



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1232669
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
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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: _____

1232669

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
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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> _____	PRODUCTION INTERVAL: _____ _____
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SandRidge Energy
Foster #3508 3-2H
Harper County, KS.

1.0 Executive Summary

Allied Oil & Gas Services would like to thank you for the award of the provision of cementing products and services on the well Foster #3508 3-2H Casing.

A pre-job meeting was held to discuss job details, review the safety hazards, potential environmental impact and established emergency procedures.

Allied started the job testing lines to 3500 psi. After a successful test we began the job by pumping 30 bbls of preflush spacer. We then mixed and pumped the following cements:

60 Bbls (240 sacks) of 13.6 ppg Lead slurry:
50:50 Class A:Poz Blend - 1.4 Yield
2.0% Gel
0.4% FL-160
0.1% SA-51

21Bbls (100 sacks) of 15.6 ppg Tail slurry:
Class A - 1.18 Yield
0.8% FL-160
0.2% CD-31

The top plug was then released and displaced with 215 of fresh water. The plug did not land stop pumps and discussed with company man then pumped another ½ Bbl still did not land plug, release pressure + float held

All real time data is shown on the graph in the attachment section.

Allied Oil & Gas Services remains committed to provide operational excellence and superior product performance. All comments and suggestions are greatly appreciated and help us to continue to provide this level of service.

Again we want to thank you for the opportunity to perform these and your future cementing & acidizing service needs.



SandRidge Energy
Foster #3508 3-2H
Harper County, KS.

1.0 Executive Summary

Allied Oil & Gas Services would like to thank you, for the award of the provision of cementing products and services on the well Foster #3508 3-2H Surface Casing.

A pre-job meeting was held to discuss job details, review the safety hazards, potential environmental impact and established emergency procedures.

Allied started the job testing lines to 1500 psi. After a successful test we began the job by pumping 10 bbls of preflush spacer. We then mixed and pumped the following cements:

85.1 Bbls (255 sacks) of 12.7 ppg Lead slurry:
65:35 Class A:Poz Blend - 1.87 Yield
6.0% Gel
2.0%cc
¼# Floseal

32Bbls (150 sacks) of 15.6 ppg Tail slurry:
Class A - 1.20 Yield
2.0%cc
¼# Floseal

The top plug was then released and displaced with 57 Bbls of fresh water. The plug bumped and pressured up to 800 psi. Pressure was released and floats held.

All real time data is shown on the graph in the attachment section.

Allied Oil & Gas Services remains committed to provide operational excellence and superior product performance. All comments and suggestion are greatly appreciated, to help us to continue to provide this level of service.

Again we want to thank you for the opportunity to perform these and your future cementing & acidizing service needs

Foster 3508 3-2H

Perforations

(2 shots per foot)

Perforations			
Date	Top (ftKB)	Btm (ftKB)	Zone
9/2/2014	5,924.0	5,926.0	Miss Lime, Original Hole
9/2/2014	6,147.0	6,149.0	Miss Lime, Original Hole
9/2/2014	6,385.0	6,387.0	Miss Lime, Original Hole
9/2/2014	6,573.0	6,575.0	Miss Lime, Original Hole
9/2/2014	6,747.0	6,749.0	Miss Lime, Original Hole
9/2/2014	6,884.0	6,886.0	Miss Lime, Original Hole
9/1/2014	6,982.0	6,984.0	Miss Lime, Original Hole
9/1/2014	7,118.0	7,120.0	Miss Lime, Original Hole
9/1/2014	7,218.0	7,220.0	Miss Lime, Original Hole
9/1/2014	7,365.0	7,367.0	Miss Lime, Original Hole
9/1/2014	7,462.0	7,464.0	Miss Lime, Original Hole
9/1/2014	7,599.0	7,601.0	Miss Lime, Original Hole
9/1/2014	7,697.0	7,699.0	Miss Lime, Original Hole
9/1/2014	7,841.0	7,843.0	Miss Lime, Original Hole
9/1/2014	7,934.0	7,936.0	Miss Lime, Original Hole
9/1/2014	8,074.0	8,076.0	Miss Lime, Original Hole
9/1/2014	8,171.0	8,173.0	Miss Lime, Original Hole
9/1/2014	8,310.0	8,312.0	Miss Lime, Original Hole
9/1/2014	8,403.0	8,405.0	Miss Lime, Original Hole
9/1/2014	8,532.0	8,534.0	Miss Lime, Original Hole
9/1/2014	8,628.0	8,630.0	Miss Lime, Original Hole
9/1/2014	8,722.0	8,724.0	Miss Lime, Original Hole
9/1/2014	8,818.0	8,820.0	Miss Lime, Original Hole
9/1/2014	8,912.0	8,914.0	Miss Lime, Original Hole
9/1/2014	9,010.0	9,012.0	Miss Lime, Original Hole
9/1/2014	9,108.0	9,110.0	Miss Lime, Original Hole
9/1/2014	9,206.0	9,208.0	Miss Lime, Original Hole
9/1/2014	9,300.0	9,302.0	Miss Lime, Original Hole
9/1/2014	9,393.0	9,395.0	Miss Lime, Original Hole
9/1/2014	9,492.0	9,494.0	Miss Lime, Original Hole
9/1/2014	9,591.0	9,593.0	Miss Lime, Original Hole
9/1/2014	9,675.0	9,677.0	Miss Lime, Original Hole
9/1/2014	9,773.0	9,775.0	Miss Lime, Original Hole
8/31/2014	9,870.0	9,872.0	Miss Lime, Original Hole
8/31/2014	9,919.0	9,921.0	Miss Lime, Original Hole

