Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1148415

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 # 34192
Name: SandRidge Exploration and Production LLC
Address 1: 123 ROBERT S. KERR AVE
Address 2:
City: OKLAHOMA CITY State: OK Zip: 73102 + 6406
Contact Person: Tiffany Golay
Phone: (405) 429-6543
CONTRACTOR: License # 34464
Name: Lariat Services, Inc.
Wellsite Geologist: Kathy Gentry
Purchaser: DCP Midstream, LP (Gas) NCRA (Oil)

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 #:

4/19/2013	6/9/2013	7/7/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-033-21711-01-00
Spot Description:
SE - SE - SW - SW Sec. 33 Twp. 33 S. R. 19 ☐ East ☑ West
200 Feet from ☐ North / ☑ South Line of Section
1200 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Comanche
Lease Name: Pepper 3419 Well #: 4-4H
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 1994 Kelly Bushing: 2014
Total Vertical Depth: 9999 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 936 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: 12000 ppm Fluid volume: 140 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Lojo Disposal
Lease Name: Unnamed License #: 99999
Quarter SW Sec. 10 Twp. 26 S. R. 15 ☐ East ☑ West
County: Woods, OK Permit #: 563714

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: 08/13/2013
☑ **Confidential Release Date:** 08/13/2015
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 08/16/2013

1148415

Operator Name: SandRidge Exploration and Production LLC Lease Name: Pepper 3419 Well #: 4-4H

Sec. 33 Twp. 33 S. R. 19 ☐ East ☑ West County: Comanche

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 ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Final Boresight Depiction
Prizm
Mud Log

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Base Heebner Shale Marker	4410	
Top Lansing Limestone Group	4608	
Top Cherokee Shale marker	5247	
Top Mississippi unconformity	5362	
Top Mississippi 'Solid'	5367	

CASING RECORD ☑ New ☐ 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
Conductor	30	20	75	120	Basin Services 10 Sack Grout	11	none
Surface	12.25	9.63	36	935	Extendacem and Swiftcem Sys	390	3% Calcium Chloride, .25% Poly-E-Flake
Intermediate	8.75	7	26	6057	Halliburton Econocem and Halc	270	.4% Halad(R)-9, 2 lbm Kol-Seal, 2% Bent

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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 *(Amount and Kind of Material Used)*	Depth
Attached	Attached	Attached	Attached

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

Date of First, Resumed Production, SWD or ENHR. 7/17/2013

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:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Pepper 3419 4-4H
Doc ID	1148415

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9954-10274	1500 gals 15% HCL, 4173 bbls Fresh Slickwater, 4213 TLTR	
5	9580-9875	1500 gals 15% HCL, 4191 bbls Fresh Slickwater, 8827 TLTR	
5	9198-9498	1500 gals 15% HCL, 4213 bbls Fresh Slickwater, 13185 TLTR	
5	8803-9127	1500 gals 15% HCL, 4215 bbls Fresh Slickwater, 17553 TLTR	
5	8410-8720	1500 gals 15% HCL, 4195 bbls Fresh Slickwater, 21877 TLTR	
5	8004-8326	1500 gals 15% HCL, 4219 bbls Fresh Slickwater, 26211 TLTR	
5	7622-7958	1500 gals 15% HCL, 4252 bbls Fresh Slickwater, 30573 TLTR	
5	7240-7524	1500 gals 15% HCL, 4195 bbls Fresh Slickwater, 34861 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Pepper 3419 4-4H
Doc ID	1148415

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	6860-7160	1500 gals 15% HCL, 4152 bbls Fresh Slickwater, 39083 TLTR	
5	6522-6812	1500 gals 15% HCL, 3714 bbls Fresh Slickwater, 42870 TLTR	
5	6098-6430	1500 gals 15% HCL, 4667 bbls Fresh Slickwater, 48248 TLTR	

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

Kansas
Corporation Commission

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

June 17, 2013

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

Re: ACO1
API 15-033-21711-01-00
Pepper 3419 4-4H
SW/4 Sec.33-33S-19W
Comanche County, Kansas

Dear Production Department:

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

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

Respectfully,
Tiffany Golay

BASIN SERVICES, LLC
P O BOX 4268
ABILENE, TX 79608-4268
Phone # (325)690-0053
Fax # (325)698-0055

INVOICE

INVOICE NO.: 158
INVOICE DATE: 06/17/2013

SANDRIDGE ENERGY
123 ROBERT S KERR AVE
OKLAHOMA CITY, OK 73102-6406

YARD: WY WAYNOKA OK
LEASE: Pepper
WELL#: 3419 4-4H
RIG #: Lariat 41
Co/St: COMANCHE, KS

