Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1130556

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) 429-5500
CONTRACTOR: License # 34464
Name: Lariat Services, Inc.
Wellsite Geologist: Joe Hileman
Purchaser: DCP Midstream (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 #:

3/5/2013	3/29/2013	5/14/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-033-21697-01-00
Spot Description:
S2 - S2 - SW - SW Sec. 6 Twp. 34 S. R. 19 ☐ East ☑ West
210 Feet from ☐ North / ☑ South Line of Section
660 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: Clay 3419 Well #: 1-6H
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 1813 Kelly Bushing: 1833
Total Vertical Depth: 9620 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 327 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: 20000 ppm Fluid volume: 2400 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: 07/01/2013
☑ **Confidential Release Date:** 07/01/2015
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 07/01/2013

1130556

Operator Name: SandRidge Exploration and Production LLC Lease Name: Clay 3419 Well #: 1-6H

Sec. 6 Twp. 34 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:

Attached

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

Name	Top	Datum
Base Heebner	4199	
Lansing	4409	
Cherokee	5078	
Mississippian Unc	5214	

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
Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached

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. 5/23/2013

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	Clay 3419 1-6H
Doc ID	1130556

All Electric Logs Run

Mudlog
Horizontal
Vertical
Final Boresight

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Clay 3419 1-6H
Doc ID	1130556

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9228-9484	4224 bbls water, 36 bbls acid, 75M lbs sd, 4448 TLTR	
5	8758-9110	4218 bbls water, 36 bbls acid, 75M lbs sd, 8984 TLTR	
5	8278-8562	4211 bbls water, 36 bbls acid, 75M lbs sd, 13338 TLTR	
5	7856-8198	4204 bbls water, 36 bbls acid, 75M lbs sd, 17626 TLTR	
5	7498-7780	4198 bbls water, 36 bbls acid, 75M lbs sd, 21982 TLTR	
5	7123-7440	4193 bbls water, 36 bbls acid, 75M lbs sd, 26301 TLTR	
5	6713-7040	4186 bbls water, 36 bbls acid, 75M lbs sd, 30689 TLTR	
5	6208-6590	4178 bbls water, 36 bbls acid, 75M lbs sd, 34949 TLTR	
5	5796-6112	4172 bbls water, 36 bbls acid, 75M lbs sd, 39935 TLTR	
5	5468-5740	4167 bbls water, 36 bbls acid, 75M lbs sd, 44153 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Clay 3419 1-6H
Doc ID	1130556

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Conductor	30	20	75	130	Pro Oilfield Services 10 sack grout	16	none
Surface	17.5	13.375	68	327	Halliburton Extendacem and Swiftcem Systems	265	3% Calcium Chloride, .25 lbm Poly-E-Flake
Intermediate 1	12.25	9.63	36	824	Halliburton Extendacem and Swiftcem Systems	340	3% Calcium Chloride, .25 lbm Poly-E-Flake
Intermediate 2	8.75	7	26	5689	Halliburton Econocem and Halcem Systems	300	.4% Halad(R)-9, 2 lbm Kol-Seal, 2% Bentonite
Production Liner	6.125	4.5	11.6	9620	Halliburton Econocem System	500	5 lbm Kol-Seal, .25% SA-1015, .2% CFR-3

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/

April 01, 2013

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

Re: ACO1
API 15-033-21697-01-00
Clay 3419 1-6H
SW/4 Sec.06-34S-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

Sandridge Energy, INC.(mid-con.)