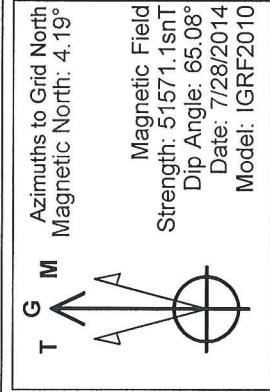


Project: Harper County (NAD-27)
 Site: Sec 02-T35S-R08W
 Well: Foster 3508 3-2H/ Horizon 4
 Plan: Plan 072814 A0 (Foster 3508 3-2H/ Horizon 4/Wellbore #1)

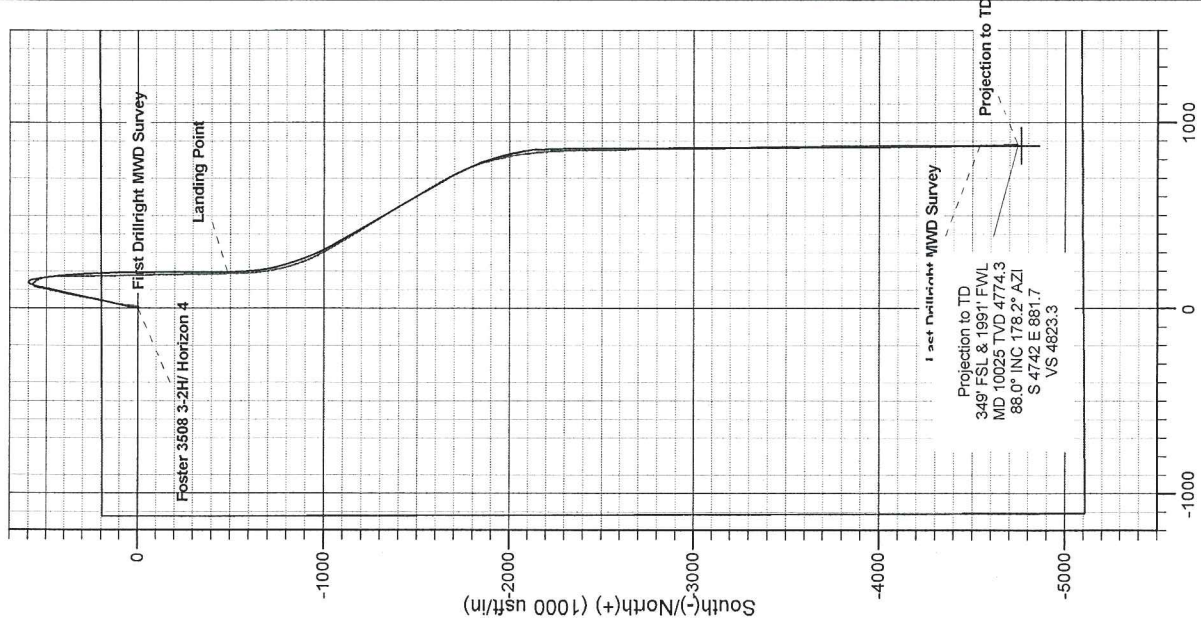
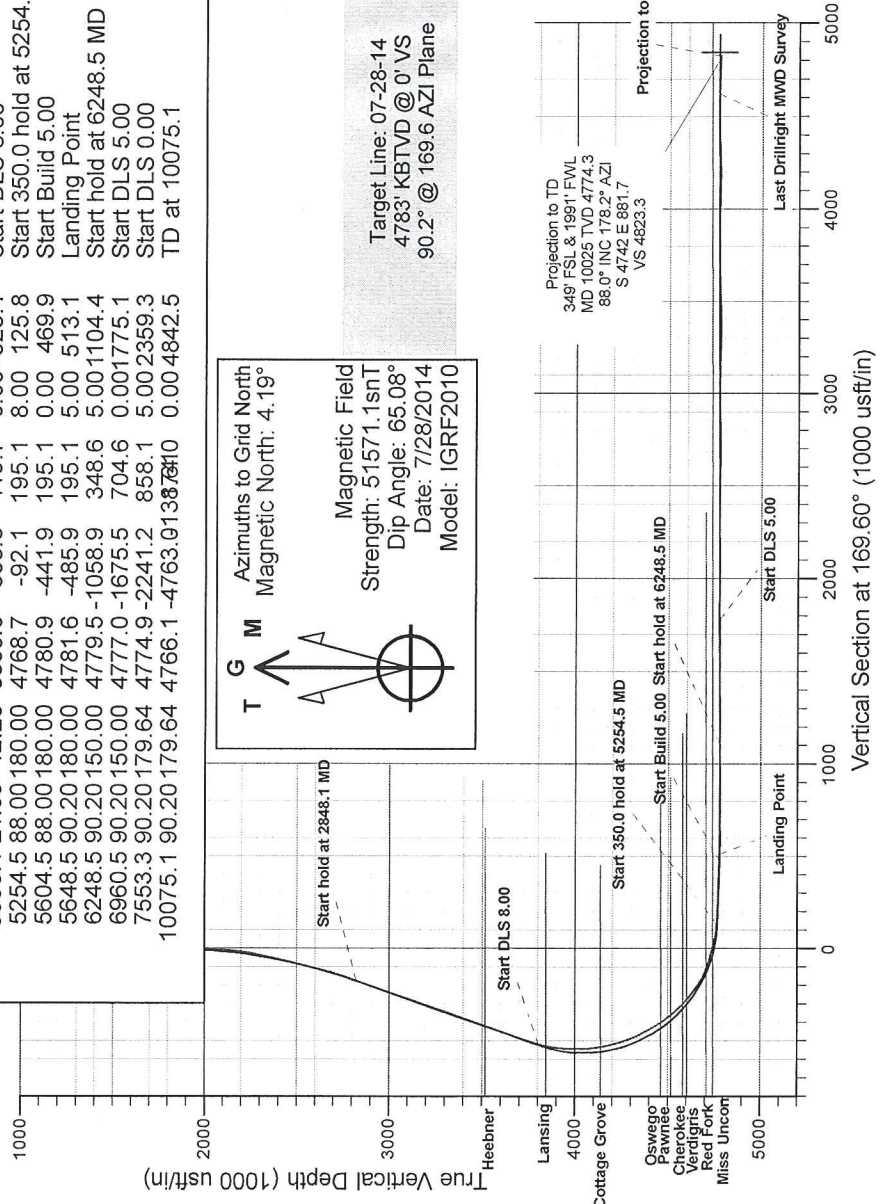
WELL DETAILS: Foster 3508 3-2H/ Horizon 4			
Ground Level: 1276.0			
Northing	Easting	Latitude	Longitude
134550.00	2099161.00	37° 2' 8.486 N	98° 9' 37.124 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0	
1798.1	0.00	0.00	1798.1	0.0	0.0	0.00	0.0	Start Build 2.00
2848.1	21.00	12.20	2824.7	186.0	40.2	2.00	-175.7	Start hold at 2848.1 MD
3898.1	21.00	12.20	3805.0	553.8	119.7	0.00	-523.1	Start DLS 8.00
5254.5	88.00	180.00	4768.7	-92.1	195.1	8.00	125.8	Start 350.0 hold at 5254.5 MD
5604.5	88.00	180.00	4780.9	-441.9	195.1	0.00	469.9	Start Build 5.00
5648.5	90.20	180.00	4781.6	-485.9	195.1	5.00	513.1	Landing Point
6248.5	90.20	150.00	4779.5	-1058.9	348.6	5.00	1104.4	Start hold at 6248.5 MD
6960.5	90.20	150.00	4777.0	-1675.5	704.6	0.00	1775.1	Start DLS 5.00
7553.3	90.20	179.64	4774.9	-2241.2	858.1	5.00	2359.3	Start DLS 0.00
10075.1	90.20	179.64	4766.1	-4763.0	1387.0	0.00	4842.5	TD at 10075.1