Tkt # WY-6-1 04/20/2013

DESCRIPTION	FOOTAGE	QUANTITY	RATE	AMOUNT
4/20/2013 DRILLED 30" CONDUCTOR HOLE				
4/20/2013 20" CONDUCTOR PIPE (.250 WALL)				
4/20/2013 6' X 6' CELLAR TINHORN WITH PROTECTIVE RING				
4/20/2013 DRILL & INSTALL 6' X 6' CELLAR TINHORN				
4/20/2013 DRILLED 20" MOUSE HOLE (PER FOOT)				
4/20/2013 16" CONDUCTOR PIPE (.250 WALL)				
4/20/2013 MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE				
4/20/2013 WELDING SERVICES FOR PIPE & LIDS				
4/20/2013 PROVIDED EQUIPMENT & LABOR TO ASSIST IN PUMPING CONCRETE				
4/20/2013 PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR MOUSEHOLE PIPE)				
4/20/2013 11 YARDS 10 SACK GROUT				
4/20/2013 TAXABLE ITEMS				11,000.00
4/20/2013 BID - TAXABLE ITEMS				10,250.00

Sub Total:	21,250.00
Tax COMANCHE COUNTY (6.3 %):	693.00
PLEASE PAY THIS AMOUNT:	$ 21,943.00

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 3000353	**Quote #:**	**Sales Order #:** 900467023
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Man, Company	
Well Name: Pepper 3419	**Well #:** 4-4H		**API/UWI #:**
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Contractor: Lariat	**Rig/Platform Name/Num:** 41		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** WILTSHIRE, MERSHEK	**MBU ID Emp #:** 195811	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ESTRADA, JOSE Corral	7	541275	LAYNE, OLANDIS P	7	517538	MURGADO, MIGUEL	7	284594
WILTSHIRE, MERSHEK TonJe	7	195811						

Equipment

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

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	950. ft	**Job Depth TVD**	
Water Depth		**Wk Ht Above Floor**	
Perforation Depth (MD)	**From**		**To**

Job Times

	Date	Time	Time Zone
Called Out	27 - May - 2013	15:00	CST
On Location	20 - May - 2013	21:00	CST
Job Started	27 - May - 2013	01:47	CST
Job Completed	27 - May - 2013	02:52	CST
Departed Loc	27 - May - 2013	04:30	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
12.25" Open Hole				12.25				.	950.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	950.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		

Tools and Accessories

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

Miscellaneous Materials

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

Fluid Data

Stage/Plug #: 1

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water		10.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	EXTENDACEM (TM) SYSTEM (452981)	255.0	sacks	12.4	2.11	11.61		11.61
3 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.25 lbm		POLY-E-FLAKE (101216940)							
11.609 Gal		FRESH WATER							
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	135.0	sacks	15.6	1.2	5.32		5.32
2 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.125 lbm		POLY-E-FLAKE (101216940)							
5.319 Gal		FRESH WATER							
4	Displacement		69.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	

Rates

Circulating		Mixing		Displacement		Avg. Job	

Cement Left In Pipe	Amount	42 ft	Reason	Shoe Joint

Frac Ring # 1 @		ID		Frac ring # 2 @		ID		Frac Ring # 3 @		ID		Frac Ring # 4 @		ID	

The Information Stated Herein Is Correct	Customer Representative Signature

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 3000353	**Quote #:**	**Sales Order #:** 900486653
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** ., Quincy	
Well Name: Pepper 3419	**Well #:** 4-4H		**API/UWI #:** 15-033-21711
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 33 Township 33S Range 19W			
Contractor: Lariat	**Rig/Platform Name/Num:** 41		
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well	**Job Type:** Cement Intermediate Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** HEIDT, JAMES	**MBU ID Emp #:** 517102	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
AGUILERA, FABIAN J	9	442123	HEIDT, JAMES Nicholas	9	517102	SEARS, LOGAN Partick	9	544024

Equipment

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

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
6/4/2013	9	1.25						
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	19947.5 m	**Job Depth TVD**	19947.5 m		
Water Depth		**Wk Ht Above Floor**	16.4 m		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	03 - Jun - 2013	18:00	CST
On Location	04 - Jun - 2013	02:30	CST
Job Started	04 - Jun - 2013	06:58	CST
Job Completed	04 - Jun - 2013	08:13	CST
Departed Loc	04 - Jun - 2013	10:30	CST

Well Data

Description	New / Used	Max pressure MPa	Size mm	ID mm	Weight kg/m	Thread	Grade	Top MD m	Bottom MD m	Top TVD m	Bottom TVD m
8.75" Open Hole				8.75				900.	6060.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	6060.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	950.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,7,HWE,5.66 MIN/6.54 MAX CS	1	EA		

Tools and Accessories

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

Miscellaneous Materials

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

Fluid Data

Stage/Plug #: 1

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density kg/m3	Yield m3/sk	Mix Fluid m3/ tonne	Rate m3/min	Total Mix Fluid m3/ tonne
1	Rig Supplied Gel Water		30.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	ECONOCEM (TM) SYSTEM (452992)	170.0	sacks	13.6	1.53	7.24		7.24
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	2 lbm	KOL-SEAL, BULK (100064233)							
	2 %	BENTONITE, BULK (100003682)							
	7.24 Gal	FRESH WATER							
3	Tail Cement	HALCEM (TM) SYSTEM (452986)	100.0	sacks	15.6	1.19	5.08		5.08
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	2 lbm	KOL-SEAL, BULK (100064233)							
	5.076 Gal	FRESH WATER							
4	Displacement			bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	229 BBLS	Shut In: Instant		Lost Returns	NO	Cement Slurry	71 BBL	Pad	
Top Of Cement	1729 FT	5 Min		Cement Returns	NO	Actual Displacement	229BBL	Treatment	
Frac Gradient		15 Min		Spacers	30 BBL	Load and Breakdown		Total Job	