Comanche County (KS27S)
Sec 06-T34S-R19W
Clay 3419 1-6H/Job #04140-431-22/Lariat 20

Wellbore #1

Design: Wellbore #1

Standard Survey Report

01 April, 2013

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Clay 3419 1-6H/Job #04140-431-22/Lariat 20
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Site:	Sec 06-T34S-R19W	**MD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Well:	Clay 3419 1-6H/Job #04140-431-22/Lariat 20	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Project Comanche County (KS27S), KS South

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 06-T34S-R19W

Site Position:		**Northing:**	161,114.00 usft	**Latitude:**	37° 6' 19.446 N
From:	Map	**Easting:**	1,727,844.00 usft	**Longitude:**	99° 25' 59.472 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.57 °

Well Clay 3419 1-6H/Job #04140-431-22/Lariat 20

Well Position	**+N/-S**	0.0 usft	**Northing:**	161,321.00 usft	**Latitude:**	37° 6' 21.558 N
	+E/-W	0.0 usft	**Easting:**	1,728,504.00 usft	**Longitude:**	99° 25' 51.351 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	1,810.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2013/03/06	5.38	65.06	51,678

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	0.13

Survey Program **Date** 2013/04/01

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
879.0	9,620.0	Archer MWD Survey (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
879.0	0.60	174.10	879.0	-4.6	0.5	-4.6	0.07	0.07	0.00
First Archer MWD Survey									
1,337.0	1.00	220.80	1,336.9	-10.0	-1.9	-10.0	0.16	0.09	10.20
1,811.0	1.30	240.30	1,810.8	-15.8	-9.3	-15.8	0.10	0.06	4.11
2,286.0	1.10	248.10	2,285.7	-20.2	-18.2	-20.2	0.05	-0.04	1.64
2,761.0	1.30	254.50	2,760.6	-23.3	-27.6	-23.4	0.05	0.04	1.35
3,236.0	1.10	320.20	3,235.6	-21.2	-35.7	-21.3	0.28	-0.04	13.83
3,711.0	1.30	332.60	3,710.5	-12.9	-41.1	-13.0	0.07	0.04	2.61
4,185.0	0.70	317.80	4,184.4	-6.0	-45.5	-6.1	0.14	-0.13	-3.12