Target Line: 07-28-14
 4783' KBTVD @ 0° VS
 90.2° @ 169.6 AZI Plane



Survey Report

Company: Sandridge Energy	Local Co-ordinate Reference: Well Foster 3508 3-2H/ Horizon 4
Project: Harper County (NAD-27)	TVD Reference: KB @ 1288.0usft
Site: Sec 02-T35S-R08W	MD Reference: KB @ 1288.0usft
Well: Foster 3508 3-2H/ Horizon 4	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 02-T35S-R08W			
Site Position:	Northing: 129,440.00 usft	Latitude: 37° 1' 18.003 N	
From: Map	Easting: 2,098,056.00 usft	Longitude: 98° 9' 50.978 W	
Position Uncertainty: 0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.21 °	

Well Foster 3508 3-2H/ Horizon 4			
Well Position	+N/-S 0.0 usft	Northing: 134,550.00 usft	Latitude: 37° 2' 8.486 N
	+E/-W 0.0 usft	Easting: 2,099,161.00 usft	Longitude: 98° 9' 37.124 W
Position Uncertainty	0.0 usft	Wellhead Elevation: 0.0 usft	Ground Level: 1,276.0 usft

Wellbore Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/28/2014	4.40	65.08	51,571

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	169.60	

Survey Program Date 8/27/2014				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
795.0	10,025.0	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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
795.0	0.30	163.40	795.0	-2.0	0.6	2.1	0.04	0.04	0.00
First Drillright MWD Survey									
1,039.0	0.60	149.90	1,039.0	-3.7	1.4	3.9	0.13	0.12	-5.53
1,290.0	0.60	164.60	1,290.0	-6.1	2.4	6.5	0.06	0.00	5.86
1,542.0	0.60	103.80	1,542.0	-7.7	4.1	8.3	0.24	0.00	-24.13
1,730.0	0.40	247.80	1,730.0	-8.2	4.4	8.8	0.51	-0.11	76.60
1,824.0	2.00	49.60	1,823.9	-7.2	5.4	8.1	2.54	1.70	172.13
1,919.0	2.30	34.10	1,918.9	-4.6	7.7	5.9	0.69	0.32	-16.32
2,013.0	3.60	14.50	2,012.8	-0.2	9.5	1.9	1.73	1.38	-20.85