Rates							
Circulating	5	Mixing	5	Displacement	6	Avg. Job	5

Cement Left In Pipe	Amount	84 ft	Reason	Shoe Joint

Frac Ring # 1 @		ID		Frac ring # 2 @		ID		Frac Ring # 3 @		ID		Frac Ring # 4 @		ID	

The Information Stated Herein Is Correct	Customer Representative Signature

OPERATOR	FIELD NAME	Well name/No.	Rig Name & No.	Job No.	Calculation Method	Minimum Curvature
Sandridge Energy, In	Saddle	Pepper 3419 4-4H	Lariat 41	04211-431-22	Proposed Azimuth	186.16°
MWD OPERATOR	DIR SUPERVISOR	COUNTY	STATE	Start Date	Depth Reference:	RKB
Charles Alderman Jr	Roy Ramsey	Comanche	Kansas	27-May-13	Tie Into:	MWD
DipA: 65.07	Mag Field: 0.51674	Mag Dec. 0.00	Total Cor.: 5.89		Job Service:	Gamma-Dir.
Mag Spacing Req.	Mag Spacing Actual	Mag Spacing Req.	Mag Spacing Actual			
Below 11	Below 20	Above 15	Above 42			

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (°/100')	Build Rate (°/100')	Walk Rate (°/100')
Tie-In	**0.00'**	**0.00°**	**0.00°**	**0.00'**	**0.00'**	**0.00'**	**0.00'**		**0.00'**		**0.00'**	**0.00°**	**0.00°**	**0.0°**	**0.0°**
1	250.00'	0.25°	198.60°	250.00'	250.00'	0.53'	0.52'	S	0.17'	W	0.55'	198.60°	0.10°	0.1°	79.4°
2	500.00'	0.15°	198.60°	250.00'	500.00'	1.38'	1.34'	S	0.45'	W	1.42'	198.60°	0.04°	0.0°	0.0°
3	720.00'	0.92°	198.60°	220.00'	719.99'	3.39'	3.29'	S	1.11'	W	3.47'	198.60°	0.35°	0.4°	0.0°
4	925.00'	0.72°	198.60°	205.00'	924.96'	6.26'	6.07'	S	2.04'	W	6.41'	198.60°	0.10°	-0.1°	0.0°
5	1036.00'	0.70°	198.60°	111.00'	1035.96'	7.60'	7.38'	S	2.48'	W	7.78'	198.60°	0.02°	-0.02°	0.00°
6	1493.00'	0.90°	222.70°	457.00'	1492.91'	13.21'	12.66'	S	5.81'	W	13.93'	204.64°	0.08°	0.04°	5.27°
7	1949.00'	0.60°	41.10°	456.00'	1948.90'	14.13'	13.49'	S	6.67'	W	15.05'	206.29°	0.33°	-0.07°	-39.82°
8	2405.00'	0.80°	47.60°	456.00'	2404.86'	9.79'	9.55'	S	2.75'	W	9.93'	196.05°	0.05°	0.04°	1.43°
9	2862.00'	0.70°	47.40°	457.00'	2861.82'	5.29'	5.50'	S	1.67'	E	5.75'	163.17°	0.02°	-0.02°	-0.04°
10	3319.00'	0.10°	348.70°	457.00'	3318.81'	2.81'	3.22'	S	3.64'	E	4.86'	131.52°	0.14°	-0.13°	65.93°
11	3775.00'	0.20°	343.70°	456.00'	3774.81'	1.70'	2.07'	S	3.34'	E	3.93'	121.78°	0.02°	0.02°	-1.10°
12	4231.00'	0.40°	282.30°	456.00'	4230.80'	0.79'	0.97'	S	1.56'	E	1.84'	121.76°	0.08°	0.04°	-13.46°
13	4447.00'	0.00°	246.70°	216.00'	4446.80'	0.71'	0.81'	S	0.83'	E	1.15'	134.33°	0.19°	-0.19°	-16.48°
14	4478.00'	0.20°	228.80°	31.00'	4477.80'	0.75'	0.84'	S	0.78'	E	1.15'	137.01°	0.65°	0.65°	-57.74°
15	4508.00'	1.50°	222.50°	30.00'	4507.80'	1.11'	1.17'	S	0.48'	E	1.26'	157.61°	4.34°	4.33°	-21.00°
16	4538.00'	3.30°	226.80°	30.00'	4537.77'	2.08'	2.05'	S	0.41'	W	2.09'	191.45°	6.03°	6.00°	14.33°
17	4568.00'	6.10°	227.30°	30.00'	4567.67'	3.94'	3.72'	S	2.22'	W	4.33'	210.78°	9.33°	9.33°	1.67°
18	4599.00'	8.30°	228.60°	31.00'	4598.42'	6.83'	6.32'	S	5.10'	W	8.12'	218.95°	7.12°	7.10°	4.19°
19	4629.00'	10.50°	229.40°	30.00'	4628.02'	10.42'	9.53'	S	8.81'	W	12.97'	222.74°	7.35°	7.33°	2.67°
20	4660.00'	13.00°	229.00°	31.00'	4658.36'	15.03'	13.65'	S	13.58'	W	19.26'	224.85°	8.07°	8.06°	-1.29°
21	4690.00'	15.30°	229.70°	30.00'	4687.45'	20.38'	18.43'	S	19.15'	W	26.58'	226.10°	7.69°	7.67°	2.33°
22	4721.00'	17.80°	229.80°	31.00'	4717.17'	26.77'	24.13'	S	25.89'	W	35.39'	227.01°	8.07°	8.06°	0.32°
23	4751.00'	19.60°	230.20°	30.00'	4745.58'	33.71'	30.31'	S	33.26'	W	45.00'	227.65°	6.02°	6.00°	1.33°
24	4782.00'	19.70°	230.10°	31.00'	4774.78'	41.21'	36.99'	S	41.26'	W	55.42'	228.12°	0.34°	0.32°	-0.32°