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Clay 3419 1-6H/Job #04140-431-22/Lariat 20
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Site:	Sec 06-T34S-R19W	**MD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Well:	Clay 3419 1-6H/Job #04140-431-22/Lariat 20	**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)
4,220.0	0.50	309.30	4,219.4	-5.8	-45.8	-5.9	0.62	-0.57	-24.29
4,270.0	0.70	296.40	4,269.4	-5.5	-46.2	-5.6	0.48	0.40	-25.80
4,301.0	0.80	315.20	4,300.4	-5.3	-46.6	-5.4	0.85	0.32	60.65
4,333.0	1.70	336.90	4,332.4	-4.7	-46.9	-4.8	3.13	2.81	67.81
4,365.0	3.10	346.70	4,364.3	-3.4	-47.3	-3.5	4.54	4.38	30.63
4,396.0	4.10	348.40	4,395.3	-1.5	-47.7	-1.6	3.24	3.23	5.48
4,428.0	5.10	349.50	4,427.2	1.0	-48.2	0.9	3.14	3.13	3.44
4,459.0	7.10	358.00	4,458.0	4.3	-48.5	4.2	7.06	6.45	27.42
4,491.0	9.20	1.20	4,489.7	8.8	-48.5	8.7	6.71	6.56	10.00
4,523.0	11.90	1.60	4,521.1	14.7	-48.4	14.6	8.44	8.44	1.25
4,554.0	14.20	0.10	4,551.3	21.7	-48.3	21.6	7.50	7.42	-4.84
4,586.0	16.40	0.10	4,582.2	30.1	-48.3	30.0	6.88	6.88	0.00
4,618.0	18.50	1.50	4,612.7	39.7	-48.1	39.6	6.69	6.56	4.38
4,649.0	20.40	3.60	4,641.9	50.0	-47.7	49.9	6.53	6.13	6.77
4,681.0	22.50	4.80	4,671.7	61.7	-46.8	61.6	6.70	6.56	3.75
4,716.0	25.60	5.00	4,703.7	75.9	-45.6	75.8	8.86	8.86	0.57
4,744.0	28.00	4.80	4,728.7	88.5	-44.5	88.4	8.58	8.57	-0.71
4,777.0	30.90	4.10	4,757.4	104.7	-43.2	104.6	8.85	8.79	-2.12
4,808.0	32.60	3.60	4,783.8	120.9	-42.1	120.8	5.55	5.48	-1.61
4,839.0	33.90	3.10	4,809.7	137.9	-41.2	137.8	4.29	4.19	-1.61
4,871.0	36.40	3.10	4,835.9	156.3	-40.2	156.2	7.81	7.81	0.00
4,903.0	39.00	3.40	4,861.2	175.8	-39.0	175.8	8.15	8.13	0.94
4,934.0	40.80	3.00	4,885.0	195.7	-37.9	195.6	5.87	5.81	-1.29
4,966.0	41.20	3.00	4,909.1	216.7	-36.8	216.6	1.25	1.25	0.00
4,998.0	41.90	3.00	4,933.0	237.9	-35.7	237.8	2.19	2.19	0.00
5,029.0	43.60	3.10	4,955.8	258.9	-34.6	258.8	5.49	5.48	0.32
5,061.0	45.50	3.40	4,978.6	281.3	-33.3	281.2	5.97	5.94	0.94
5,092.0	48.40	3.50	4,999.8	303.9	-32.0	303.8	9.36	9.35	0.32
5,124.0	49.10	3.80	5,020.9	327.9	-30.4	327.8	2.30	2.19	0.94
5,156.0	49.20	4.20	5,041.8	352.0	-28.8	352.0	1.00	0.31	1.25
5,187.0	49.70	3.70	5,062.0	375.5	-27.1	375.5	2.03	1.61	-1.61
5,219.0	49.80	4.30	5,082.6	399.9	-25.4	399.9	1.46	0.31	1.88
5,251.0	49.80	4.20	5,103.3	424.3	-23.6	424.2	0.24	0.00	-0.31
5,282.0	49.30	4.10	5,123.4	447.8	-21.9	447.8	1.63	-1.61	-0.32
5,314.0	50.80	3.60	5,143.9	472.3	-20.3	472.2	4.84	4.69	-1.56
5,346.0	54.50	4.20	5,163.4	497.7	-18.5	497.6	11.66	11.56	1.88
5,377.0	58.20	4.00	5,180.5	523.4	-16.7	523.4	11.95	11.94	-0.65
5,409.0	62.00	3.30	5,196.5	551.1	-14.9	551.0	12.03	11.88	-2.19
5,441.0	66.20	2.40	5,210.5	579.8	-13.5	579.8	13.37	13.13	-2.81
5,472.0	69.80	0.80	5,222.1	608.5	-12.7	608.5	12.56	11.61	-5.16
5,504.0	72.70	360.00	5,232.4	638.8	-12.5	638.8	9.37	9.06	-2.50
5,536.0	75.30	359.70	5,241.2	669.6	-12.6	669.6	8.17	8.13	-0.94