Survey Report

Company:	Sandridge Energy	Local Co-ordinate Reference:	Well Foster 3508 3-2H/ Horizon 4
Project:	Harper County (NAD-27)	TVD Reference:	KB @ 1288.0usft
Site:	Sec 02-T35S-R08W	MD Reference:	KB @ 1288.0usft
Well:	Foster 3508 3-2H/ Horizon 4	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)	
2,107.0	6.00	18.40	2,106.4	7.3	11.8	-5.1	2.58	2.55	4.15	
2,202.0	8.80	6.80	2,200.6	19.3	14.2	-16.4	3.33	2.95	-12.21	
2,298.0	11.60	5.60	2,295.1	36.2	16.0	-32.7	2.92	2.92	-1.25	
2,392.0	13.50	5.60	2,386.8	56.5	18.0	-52.3	2.02	2.02	0.00	
2,487.0	14.40	4.80	2,479.0	79.3	20.1	-74.4	0.97	0.95	-0.84	
2,581.0	15.40	9.90	2,569.9	103.3	23.2	-97.4	1.75	1.06	5.43	
2,676.0	16.70	14.60	2,661.2	128.9	28.8	-121.6	1.93	1.37	4.95	
2,770.0	19.30	14.50	2,750.6	157.0	36.1	-147.9	2.77	2.77	-0.11	
2,865.0	22.10	11.80	2,839.4	189.7	43.7	-178.7	3.11	2.95	-2.84	
2,960.0	22.00	10.60	2,927.5	224.7	50.6	-211.9	0.49	-0.11	-1.26	
3,053.0	19.30	6.00	3,014.5	257.1	55.4	-242.9	3.38	-2.90	-4.95	
3,148.0	19.40	8.70	3,104.1	288.3	59.5	-272.8	0.95	0.11	2.84	
3,243.0	20.30	11.50	3,193.5	320.1	65.1	-303.1	1.38	0.95	2.95	
3,338.0	21.50	13.40	3,282.3	353.1	72.4	-334.3	1.45	1.26	2.00	
3,432.0	20.60	13.00	3,370.0	386.0	80.2	-365.2	0.97	-0.96	-0.43	
3,526.0	20.90	10.00	3,457.9	418.6	86.8	-396.1	1.17	0.32	-3.19	
3,621.0	22.80	12.00	3,546.1	453.3	93.6	-429.0	2.15	2.00	2.11	
3,716.0	20.20	10.80	3,634.4	487.5	100.5	-461.3	2.78	-2.74	-1.26	
3,810.0	20.50	14.10	3,722.6	519.4	107.5	-491.4	1.26	0.32	3.51	
3,842.0	20.30	14.00	3,752.6	530.2	110.2	-501.6	0.63	-0.63	-0.31	
3,874.0	16.90	8.50	3,782.9	540.2	112.3	-511.0	11.94	-10.63	-17.19	
3,905.0	14.20	5.80	3,812.8	548.4	113.3	-519.0	9.01	-8.71	-8.71	
3,936.0	12.60	6.70	3,842.9	555.6	114.1	-525.8	5.20	-5.16	2.90	
3,968.0	11.40	15.20	3,874.2	562.1	115.3	-532.0	6.67	-3.75	26.56	
3,999.0	10.40	28.50	3,904.7	567.5	117.5	-537.0	8.71	-3.23	42.90	
4,031.0	8.90	43.70	3,936.2	571.8	120.5	-540.7	9.20	-4.69	47.50	
4,062.0	7.00	58.30	3,966.9	574.6	123.8	-542.8	8.90	-6.13	47.10	
4,093.0	5.00	79.90	3,997.7	575.8	126.8	-543.4	9.62	-6.45	69.68	
4,125.0	4.20	105.20	4,029.6	575.7	129.3	-542.9	6.75	-2.50	79.06	
4,156.0	5.30	130.80	4,060.5	574.5	131.4	-541.3	7.61	3.55	82.58	
4,188.0	7.00	143.30	4,092.4	572.0	133.7	-538.4	6.73	5.31	39.06	
4,219.0	9.00	143.00	4,123.1	568.5	136.3	-534.6	6.45	6.45	-0.97	
4,250.0	11.90	140.80	4,153.5	564.1	139.8	-529.6	9.44	9.35	-7.10	
4,282.0	14.60	140.60	4,184.7	558.4	144.4	-523.2	8.44	8.44	-0.63	
4,314.0	16.20	147.40	4,215.5	551.5	149.4	-515.5	7.53	5.00	21.25	
4,345.0	18.60	154.30	4,245.1	543.4	153.9	-506.7	10.20	7.74	22.26	
4,377.0	20.90	156.50	4,275.2	533.6	158.4	-496.3	7.55	7.19	6.88	
4,408.0	22.70	162.80	4,304.0	522.8	162.3	-484.9	9.51	5.81	20.32	
4,440.0	24.80	167.40	4,333.3	510.4	165.6	-472.1	8.75	6.56	14.38	
4,471.0	26.90	170.90	4,361.2	497.1	168.2	-458.6	8.37	6.77	11.29	
4,502.0	28.20	173.80	4,388.7	482.9	170.1	-444.3	6.02	4.19	9.35	
4,534.0	30.00	175.20	4,416.7	467.4	171.5	-428.8	6.01	5.63	4.38	
4,565.0	32.10	178.00	4,443.2	451.4	172.5	-412.9	8.22	6.77	9.03	

