47 | -2.32 | |
| 3,419.0 | 12.60 | 104.90 | 3,367.0 | -89.8 | 449.9 | -15.9 | 0.88 | 0.53 | 3.30 | |
| 3,514.0 | 12.80 | 103.30 | 3,459.7 | -94.9 | 470.2 | -17.6 | 0.43 | 0.21 | -1.68 | |
| 3,610.0 | 13.90 | 103.10 | 3,553.1 | -100.0 | 491.7 | -19.1 | 1.15 | 1.15 | -0.21 | |
| 3,704.0 | 13.50 | 94.50 | 3,644.4 | -103.4 | 513.7 | -18.9 | 2.21 | -0.43 | -9.15 | |
| 3,798.0 | 13.40 | 94.80 | 3,735.9 | -105.1 | 535.5 | -17.2 | 0.13 | -0.11 | 0.32 | |
| 3,894.0 | 14.30 | 92.40 | 3,829.1 | -106.6 | 558.4 | -14.9 | 1.11 | 0.94 | -2.50 | |
| 3,956.0 | 12.90 | 91.60 | 3,889.3 | -107.1 | 573.0 | -13.0 | 2.28 | -2.26 | -1.29 | |
| 3,988.0 | 12.60 | 92.10 | 3,920.5 | -107.3 | 580.0 | -12.1 | 1.00 | -0.94 | 1.56 | |
| 4,019.0 | 14.50 | 87.10 | 3,950.7 | -107.2 | 587.3 | -10.8 | 7.19 | 6.13 | -16.13 | |
| 4,050.0 | 16.40 | 81.90 | 3,980.6 | -106.4 | 595.5 | -8.7 | 7.58 | 6.13 | -16.77 | |
| 4,082.0 | 18.30 | 77.90 | 4,011.1 | -104.7 | 604.9 | -5.5 | 7.01 | 5.94 | -12.50 | |
| 4,113.0 | 19.70 | 74.60 | 4,040.4 | -102.3 | 614.7 | -1.6 | 5.69 | 4.52 | -10.65 | |
| 4,144.0 | 21.30 | 69.10 | 4,069.5 | -98.9 | 625.0 | 3.4 | 8.07 | 5.16 | -17.74 | |
| 4,176.0 | 22.70 | 62.90 | 4,099.1 | -94.0 | 635.9 | 10.0 | 8.47 | 4.38 | -19.38 | |
| 4,207.0 | 23.90 | 57.90 | 4,127.6 | -88.0 | 646.6 | 17.7 | 7.46 | 3.87 | -16.13 | |
| 4,238.0 | 24.60 | 50.10 | 4,155.9 | -80.5 | 656.8 | 26.8 | 10.57 | 2.26 | -25.16 | |
| 4,270.0 | 25.50 | 44.40 | 4,184.9 | -71.3 | 666.8 | 37.5 | 8.05 | 2.81 | -17.81 | |
| 4,301.0 | 26.90 | 40.20 | 4,212.7 | -61.2 | 676.0 | 48.9 | 7.49 | 4.52 | -13.55 | |
| 4,333.0 | 28.00 | 39.10 | 4,241.1 | -49.8 | 685.4 | 61.7 | 3.79 | 3.44 | -3.44 | |
| 4,364.0 | 30.40 | 36.10 | 4,268.1 | -37.8 | 694.6 | 75.0 | 9.07 | 7.74 | -9.68 | |
| 4,396.0 | 33.50 | 33.80 | 4,295.3 | -24.0 | 704.3 | 90.3 | 10.41 | 9.69 | -7.19 | |
| 4,428.0 | 35.00 | 32.40 | 4,321.7 | -8.9 | 714.1 | 106.7 | 5.29 | 4.69 | -4.38 | |
| 4,459.0 | 36.70 | 29.50 | 4,346.9 | 6.7 | 723.4 | 123.6 | 7.75 | 5.48 | -9.35 | |
| 4,491.0 | 38.40 | 26.80 | 4,372.2 | 23.9 | 732.6 | 142.1 | 7.39 | 5.31 | -8.44 | |
| 4,522.0 | 40.40 | 23.60 | 4,396.2 | 41.7 | 741.0 | 161.0 | 9.19 | 6.45 | -10.32 | |
| 4,554.0 | 42.40 | 22.00 | 4,420.2 | 61.2 | 749.2 | 181.6 | 7.07 | 6.25 | -5.00 | |