25	4812.00'	19.30°	229.30°	30.00'	4803.05'	48.47'	43.47'	S	48.90'	W	65.43'	228.36°	1.60°	-1.33°	-2.67°
26	4842.00'	20.60°	229.80°	30.00'	4831.25'	55.90'	50.11'	S	56.69'	W	75.66'	228.52°	4.37°	4.33°	1.67°
27	4873.00'	23.30°	229.60°	31.00'	4860.00'	64.30'	57.60'	S	65.52'	W	87.24'	228.68°	8.71°	8.71°	-0.65°
28	4903.00'	26.50°	230.40°	30.00'	4887.21'	73.41'	65.72'	S	75.20'	W	99.87'	228.85°	10.73°	10.67°	2.67°
29	4934.00'	28.40°	231.00°	31.00'	4914.72'	83.59'	74.77'	S	86.26'	W	114.15'	229.08°	6.19°	6.13°	1.94°
30	4964.00'	29.80°	230.70°	30.00'	4940.93'	93.96'	83.98'	S	97.57'	W	128.74'	229.28°	4.69°	4.67°	-1.00°
31	4995.00'	31.30°	230.50°	31.00'	4967.63'	105.21'	93.98'	S	109.75'	W	144.49'	229.43°	4.85°	4.84°	-0.65°
32	5025.00'	32.90°	230.50°	30.00'	4993.04'	116.62'	104.12'	S	122.05'	W	160.43'	229.53°	5.33°	5.33°	0.00°
33	5055.00'	34.10°	230.50°	30.00'	5018.06'	128.46'	114.65'	S	134.83'	W	176.98'	229.62°	4.00°	4.00°	0.00°
34	5086.00'	35.80°	230.70°	31.00'	5043.47'	141.14'	125.92'	S	148.55'	W	194.74'	229.71°	5.50°	5.48°	0.65°
35	5116.00'	38.20°	231.00°	30.00'	5067.42'	153.97'	137.32'	S	162.55'	W	212.79'	229.81°	8.02°	8.00°	1.00°
36	5147.00'	41.00°	231.10°	31.00'	5091.31'	167.97'	149.74'	S	177.92'	W	232.54'	229.91°	9.03°	9.03°	0.32°
37	5177.00'	42.70°	231.20°	30.00'	5113.65'	182.12'	162.30'	S	193.50'	W	252.55'	230.01°	5.67°	5.67°	0.33°
38	5208.00'	45.10°	229.90°	31.00'	5135.99'	197.49'	175.96'	S	210.10'	W	274.05'	230.05°	8.27°	7.74°	-4.19°
39	5238.00'	48.30°	229.60°	30.00'	5156.56'	213.30'	190.06'	S	226.76'	W	295.88'	230.03°	10.69°	10.67°	-1.00°
40	5268.00'	51.50°	228.30°	30.00'	5175.88'	230.14'	205.14'	S	244.06'	W	318.82'	229.95°	11.17°	10.67°	-4.33°
41	5299.00'	51.90°	227.80°	31.00'	5195.10'	248.25'	221.40'	S	262.15'	W	343.13'	229.82°	1.81°	1.29°	-1.61°
42	5329.00'	51.70°	227.90°	30.00'	5213.65'	265.86'	237.22'	S	279.63'	W	366.69'	229.69°	0.72°	-0.67°	0.33°
43	5360.00'	52.00°	227.60°	31.00'	5232.80'	284.09'	253.61'	S	297.67'	W	391.06'	229.57°	1.23°	0.97°	-0.97°
44	5390.00'	52.10°	227.20°	30.00'	5251.25'	301.88'	269.62'	S	315.09'	W	414.70'	229.45°	1.10°	0.33°	-1.33°
45	5421.00'	51.90°	228.10°	31.00'	5270.33'	320.17'	286.08'	S	333.14'	W	439.12'	229.35°	2.38°	-0.65°	2.90°
46	5451.00'	51.70°	227.60°	30.00'	5288.88'	337.78'	301.90'	S	350.62'	W	462.68'	229.27°	1.47°	-0.67°	-1.67°
47	5482.00'	51.80°	223.10°	31.00'	5308.08'	356.64'	319.00'	S	367.93'	W	486.96'	229.07°	11.40°	0.32°	-14.52°
48	5512.00'	52.70°	218.80°	30.00'	5326.45'	376.12'	336.91'	S	383.47'	W	510.45'	228.70°	11.72°	3.00°	-14.33°
49	5543.00'	53.80°	215.20°	31.00'	5345.01'	397.44'	356.75'	S	398.40'	W	534.79'	228.16°	9.96°	3.55°	-11.61°
50	5573.00'	56.00°	211.90°	30.00'	5362.26'	419.23'	377.20'	S	411.96'	W	558.56'	227.52°	11.61°	7.33°	-11.00°
51	5603.00'	58.60°	209.20°	30.00'	5378.47'	442.22'	398.94'	S	424.78'	W	582.75'	226.80°	11.51°	8.67°	-9.00°
52	5634.00'	61.10°	207.30°	31.00'	5394.04'	467.06'	422.56'	S	437.46'	W	608.21'	225.99°	9.65°	8.06°	-6.13°
53	5664.00'	63.60°	206.30°	30.00'	5407.96'	491.92'	446.27'	S	449.44'	W	633.37'	225.20°	8.84°	8.33°	-3.33°
54	5695.00'	66.20°	203.00°	31.00'	5421.11'	518.54'	471.78'	S	461.14'	W	659.72'	224.35°	12.78°	8.39°	-10.65°
55	5725.00'	68.60°	200.80°	30.00'	5432.64'	545.20'	497.48'	S	471.46'	W	685.39'	223.46°	10.48°	8.00°	-7.33°
56	5756.00'	70.50°	199.10°	31.00'	5443.47'	573.41'	524.78'	S	481.37'	W	712.12'	222.53°	8.00°	6.13°	-5.48°
57	5786.00'	72.00°	197.20°	30.00'	5453.11'	601.19'	551.77'	S	490.21'	W	738.08'	221.62°	7.81°	5.00°	-6.33°
58	5816.00'	73.40°	195.20°	30.00'	5462.04'	629.39'	579.28'	S	498.20'	W	764.05'	220.70°	7.89°	4.67°	-6.67°
59	5847.00'	74.60°	193.70°	31.00'	5470.58'	658.88'	608.13'	S	505.64'	W	790.88'	219.74°	6.05°	3.87°	-4.84°
60	5877.00'	76.00°	192.00°	30.00'	5478.19'	687.70'	636.42'	S	512.09'	W	816.87'	218.82°	7.20°	4.67°	-5.67°