Survey Report

Company:	Sandridge Energy	Local Co-ordinate Reference:	Well Foster 3508 3-2H/ Horizon 4
Project:	Harper County (NAD-27)	TVD Reference:	KB @ 1288.0usft
Site:	Sec 02-T35S-R08W	MD Reference:	KB @ 1288.0usft
Well:	Foster 3508 3-2H/ Horizon 4	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)	
4,596.0	34.30	179.80	4,469.2	434.5	172.8	-396.1	7.78	7.10	5.81	
4,628.0	36.90	180.80	4,495.2	415.8	172.7	-377.8	8.33	8.13	3.13	
4,660.0	39.80	181.00	4,520.3	396.0	172.4	-358.4	9.07	9.06	0.63	
4,691.0	42.80	180.60	4,543.5	375.5	172.1	-338.3	9.71	9.68	-1.29	
4,723.0	45.50	179.20	4,566.5	353.3	172.1	-316.4	8.97	8.44	-4.38	
4,755.0	47.70	179.30	4,588.5	330.0	172.4	-293.5	6.88	6.88	0.31	
4,786.0	49.70	179.00	4,609.0	306.7	172.8	-270.5	6.49	6.45	-0.97	
4,817.0	52.40	178.60	4,628.4	282.6	173.3	-246.7	8.77	8.71	-1.29	
4,848.0	55.70	178.50	4,646.6	257.5	173.9	-221.9	10.65	10.65	-0.32	
4,880.0	57.40	178.90	4,664.3	230.8	174.5	-195.6	5.41	5.31	1.25	
4,912.0	60.80	178.90	4,680.7	203.4	175.1	-168.5	10.63	10.63	0.00	
4,943.0	65.70	178.10	4,694.7	175.7	175.8	-141.1	15.97	15.81	-2.58	
4,975.0	69.30	177.80	4,706.9	146.2	176.9	-111.9	11.28	11.25	-0.94	
5,006.0	71.60	177.90	4,717.3	117.0	177.9	-83.0	7.43	7.42	0.32	
5,039.0	72.40	178.90	4,727.5	85.6	178.8	-51.9	3.77	2.42	3.03	
5,070.0	73.60	179.30	4,736.5	56.0	179.3	-22.7	4.06	3.87	1.29	
5,101.0	75.80	179.40	4,744.7	26.1	179.6	6.8	7.10	7.10	0.32	
5,133.0	78.30	178.70	4,751.9	-5.1	180.1	37.5	8.10	7.81	-2.19	
5,165.0	81.00	179.10	4,757.6	-36.6	180.8	68.6	8.53	8.44	1.25	
5,196.0	83.20	179.10	4,761.9	-67.3	181.2	98.9	7.10	7.10	0.00	
5,228.0	86.10	179.20	4,764.9	-99.1	181.7	130.3	9.07	9.06	0.31	
5,260.0	87.80	179.90	4,766.6	-131.1	182.0	161.8	5.74	5.31	2.19	
5,291.0	88.00	180.00	4,767.7	-162.0	182.0	192.2	0.72	0.65	0.32	
5,322.0	88.10	179.80	4,768.8	-193.0	182.0	222.7	0.72	0.32	-0.65	
5,353.0	88.10	179.60	4,769.8	-224.0	182.2	253.2	0.64	0.00	-0.65	
5,384.0	88.30	179.80	4,770.8	-255.0	182.4	283.7	0.91	0.65	0.65	
5,416.0	88.30	179.40	4,771.7	-287.0	182.6	315.2	1.25	0.00	-1.25	
5,448.0	88.50	179.20	4,772.6	-319.0	183.0	346.8	0.88	0.63	-0.63	
5,479.0	88.30	178.90	4,773.5	-349.9	183.5	377.3	1.16	-0.65	-0.97	
5,510.0	88.20	179.10	4,774.4	-380.9	184.0	407.9	0.72	-0.32	0.65	
5,542.0	88.60	178.80	4,775.3	-412.9	184.6	439.5	1.56	1.25	-0.94	
5,575.0	88.60	178.70	4,776.1	-445.9	185.3	472.0	0.30	0.00	-0.30	
5,606.0	88.70	178.70	4,776.9	-476.9	186.0	502.6	0.32	0.32	0.00	
5,668.0	89.50	178.00	4,777.8	-538.8	187.8	563.9	1.71	1.29	-1.13	
5,763.0	89.80	174.40	4,778.4	-633.6	194.1	658.2	3.80	0.32	-3.79	
5,858.0	89.80	169.70	4,778.7	-727.7	207.3	753.1	4.95	0.00	-4.95	
5,951.0	89.50	163.40	4,779.3	-818.1	228.9	846.0	6.78	-0.32	-6.77	
6,045.0	89.70	158.40	4,780.0	-906.9	259.6	938.8	5.32	0.21	-5.32	
6,140.0	90.00	152.30	4,780.2	-993.2	299.2	1,030.9	6.43	0.32	-6.42	
6,234.0	90.80	148.30	4,779.6	-1,074.8	345.8	1,119.6	4.34	0.85	-4.26	
6,328.0	91.20	147.40	4,777.9	-1,154.4	395.8	1,206.9	1.05	0.43	-0.96	
6,423.0	90.40	148.30	4,776.6	-1,234.8	446.3	1,295.1	1.27	-0.84	0.95	
6,517.0	89.30	148.10	4,776.8	-1,314.7	495.9	1,382.6	1.19	-1.17	-0.21	