Survey Report

| | | | |
|------------------|------------------------|-------------------------------------|---------------------------|
| Company: | Sandridge Energy | Local Co-ordinate Reference: | Well Teresia 3509 2-9H |
| Project: | Harper County (NAD-27) | TVD Reference: | KB @ 1260.0usft |
| Site: | Sec 16-T35S-R09W | MD Reference: | KB @ 1260.0usft |
| Well: | Teresia 3509 2-9H | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 4,586.0 | 45.40 | 21.50 | 4,443.3 | 81.8 | 757.4 | 203.2 | 9.44 | 9.38 | -1.56 | |
| 4,617.0 | 47.60 | 21.20 | 4,464.6 | 102.8 | 765.6 | 225.2 | 7.13 | 7.10 | -0.97 | |
| 4,649.0 | 50.10 | 20.90 | 4,485.6 | 125.2 | 774.2 | 248.8 | 7.84 | 7.81 | -0.94 | |
| 4,680.0 | 52.40 | 20.50 | 4,505.0 | 147.9 | 782.8 | 272.5 | 7.49 | 7.42 | -1.29 | |
| 4,712.0 | 54.50 | 20.20 | 4,524.1 | 172.0 | 791.7 | 297.7 | 6.61 | 6.56 | -0.94 | |
| 4,744.0 | 56.70 | 19.90 | 4,542.2 | 196.8 | 800.8 | 323.7 | 6.92 | 6.88 | -0.94 | |
| 4,792.0 | 58.00 | 20.00 | 4,568.1 | 234.8 | 814.5 | 363.4 | 2.71 | 2.71 | 0.21 | |
| 4,838.0 | 57.90 | 19.70 | 4,592.5 | 271.4 | 827.8 | 401.7 | 0.59 | -0.22 | -0.65 | |
| 4,933.0 | 57.70 | 18.60 | 4,643.1 | 347.4 | 854.2 | 480.9 | 1.00 | -0.21 | -1.16 | |
| 5,013.0 | 57.70 | 18.20 | 4,685.9 | 411.5 | 875.5 | 547.7 | 0.42 | 0.00 | -0.50 | |
| 5,028.0 | 58.80 | 17.80 | 4,693.8 | 423.7 | 879.4 | 560.3 | 7.68 | 7.33 | -2.67 | |
| 5,060.0 | 62.80 | 16.90 | 4,709.4 | 450.3 | 887.8 | 588.0 | 12.74 | 12.50 | -2.81 | |
| 5,091.0 | 64.70 | 16.50 | 4,723.1 | 476.9 | 895.8 | 615.5 | 6.24 | 6.13 | -1.29 | |
| 5,123.0 | 66.10 | 16.50 | 4,736.4 | 504.8 | 904.0 | 644.4 | 4.38 | 4.38 | 0.00 | |
| 5,154.0 | 68.70 | 15.60 | 4,748.3 | 532.3 | 911.9 | 672.8 | 8.80 | 8.39 | -2.90 | |
| 5,186.0 | 70.70 | 14.10 | 4,759.4 | 561.4 | 919.6 | 702.7 | 7.64 | 6.25 | -4.69 | |
| 5,218.0 | 72.90 | 13.30 | 4,769.4 | 590.9 | 926.8 | 733.0 | 7.27 | 6.88 | -2.50 | |
| 5,249.0 | 75.90 | 12.40 | 4,777.7 | 620.0 | 933.5 | 762.8 | 10.07 | 9.68 | -2.90 | |
| 5,281.0 | 79.50 | 11.70 | 4,784.6 | 650.6 | 940.0 | 794.0 | 11.45 | 11.25 | -2.19 | |
| 5,312.0 | 81.40 | 11.00 | 4,789.7 | 680.5 | 946.0 | 824.6 | 6.52 | 6.13 | -2.26 | |
| 5,344.0 | 83.30 | 9.60 | 4,794.0 | 711.7 | 951.7 | 856.3 | 7.35 | 5.94 | -4.38 | |
| 5,407.0 | 88.40 | 7.40 | 4,798.5 | 773.9 | 960.9 | 919.1 | 8.81 | 8.10 | -3.49 | |
| 5,501.0 | 89.00 | 7.60 | 4,800.6 | 867.0 | 973.2 | 1,013.0 | 0.67 | 0.64 | 0.21 | |
| 5,595.0 | 89.70 | 6.80 | 4,801.7 | 960.3 | 985.0 | 1,106.9 | 1.13 | 0.74 | -0.85 | |
| 5,682.0 | 87.60 | 7.00 | 4,803.8 | 1,046.6 | 995.4 | 1,193.8 | 2.42 | -2.41 | 0.23 | |
| 5,771.0 | 87.80 | 6.80 | 4,807.3 | 1,134.9 | 1,006.1 | 1,282.7 | 0.32 | 0.22 | -0.22 | |
| 5,865.0 | 91.40 | 5.90 | 4,808.0 | 1,228.3 | 1,016.5 | 1,376.5 | 3.95 | 3.83 | -0.96 | |
| 5,960.0 | 90.60 | 3.20 | 4,806.3 | 1,323.0 | 1,024.1 | 1,471.2 | 2.96 | -0.84 | -2.84 | |
| 6,054.0 | 90.90 | 1.20 | 4,805.1 | 1,416.9 | 1,027.7 | 1,564.5 | 2.15 | 0.32 | -2.13 | |
| 6,149.0 | 90.30 | 359.60 | 4,804.1 | 1,511.9 | 1,028.3 | 1,658.3 | 1.80 | -0.63 | -1.68 | |
| 6,244.0 | 90.70 | 358.60 | 4,803.3 | 1,606.9 | 1,026.8 | 1,751.8 | 1.13 | 0.42 | -1.05 | |
| 6,338.0 | 89.70 | 0.50 | 4,803.0 | 1,700.9 | 1,026.1 | 1,844.4 | 2.28 | -1.06 | 2.02 | |
| 6,433.0 | 90.70 | 0.30 | 4,802.6 | 1,795.9 | 1,026.8 | 1,938.3 | 1.07 | 1.05 | -0.21 | |
| 6,528.0 | 90.20 | 0.30 | 4,801.9 | 1,890.9 | 1,027.3 | 2,032.1 | 0.53 | -0.53 | 0.00 | |
| 6,622.0 | 90.20 | 358.90 | 4,801.5 | 1,984.9 | 1,026.6 | 2,124.8 | 1.49 | 0.00 | -1.49 | |
| 6,717.0 | 91.10 | 358.30 | 4,800.5 | 2,079.8 | 1,024.3 | 2,218.1 | 1.14 | 0.95 | -0.63 | |
| 6,811.0 | 89.80 | 357.80 | 4,799.7 | 2,173.8 | 1,021.1 | 2,310.3 | 1.48 | -1.38 | -0.53 | |
| 6,906.0 | 91.00 | 359.40 | 4,799.1 | 2,268.7 | 1,018.8 | 2,403.6 | 2.11 | 1.26 | 1.68 | |
| 7,000.0 | 88.70 | 359.70 | 4,799.3 | 2,362.7 | 1,018.0 | 2,496.3 | 2.47 | -2.45 | 0.32 | |
| 7,095.0 | 89.40 | 359.50 | 4,800.9 | 2,457.7 | 1,017.4 | 2,589.9 | 0.77 | 0.74 | -0.21 | |
| 7,190.0 | 88.50 | 359.50 | 4,802.6 | 2,552.7 | 1,016.5 | 2,683.5 | 0.95 | -0.95 | 0.00 | |
| 7,285.0 | 89.50 | 358.80 | 4,804.3 | 2,647.7 | 1,015.1 | 2,777.0 | 1.28 | 1.05 | -0.74 | |
| 7,376.0 | 89.90 | 358.80 | 4,804.8 | 2,738.6 | 1,013.2 | 2,866.4 | 0.44 | 0.44 | 0.00 | |