61	5908.00'	76.90°	190.50°	31.00'	5485.46'	717.72'	665.98' S	517.97' W	843.69'	217.87°	5.53°	2.90°	-4.84°
62	5938.00'	78.30°	189.40°	30.00'	5491.90'	746.95'	694.84' S	523.03' W	869.69'	216.97°	5.88°	4.67°	-3.67°
63	5969.00'	79.60°	188.40°	31.00'	5497.84'	777.34'	724.90' S	527.74' W	896.65'	216.06°	5.25°	4.19°	-3.23°
64	5999.00'	81.30°	186.50°	30.00'	5502.82'	806.91'	754.23' S	531.57' W	922.73'	215.18°	8.43°	5.67°	-6.33°
65	6025.00'	82.90°	184.70°	26.00'	5506.39'	832.66'	779.86' S	534.08' W	945.21'	214.41°	9.21°	6.15°	-6.92°
66	6103.00'	86.80°	181.90°	78.00'	5513.39'	910.23'	857.39' S	538.55' W	1012.50'	212.13°	6.15°	5.00°	-3.59°
67	6135.00'	86.80°	181.80°	32.00'	5515.18'	942.09'	889.32' S	539.58' W	1040.21'	211.25°	0.31°	0.00°	-0.31°
68	6166.00'	88.50°	181.70°	31.00'	5516.45'	972.97'	920.28' S	540.52' W	1067.28'	210.43°	5.49°	5.48°	-0.32°
69	6197.00'	90.30°	181.10°	31.00'	5516.78'	1003.86'	951.27' S	541.28' W	1094.49'	209.64°	6.12°	5.81°	-1.94°
70	6228.00'	90.50°	180.60°	31.00'	5516.56'	1034.73'	982.27' S	541.74' W	1121.75'	208.88°	1.74°	0.65°	-1.61°
71	6258.00'	90.80°	180.70°	30.00'	5516.22'	1064.59'	1012.26' S	542.08' W	1148.27'	208.17°	1.05°	1.00°	0.33°
72	6288.00'	90.90°	180.30°	30.00'	5515.77'	1094.44'	1042.26' S	542.34' W	1174.92'	207.49°	1.37°	0.33°	-1.33°
73	6379.00'	90.50°	180.40°	91.00'	5514.66'	1184.96'	1133.25' S	542.90' W	1256.58'	205.60°	0.45°	-0.44°	0.11°
74	6470.00'	90.30°	180.00°	91.00'	5514.03'	1275.47'	1224.25' S	543.22' W	1339.35'	203.93°	0.49°	-0.22°	-0.44°
75	6560.00'	90.70°	180.40°	90.00'	5513.24'	1364.98'	1314.24' S	543.53' W	1422.20'	202.47°	0.63°	0.44°	0.44°
76	6652.00'	91.10°	179.90°	92.00'	5511.80'	1456.46'	1406.23' S	543.77' W	1507.70'	201.14°	0.70°	0.43°	-0.54°
77	6742.00'	88.70°	179.70°	90.00'	5511.95'	1545.90'	1496.22' S	543.46' W	1591.86'	199.96°	2.68°	-2.67°	-0.22°
78	6834.00'	89.00°	179.30°	92.00'	5513.80'	1637.26'	1588.20' S	542.65' W	1678.35'	198.86°	0.54°	0.33°	-0.43°
79	6925.00'	89.80°	178.70°	91.00'	5514.75'	1727.54'	1679.18' S	541.07' W	1764.20'	197.86°	1.10°	0.88°	-0.66°
80	7017.00'	90.90°	178.70°	92.00'	5514.19'	1818.76'	1771.15' S	538.98' W	1851.35'	196.93°	1.20°	1.20°	0.00°
81	7107.00'	89.30°	179.10°	90.00'	5514.03'	1908.04'	1861.13' S	537.25' W	1937.13'	196.10°	1.83°	-1.78°	0.44°
82	7199.00'	89.50°	179.00°	92.00'	5515.00'	1999.33'	1953.12' S	535.73' W	2025.26'	195.34°	0.24°	0.22°	-0.11°
83	7289.00'	89.40°	178.90°	90.00'	5515.86'	2088.61'	2043.10' S	534.08' W	2111.75'	194.65°	0.16°	-0.11°	-0.11°
84	7381.00'	90.00°	179.00°	92.00'	5516.34'	2179.88'	2135.08' S	532.39' W	2200.46'	194.00°	0.66°	0.65°	0.11°
85	7472.00'	89.70°	179.90°	91.00'	5516.58'	2270.26'	2226.07' S	531.52' W	2288.65'	193.43°	1.04°	-0.33°	0.99°
86	7564.00'	89.80°	180.40°	92.00'	5516.98'	2361.75'	2318.07' S	531.76' W	2378.28'	192.92°	0.55°	0.11°	0.54°
87	7658.00'	89.30°	180.00°	94.00'	5517.72'	2455.24'	2412.07' S	532.09' W	2470.06'	192.44°	0.68°	-0.53°	-0.43°
88	7753.00'	90.60°	180.30°	95.00'	5517.80'	2549.71'	2507.07' S	532.34' W	2562.96'	191.99°	1.40°	1.37°	0.32°
89	7847.00'	90.00°	181.10°	94.00'	5517.31'	2643.28'	2601.06' S	533.48' W	2655.20'	191.59°	1.06°	-0.64°	0.85°
90	7942.00'	90.40°	181.00°	95.00'	5516.98'	2737.91'	2696.04' S	535.22' W	2748.65'	191.23°	0.43°	0.42°	-0.11°
91	8036.00'	90.50°	180.50°	94.00'	5516.24'	2831.48'	2790.03' S	536.45' W	2841.13'	190.88°	0.54°	0.11°	-0.53°
92	8130.00'	89.90°	180.70°	94.00'	5515.91'	2925.04'	2884.02' S	537.44' W	2933.67'	190.56°	0.67°	-0.64°	0.21°
93	8225.00'	90.00°	180.80°	95.00'	5516.00'	3019.62'	2979.01' S	538.68' W	3027.33'	190.25°	0.15°	0.11°	0.11°
94	8319.00'	90.50°	180.60°	94.00'	5515.59'	3113.19'	3073.01' S	539.83' W	3120.06'	189.96°	0.57°	0.53°	-0.21°
95	8414.00'	90.70°	180.40°	95.00'	5514.59'	3207.72'	3168.00' S	540.66' W	3213.80'	189.68°	0.30°	0.21°	-0.21°
96	8508.00'	88.70°	181.40°	94.00'	5515.08'	3301.32'	3261.98' S	542.14' W	3306.72'	189.44°	2.38°	-2.13°	1.06°