Survey Report

Company:	Sandridge Energy	Local Co-ordinate Reference:	Well Foster 3508 3-2H/ Horizon 4
Project:	Harper County (NAD-27)	TVD Reference:	KB @ 1288.0usft
Site:	Sec 02-T35S-R08W	MD Reference:	KB @ 1288.0usft
Well:	Foster 3508 3-2H/ Horizon 4	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)	
6,611.0	90.00	149.30	4,777.4	-1,395.0	544.7	1,470.4	1.48	0.74	1.28	
6,705.0	90.90	150.10	4,776.7	-1,476.2	592.1	1,558.8	1.28	0.96	0.85	
6,799.0	91.30	149.60	4,774.9	-1,557.4	639.3	1,647.2	0.68	0.43	-0.53	
6,893.0	90.30	150.70	4,773.6	-1,638.9	686.1	1,735.9	1.58	-1.06	1.17	
6,988.0	89.40	153.40	4,773.8	-1,722.9	730.6	1,826.4	3.00	-0.95	2.84	
7,081.0	88.90	159.50	4,775.2	-1,808.1	767.8	1,916.9	6.58	-0.54	6.56	
7,176.0	90.60	165.10	4,775.6	-1,898.5	796.7	2,011.1	6.16	1.79	5.89	
7,270.0	90.70	169.80	4,774.5	-1,990.2	817.1	2,105.0	5.00	0.11	5.00	
7,364.0	89.90	173.30	4,774.0	-2,083.2	830.9	2,199.0	3.82	-0.85	3.72	
7,460.0	90.20	174.10	4,774.0	-2,178.6	841.4	2,294.7	0.89	0.31	0.83	
7,554.0	88.90	179.10	4,774.7	-2,272.4	847.0	2,388.0	5.50	-1.38	5.32	
7,649.0	89.30	179.20	4,776.2	-2,367.4	848.4	2,481.7	0.43	0.42	0.11	
7,744.0	88.60	178.80	4,777.9	-2,462.4	850.1	2,575.4	0.85	-0.74	-0.42	
7,836.0	90.60	178.00	4,778.6	-2,554.3	852.6	2,666.3	2.34	2.17	-0.87	
7,931.0	90.30	178.10	4,777.8	-2,649.3	855.9	2,760.2	0.33	-0.32	0.11	
8,026.0	91.60	179.20	4,776.3	-2,744.2	858.1	2,854.0	1.79	1.37	1.16	
8,120.0	91.80	180.70	4,773.5	-2,838.2	858.2	2,946.5	1.61	0.21	1.60	
8,215.0	89.00	180.10	4,772.8	-2,933.2	857.5	3,039.8	3.01	-2.95	-0.63	
8,309.0	89.50	178.80	4,774.0	-3,027.2	858.4	3,132.4	1.48	0.53	-1.38	
8,403.0	87.50	178.20	4,776.5	-3,121.1	860.9	3,225.2	2.22	-2.13	-0.64	
8,498.0	88.70	177.80	4,779.6	-3,216.0	864.2	3,319.1	1.33	1.26	-0.42	
8,592.0	91.80	179.60	4,779.2	-3,309.9	866.3	3,411.9	3.81	3.30	1.91	
8,687.0	92.00	178.70	4,776.1	-3,404.9	867.7	3,505.6	0.97	0.21	-0.95	
8,782.0	91.20	179.30	4,773.4	-3,499.8	869.4	3,599.3	1.05	-0.84	0.63	
8,876.0	91.60	179.40	4,771.1	-3,593.8	870.5	3,691.9	0.44	0.43	0.11	
8,971.0	90.50	179.80	4,769.4	-3,688.8	871.1	3,785.4	1.23	-1.16	0.42	
9,066.0	90.60	179.80	4,768.5	-3,783.8	871.4	3,878.9	0.11	0.11	0.00	
9,161.0	87.50	178.10	4,770.1	-3,878.7	873.2	3,972.6	3.72	-3.26	-1.79	
9,255.0	88.70	179.20	4,773.2	-3,972.6	875.4	4,065.4	1.73	1.28	1.17	
9,349.0	88.50	179.60	4,775.5	-4,066.6	876.4	4,158.0	0.48	-0.21	0.43	
9,443.0	91.80	180.00	4,775.2	-4,160.6	876.7	4,250.5	3.54	3.51	0.43	
9,538.0	94.40	181.20	4,770.1	-4,255.4	875.7	4,343.6	3.01	2.74	1.26	
9,634.0	90.80	180.60	4,765.7	-4,351.3	874.2	4,437.6	3.80	-3.75	-0.63	
9,728.0	89.70	179.90	4,765.3	-4,445.3	873.8	4,530.0	1.39	-1.17	-0.74	
9,822.0	88.00	178.20	4,767.2	-4,539.3	875.4	4,622.7	2.56	-1.81	-1.81	
Last Drillright MWD Survey										
10,025.0	88.00	178.20	4,774.3	-4,742.0	881.7	4,823.3	0.00	0.00	0.00	
Projection to TD - PBHL Foster 3-2H										