Survey Report

| | | | |
|------------------|------------------------|-------------------------------------|---------------------------|
| Company: | Sandridge Energy | Local Co-ordinate Reference: | Well Teresia 3509 2-9H |
| Project: | Harper County (NAD-27) | TVD Reference: | KB @ 1260.0usft |
| Site: | Sec 16-T35S-R09W | MD Reference: | KB @ 1260.0usft |
| Well: | Teresia 3509 2-9H | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|---|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 7,467.0 | 91.00 | 1.80 | 4,804.0 | 2,829.6 | 1,013.7 | 2,956.3 | 3.51 | 1.21 | 3.30 | |
| 7,559.0 | 90.60 | 0.90 | 4,802.8 | 2,921.6 | 1,015.9 | 3,047.4 | 1.07 | -0.43 | -0.98 | |
| 7,652.0 | 90.00 | 359.20 | 4,802.3 | 3,014.6 | 1,015.9 | 3,139.2 | 1.94 | -0.65 | -1.83 | |
| 7,744.0 | 91.40 | 1.80 | 4,801.2 | 3,106.6 | 1,016.7 | 3,230.1 | 3.21 | 1.52 | 2.83 | |
| 7,835.0 | 91.30 | 0.20 | 4,799.0 | 3,197.5 | 1,018.3 | 3,320.1 | 1.76 | -0.11 | -1.76 | |
| 7,926.0 | 91.10 | 1.80 | 4,797.1 | 3,288.5 | 1,019.9 | 3,410.1 | 1.77 | -0.22 | 1.76 | |
| 8,018.0 | 89.40 | 2.90 | 4,796.7 | 3,380.4 | 1,023.7 | 3,501.4 | 2.20 | -1.85 | 1.20 | |
| 8,108.0 | 89.60 | 2.60 | 4,797.5 | 3,470.3 | 1,028.0 | 3,590.9 | 0.40 | 0.22 | -0.33 | |
| 8,199.0 | 90.50 | 2.80 | 4,797.4 | 3,561.2 | 1,032.3 | 3,681.3 | 1.01 | 0.99 | 0.22 | |
| 8,290.0 | 92.20 | 2.10 | 4,795.3 | 3,652.1 | 1,036.2 | 3,771.6 | 2.02 | 1.87 | -0.77 | |
| 8,382.0 | 91.40 | 2.50 | 4,792.4 | 3,743.9 | 1,039.9 | 3,862.8 | 0.97 | -0.87 | 0.43 | |
| 8,473.0 | 89.00 | 2.30 | 4,792.1 | 3,834.9 | 1,043.7 | 3,953.2 | 2.65 | -2.64 | -0.22 | |
| 8,564.0 | 89.50 | 1.30 | 4,793.2 | 3,925.8 | 1,046.5 | 4,043.4 | 1.23 | 0.55 | -1.10 | |
| 8,655.0 | 90.20 | 1.80 | 4,793.5 | 4,016.8 | 1,049.0 | 4,133.5 | 0.95 | 0.77 | 0.55 | |
| 8,751.0 | 91.10 | 1.00 | 4,792.4 | 4,112.7 | 1,051.3 | 4,228.6 | 1.25 | 0.94 | -0.83 | |
| 8,845.0 | 89.70 | 1.70 | 4,791.7 | 4,206.7 | 1,053.6 | 4,321.7 | 1.67 | -1.49 | 0.74 | |
| 8,940.0 | 90.80 | 1.00 | 4,791.3 | 4,301.7 | 1,055.8 | 4,415.8 | 1.37 | 1.16 | -0.74 | |
| 9,035.0 | 92.30 | 0.90 | 4,788.8 | 4,396.6 | 1,057.4 | 4,509.8 | 1.58 | 1.58 | -0.11 | |