97	8602.00'	88.60°	181.10°	94.00'	5517.30'	3394.95'	3355.93' S	544.19' W	3399.76'	189.21°	0.34°	-0.11°	-0.32°
98	8697.00'	89.00°	180.60°	95.00'	5519.29'	3489.52'	3450.90' S	545.60' W	3493.76'	188.98°	0.67°	0.42°	-0.53°
99	8791.00'	89.30°	181.10°	94.00'	5520.68'	3583.10'	3544.88' S	546.99' W	3586.83'	188.77°	0.62°	0.32°	0.53°
100	8885.00'	89.20°	180.80°	94.00'	5521.91'	3676.71'	3638.86' S	548.55' W	3679.97'	188.57°	0.34°	-0.11°	-0.32°
101	8980.00'	89.80°	180.90°	95.00'	5522.74'	3771.30'	3733.84' S	549.96' W	3774.13'	188.38°	0.64°	0.63°	0.11°
102	9074.00'	90.00°	181.10°	94.00'	5522.91'	3864.91'	3827.83' S	551.60' W	3867.37'	188.20°	0.30°	0.21°	0.21°
103	9169.00'	91.40°	180.20°	95.00'	5521.74'	3959.46'	3922.81' S	552.68' W	3961.55'	188.02°	1.75°	1.47°	-0.95°
104	9263.00'	88.70°	180.60°	94.00'	5521.66'	4052.98'	4016.80' S	553.33' W	4054.73'	187.84°	2.90°	-2.87°	0.43°
105	9357.00'	88.70°	180.60°	94.00'	5523.80'	4146.52'	4110.77' S	554.32' W	4147.97'	187.68°	0.00°	0.00°	0.00°
106	9452.00'	89.40°	180.60°	95.00'	5525.37'	4241.05'	4205.75' S	555.31' W	4242.25'	187.52°	0.74°	0.74°	0.00°
107	9546.00'	90.20°	180.70°	94.00'	5525.70'	4334.62'	4299.74' S	556.38' W	4335.59'	187.37°	0.86°	0.85°	0.11°
108	9641.00'	91.10°	181.00°	95.00'	5524.62'	4429.20'	4394.73' S	557.79' W	4429.98'	187.23°	1.00°	0.95°	0.32°
109	9735.00'	90.10°	179.40°	94.00'	5523.64'	4522.69'	4488.72' S	558.11' W	4523.28'	187.09°	2.01°	-1.06°	-1.70°
110	9830.00'	90.50°	179.00°	95.00'	5523.14'	4616.98'	4583.70' S	556.79' W	4617.40'	186.93°	0.60°	0.42°	-0.42°
111	9925.00'	90.90°	179.10°	95.00'	5521.98'	4711.25'	4678.68' S	555.21' W	4711.51'	186.77°	0.43°	0.42°	0.11°
112	10019.00'	91.00°	178.70°	94.00'	5520.42'	4804.48'	4772.65' S	553.41' W	4804.63'	186.61°	0.44°	0.11°	-0.43°
113	10113.00'	90.50°	178.90°	94.00'	5519.19'	4897.70'	4866.62' S	551.44' W	4897.77'	186.46°	0.57°	-0.53°	0.21°
114	10208.00'	90.80°	179.40°	95.00'	5518.11'	4991.98'	4961.61' S	550.03' W	4992.00'	186.33°	0.61°	0.32°	0.53°
115	10304.00'	91.10°	179.30°	96.00'	5516.52'	5087.29'	5057.59' S	548.94' W	5087.29'	186.19°	0.33°	0.31°	-0.10°
PTB	10356.00'	91.10°	179.30°	52.00'	5515.52'	5138.91'	5109.57' S	548.31' W	5138.91'	186.12°	0.00°	0.00°	0.00°