Survey Report

Company:	Sandridge Energy	Local Co-ordinate Reference:	Well Foster 3508 3-2H/ Horizon 4
Project:	Harper County (NAD-27)	TVD Reference:	KB @ 1288.0usft
Site:	Sec 02-T35S-R08W	MD Reference:	KB @ 1288.0usft
Well:	Foster 3508 3-2H/ Horizon 4	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)	
795.0	795.0	-2.0	0.6	First Drillright MWD Survey
9,822.0	4,767.2	-4,539.3	875.4	Last Drillright MWD Survey
10,025.0	4,774.3	-4,742.0	881.7	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/30/2014
Job End Date:	8/31/2014
State:	Kansas
County:	Harper
API Number:	15-077-22059-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Foster 3508 #3-2H
Longitude:	-98.16030900
Latitude:	37.03566900
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,773
Total Base Water Volume (gal):	2,402,862
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	95.49571	None
40/70 Premium Preferred Sand	Cimarron Acid	Proppant, Scouring, Fill	Crystalline Silica (quartz)	14808-60-7	100.00000	3.12568	None
15% Uninhibited HCl Acid	Cimarron Acid	Etching, Dissolving, Cleaning	Water	7732-18-5	85.00000	0.65366	None
			Hydrochloric Acid	7647-01-0	15.00000	0.11535	None
			Water	7732-18-5	24.00000	0.00015	None
			Methanol	67-56-1	9.00000	0.00006	None
			Ethoxylated Nonylphenol	68412-54-4	8.40000	0.00005	None
			Isopropyl Alcohol	67-63-0	8.40000	0.00005	None
			Cinnamaldehyde	104-55-2	8.40000	0.00005	None
			N-Dimethylformamide	68-12-2	8.40000	0.00005	None
			Ethylene Glycol	107-21-1	8.40000	0.00005	None
			2-Butoxyethanol	111-76-2	8.40000	0.00005	None
			Triethyl Phosphate	78-40-0	8.40000	0.00005	None
			Tar Bases-quinoline derivs-benzyl chloride/quaternized	72480-70-7	8.40000	0.00005	None

40/70 Resin Coated Sand	Cimarron Acid	Proppant, Scouring, Fill					
			Crystalline Silica (quartz)	14808-60-7	97.00000	0.46260	None
Iron Control, Sodium Erythorbate	Cimarron Acid	Iron Control					
			Water	7732-18-5	55.50000	0.02489	None
			Methanol	67-56-1	12.70000	0.00571	None
			Nonylphenal Polyethylene Glycol Ether	127087-87-0	9.10000	0.00408	None
			Dinanylphenyl Polyoxyethylene	201602-88-2	9.10000	0.00408	None
			Poly(ethylene Oxide)	25322-68-3	9.10000	0.00408	None
			Isopropanol	67-63-0	4.60000	0.00204	None
			Sodium Erythorbate	6381-77-7	100.00000	0.00025	None
			Water	7732-18-5	54.50000	0.00018	None
			Isopropanol	67-63-0	13.60000	0.00005	None
			Polyglycol Ethers	52624-57-4	13.60000	0.00005	None
			Methanol	67-56-1	9.00000	0.00003	None
			Glycol Ether EB	111-76-2	9.00000	0.00003	None
FR-986, Cationic Friction Reducer	Cimarron Acid	Friction Reducer					
			Water	7732-18-5	50.00000	0.00501	None
			Petroleum Hydrotreated Light Distillate	64742-47-8	2.50000	0.00191	None
			Hydrochloric Acid	7647-01-0	16.80000	0.00169	None
			Phosphoric Acid	7664-38-2	16.80000	0.00169	None
			Ethylene Glycol	107-21-1	12.70000	0.00128	None
			Methanol	67-56-1	3.60000	0.00037	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)