| 9,130.0 | 91.40 | 1.50 | 4,785.7 | 4,491.6 | 1,059.4 | 4,603.8 | 1.14 | -0.95 | 0.63 | |
| 9,224.0 | 90.80 | 0.50 | 4,783.9 | 4,585.5 | 1,061.0 | 4,696.7 | 1.24 | -0.64 | -1.06 | |
| 9,320.0 | 89.60 | 2.20 | 4,783.5 | 4,681.5 | 1,063.3 | 4,791.8 | 2.17 | -1.25 | 1.77 | |
| 9,414.0 | 89.70 | 2.00 | 4,784.1 | 4,775.4 | 1,066.7 | 4,885.1 | 0.24 | 0.11 | -0.21 | |
| 9,509.0 | 90.90 | 1.80 | 4,783.6 | 4,870.4 | 1,069.9 | 4,979.3 | 1.28 | 1.26 | -0.21 | |
| 9,603.0 | 89.90 | 0.30 | 4,783.0 | 4,964.3 | 1,071.6 | 5,072.3 | 1.92 | -1.06 | -1.60 | |
| 9,697.0 | 90.50 | 0.30 | 4,782.6 | 5,058.3 | 1,072.1 | 5,165.1 | 0.64 | 0.64 | 0.00 | |
| 9,792.0 | 89.30 | 0.60 | 4,782.8 | 5,153.3 | 1,072.8 | 5,259.0 | 1.30 | -1.26 | 0.32 | |
| 9,886.0 | 90.50 | 359.40 | 4,783.0 | 5,247.3 | 1,072.8 | 5,351.8 | 1.81 | 1.28 | -1.28 | |
| 9,981.0 | 91.20 | 0.20 | 4,781.6 | 5,342.3 | 1,072.5 | 5,445.4 | 1.12 | 0.74 | 0.84 | |
| 10,075.0 | 89.10 | 359.70 | 4,781.3 | 5,436.3 | 1,072.4 | 5,538.2 | 2.30 | -2.23 | -0.53 | |
| 10,170.0 | 89.20 | 359.80 | 4,782.7 | 5,531.3 | 1,072.0 | 5,631.9 | 0.15 | 0.11 | 0.11 | |
| 10,264.0 | 90.70 | 0.10 | 4,782.8 | 5,625.3 | 1,071.9 | 5,724.6 | 1.63 | 1.60 | 0.32 | |
| 10,359.0 | 91.00 | 0.10 | 4,781.4 | 5,720.3 | 1,072.1 | 5,818.4 | 0.32 | 0.32 | 0.00 | |
| 10,453.0 | 90.00 | 2.50 | 4,780.6 | 5,814.3 | 1,074.2 | 5,911.4 | 2.77 | -1.06 | 2.55 | |
| 10,547.0 | 91.60 | 1.70 | 4,779.3 | 5,908.2 | 1,077.6 | 6,004.7 | 1.90 | 1.70 | -0.85 | |
| 10,642.0 | 91.40 | 1.70 | 4,776.8 | 6,003.1 | 1,080.5 | 6,098.8 | 0.21 | -0.21 | 0.00 | |
| 10,735.0 | 92.70 | 1.90 | 4,773.5 | 6,096.0 | 1,083.4 | 6,191.0 | 1.41 | 1.40 | 0.22 | |
| 10,830.0 | 91.70 | 2.30 | 4,769.8 | 6,190.9 | 1,086.9 | 6,285.1 | 1.13 | -1.05 | 0.42 | |
| 10,925.0 | 90.50 | 2.50 | 4,768.0 | 6,285.8 | 1,090.8 | 6,379.4 | 1.28 | -1.26 | 0.21 | |
| 11,019.0 | 88.90 | 2.10 | 4,768.5 | 6,379.7 | 1,094.6 | 6,472.7 | 1.75 | -1.70 | -0.43 | |
| 11,114.0 | 89.30 | 1.30 | 4,770.0 | 6,474.6 | 1,097.4 | 6,566.9 | 0.94 | 0.42 | -0.84 | |
| Last Drillright MWD Survey | | | | | | | | | | |
| 11,258.0 | 89.30 | 1.30 | 4,771.7 | 6,618.6 | 1,100.7 | 6,709.5 | 0.00 | 0.00 | 0.00 | |
| Projection to TD - PBHL Teresia 2-9H | | | | | | | | | | |