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/1/2013
Job End Date:	7/4/2013
State:	Kansas
County:	Comanche
API Number:	15-033-21711-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Pepper 3419 4-4H
Longitude:	-99.39320000
Latitude:	37.12060000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	5,516
Total Base Water Volume (gal):	1,756,377
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
C102	Bosque Disposal Systems, LLC	Oxidizer					
			Chlorine Dioxide	10049-04-4	15.00000	100.00000	
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.							
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Distillates (petroleum), hydrotreated light	64742-47-8	0.27135		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ethane-1,2-diol	107-21-1	0.00840		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					

			Polyethylene glycol monohexyl ether	31726-34-8	0.12209		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sorbitan monooleate	1338-43-8	0.02584		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C12-C16, ethoxylated	68551-12-2	0.00388		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			2-Propenoic acid, ammonium salt	10604-69-0	0.00633		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.00705		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Methanol	67-56-1	0.01166		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00535		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Fatty acids, tall-oil	61790-12-3	0.00856		

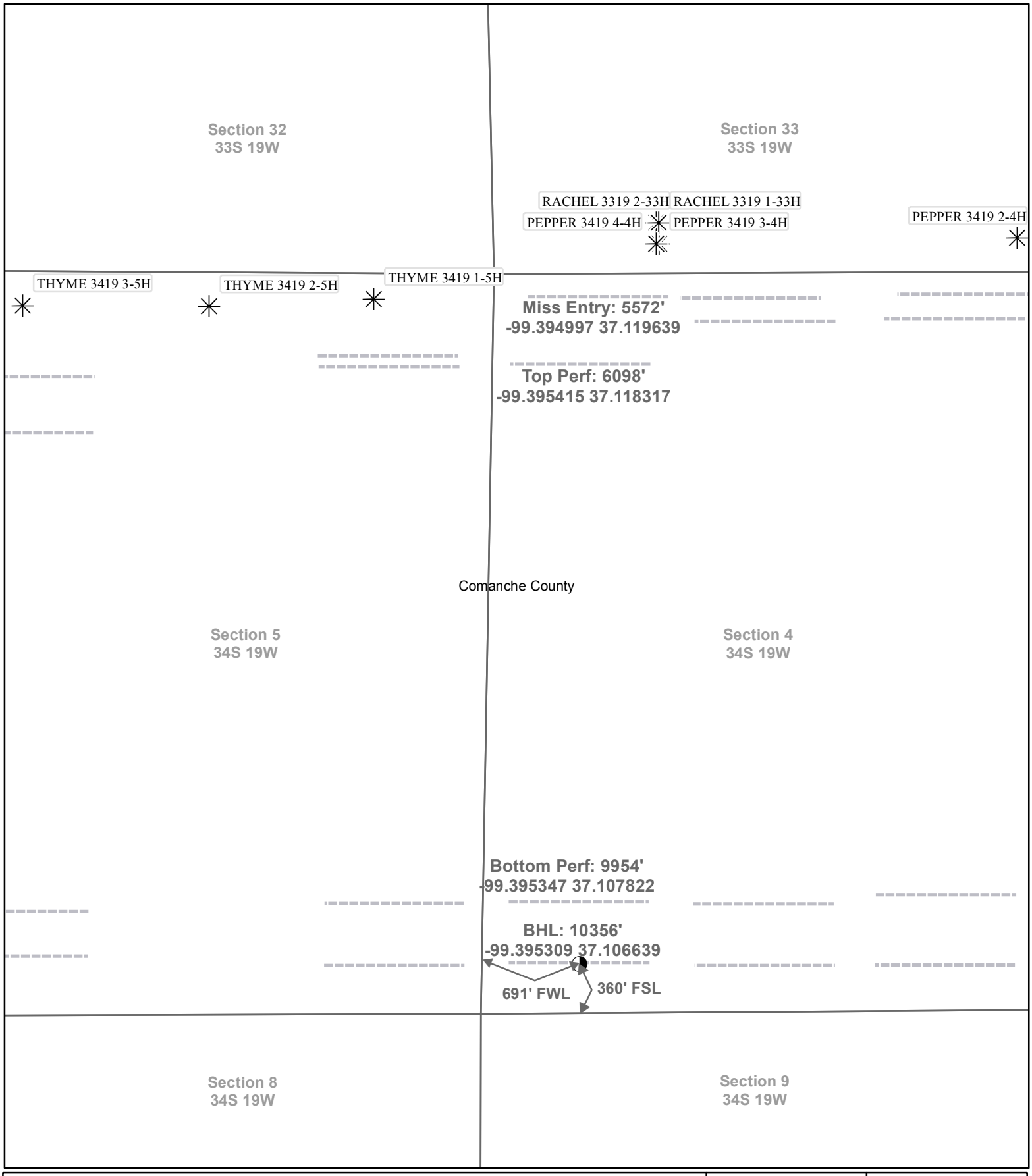
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			C14 alpha olefin ethoxylate	84133-50-6	0.00388		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Crystalline silica	14808-60-7	96.22460		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Propan-2-ol	67-63-0	0.00107		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sodium sulfocyanate	540-72-7	0.00672		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Prop-2-yn-1-ol	107-19-7	0.00219		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sorbitol Tetraoleate	61723-83-9	0.00775		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ethoxylated oleic acid	9004-96-0	0.02584		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Hydrogen chloride	7647-01-0	2.78806		

HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Acrylamide/ammonium acrylate copolymer	26100-47-0	0.20674		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C12-C14, ethoxylated	68439-50-9	0.00388		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C10-C16, ethoxylated	68002-97-1	0.00517		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Trisodium ortho phosphate	7601-54-9	0.02950		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Potassium hydroxide	1310-58-3	0.00024		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alkenes, C>10 a-	64743-02-8	0.00146		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ammonium chloride	12125-02-9	0.12921		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sodium erythorbate	6381-77-7	0.01936		

HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			2-propenamid	79-06-1	0.00116		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Water (Including Mix Water Supplied by Client)*	NA			
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00328		

* 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)



SANDRIDGE
THE POWER OF US

Actual BH Location

SandRidge Wells

Perf

Sections

Actual Bottom-Hole Location of Pepper 3419 4-4H
Comanche County, Kansas
T&R: 34S 19W
Section: 4, 691' FWL & 360' FSL
-99.395309 37.106639

1 in = 899 ft

0 650 1,300 2,600 Feet

N

Draftsman: Aaron Birk	Draft Date: 8/12/2013
Drawing Name/Number: Addendum_Pepper 3419 4-4H .mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	

Remarks

Tiffany Golay 06/17/013 02:39 pm	TMD: 10,356'
Tiffany Golay 07/25/013 09:07 am	Conductor weight: 106.5 lbs/ft Well was completed using an open hole packer system/ no liner was cemented
Tiffany Golay 08/08/013 07:00 am	Additional Fluid Mgmt Info: 5740 bbls hauled to Guard Drilling Mud Disposal, Inc., 23-22N-13W, Major, OK