Survey Report

| | | | |
|------------------|------------------------|-------------------------------------|---------------------------|
| Company: | Sandridge Energy | Local Co-ordinate Reference: | Well Teresia 3509 2-9H |
| Project: | Harper County (NAD-27) | TVD Reference: | KB @ 1260.0usft |
| Site: | Sec 16-T35S-R09W | MD Reference: | KB @ 1260.0usft |
| Well: | Teresia 3509 2-9H | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| Design Annotations | | | | |
|-----------------------------|-----------------------------|-------------------|-----------------|-----------------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
| | | +N/-S (usft) | +E/-W (usft) | |
| 887.0 | 887.0 | -0.8 | 0.4 | First Drillright MWD Survey |
| 11,114.0 | 4,770.0 | 6,474.6 | 1,097.4 | Last Drillright MWD Survey |
| 11,258.0 | 4,771.7 | 6,618.6 | 1,100.7 | Projection to TD |

| | | |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|

Section 5
35S 9W

Section 4
35S 9W

Section 3
35S 9W

BHL: 11258'
-98.298893 37.020286
Bottom Perf: 11195'
-98.298892 37.019894



Section 8
35S 9W

Section 9
35S 9W

Section 10
35S 9W

Harper County

Section 17
35S 9W

Section 16
35S 9W

TERESIA 3509 3-9H

TERESIA 3509 2-9H

Section 15
35S 9W

Top Perf: 5765'
-98.298761 37.005367

Miss Entry: 5304'
-98.298931 37.004127

TERESIA 3509 1-16H

Section 18
29N 10W

Section 17
29N 10W

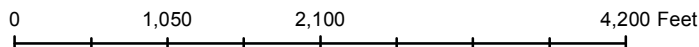
Alfalfa County

Section 16
29N 10W



Actual Bottom-Hole Location of Teresia 3509 2-9H
T&R: 35S 9W
Section: 9, 2109' FEL & 450' FNL
-98.298893 37.020286

1 in = 1,320 ft



● Actual BH Location

* SandRidge Wells

--- Perf

□ Sections

Draftsman:

Dory Deines

Draft Date: 1/20/2015

Drawing Name/Number:

Addendum_Teresia 3509 2-9H.mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502

Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|--------------------------------|--------------------|
| Job Start Date: | 11/12/2014 |
| Job End Date: | 11/13/2014 |
| State: | Kansas |
| County: | Harper |
| API Number: | 15-077-22102-01-00 |
| Operator Name: | SandRidge Energy |
| Well Name and Number: | Teresia 3509 #2-9H |
| Longitude: | -98.30179000 |
| Latitude: | 37.00218000 |
| Datum: | NAD27 |
| Federal/Tribal Well: | NO |
| True Vertical Depth: | 4,808 |
| Total Base Water Volume (gal): | 261,912 |
| 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 | Well Operator | Carrier/Base Fluid | Water | 7732-18-5 | 100.00000 | 62.73632 | None |
| 40/70 Northern White | CAF | Proppant, Scouring, Fill | Crystalline Silica (quartz) | 14808-60-7 | 100.00000 | 25.70815 | None |
| 40/70 RCS Garnett | CAF | Proppant, Scouring, Fill | Crystalline Silica (quartz) | 14808-60-7 | 97.00000 | 6.16768 | None |
| 15% Unihibited HCl Acid | CAF | Etching, Dissolving, Cleaning | Water | 7732-18-5 | 85.00000 | 2.18872 | None |
| | | | Hydrochloric Acid | 7647-01-0 | 15.00000 | 0.38625 | None |
| | | | Water | 7732-18-5 | 24.00000 | 0.00056 | None |
| | | | Methanol | 67-56-1 | 9.00000 | 0.00021 | None |
| | | | N-Dimethylformamide | 68-12-2 | 8.40000 | 0.00020 | None |
| | | | Triethyl Phosphate | 78-40-0 | 8.40000 | 0.00020 | None |
| | | | Isopropyl Alcohol | 67-63-0 | 8.40000 | 0.00020 | None |
| | | | Tar Bases-quinoline derivs-benzyl chloride/quaternized | 72480-70-7 | 8.40000 | 0.00020 | None |
| | | | Cinnamaldehyde | 104-55-2 | 8.40000 | 0.00020 | None |
| | | | Ethylene Glycol | 107-21-1 | 8.40000 | 0.00020 | None |

| | | | | | | | |
|------|------------------------------|------------------|---|------------|-----------|---------|------|
| | | | Ethoxylated Nonylphenol | 68412-54-4 | 8.40000 | 0.00020 | None |
| | | | 2-Butoxyethanol | 111-76-2 | 8.40000 | 0.00020 | None |
| C102 | Bosque Disposal Systems, LLC | Oxidizer | | | | | |
| | | | Chlorine Dioxide | 10049-04-4 | 15.00000 | 2.08202 | |
| SI-2 | CAF | Scale Inhibitor | | | | | |
| | | | Water | 7732-18-5 | 50.00000 | 0.03462 | None |
| | | | Hydrochloric Acid | 7647-01-0 | 16.80000 | 0.01164 | None |
| | | | Phosphoric Acid | 7664-38-2 | 16.80000 | 0.01164 | None |
| | | | Ethylene Glycol | 107-21-1 | 12.70000 | 0.00881 | None |
| | | | Methanol | 67-56-1 | 3.60000 | 0.00252 | None |
| IC-3 | CAF | Iron Control | | | | | |
| | | | Water | 7732-18-5 | 54.50000 | 0.01596 | None |
| | | | Isopropanol | 67-63-0 | 13.60000 | 0.00398 | None |
| | | | Methanol | 67-56-1 | 9.00000 | 0.00263 | None |
| | | | Glycol Ether EB | 111-76-2 | 9.00000 | 0.00263 | None |
| | | | Sodium Erythorbate | 6381-77-7 | 100.00000 | 0.00086 | None |
| FR-1 | CAF | Friction Reducer | | | | | |
| | | | Petroleum Hydrotreated Light Distillate | 64742-47-8 | 2.50000 | 0.01096 | 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.

* 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)