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Clay 3419 1-6H/Job #04140-431-22/Lariat 20
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Site:	Sec 06-T34S-R19W	**MD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Well:	Clay 3419 1-6H/Job #04140-431-22/Lariat 20	**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)
5,567.0	78.20	359.40	5,248.3	699.8	-12.8	699.7	9.40	9.35	-0.97
5,599.0	81.30	359.40	5,254.0	731.3	-13.1	731.2	9.69	9.69	0.00
5,631.0	84.60	359.40	5,257.9	763.0	-13.5	763.0	10.31	10.31	0.00
5,662.0	87.50	359.40	5,260.0	793.9	-13.8	793.9	9.35	9.35	0.00
5,740.0	88.90	359.40	5,262.5	871.9	-14.6	871.8	1.79	1.79	0.00
5,770.0	89.60	359.10	5,262.9	901.9	-15.0	901.8	2.54	2.33	-1.00
5,801.0	89.90	359.00	5,263.0	932.9	-15.5	932.8	1.02	0.97	-0.32
5,831.0	90.50	359.60	5,262.9	962.9	-15.9	962.8	2.83	2.00	2.00
5,862.0	90.60	359.80	5,262.6	993.9	-16.0	993.8	0.72	0.32	0.65
5,892.0	90.80	359.30	5,262.2	1,023.9	-16.3	1,023.8	1.79	0.67	-1.67
5,923.0	91.80	359.70	5,261.5	1,054.9	-16.6	1,054.8	3.47	3.23	1.29
5,953.0	92.00	359.40	5,260.5	1,084.8	-16.8	1,084.8	1.20	0.67	-1.00
5,984.0	92.00	358.40	5,259.5	1,115.8	-17.4	1,115.8	3.22	0.00	-3.23
6,014.0	91.80	359.40	5,258.5	1,145.8	-18.0	1,145.7	3.40	-0.67	3.33
6,045.0	90.50	359.90	5,257.8	1,176.8	-18.1	1,176.7	4.49	-4.19	1.61
6,075.0	89.20	359.90	5,257.9	1,206.8	-18.2	1,206.7	4.33	-4.33	0.00
6,106.0	89.90	359.30	5,258.2	1,237.8	-18.4	1,237.7	2.97	2.26	-1.94
6,136.0	91.10	359.00	5,257.9	1,267.8	-18.9	1,267.7	4.12	4.00	-1.00
6,167.0	90.20	359.20	5,257.6	1,298.8	-19.3	1,298.7	2.97	-2.90	0.65
6,197.0	89.10	359.70	5,257.7	1,328.8	-19.6	1,328.7	4.03	-3.67	1.67
6,228.0	89.10	0.80	5,258.2	1,359.8	-19.5	1,359.7	3.55	0.00	3.55
6,259.0	89.10	0.30	5,258.7	1,390.8	-19.2	1,390.7	1.61	0.00	-1.61
6,289.0	89.50	360.00	5,259.1	1,420.8	-19.1	1,420.7	1.67	1.33	-1.00
6,320.0	89.20	1.60	5,259.4	1,451.8	-18.7	1,451.7	5.25	-0.97	5.16
6,350.0	88.60	1.50	5,260.0	1,481.7	-17.9	1,481.7	2.03	-2.00	-0.33
6,381.0	88.90	0.90	5,260.7	1,512.7	-17.2	1,512.7	2.16	0.97	-1.94
6,411.0	88.70	1.20	5,261.3	1,542.7	-16.7	1,542.7	1.20	-0.67	1.00
6,442.0	88.00	1.60	5,262.2	1,573.7	-15.9	1,573.6	2.60	-2.26	1.29
6,472.0	87.60	1.50	5,263.4	1,603.7	-15.1	1,603.6	1.37	-1.33	-0.33
6,503.0	88.90	2.40	5,264.3	1,634.6	-14.1	1,634.6	5.10	4.19	2.90
6,533.0	89.40	2.00	5,264.7	1,664.6	-12.9	1,664.6	2.13	1.67	-1.33
6,564.0	89.50	2.10	5,265.0	1,695.6	-11.8	1,695.5	0.46	0.32	0.32
6,596.0	89.50	1.40	5,265.3	1,727.6	-10.8	1,727.5	2.19	0.00	-2.19
6,627.0	88.20	1.30	5,265.9	1,758.5	-10.1	1,758.5	4.21	-4.19	-0.32
6,659.0	88.50	0.70	5,266.9	1,790.5	-9.5	1,790.5	2.10	0.94	-1.88
6,691.0	90.30	1.50	5,267.2	1,822.5	-8.9	1,822.5	6.16	5.63	2.50
6,719.0	91.00	1.90	5,266.9	1,850.5	-8.1	1,850.5	2.88	2.50	1.43
6,751.0	90.90	1.80	5,266.4	1,882.5	-7.1	1,882.5	0.44	-0.31	-0.31
6,782.0	90.80	2.10	5,265.9	1,913.5	-6.0	1,913.4	1.02	-0.32	0.97
6,814.0	90.90	1.90	5,265.4	1,945.4	-4.9	1,945.4	0.70	0.31	-0.63
6,846.0	90.90	1.60	5,264.9	1,977.4	-3.9	1,977.4	0.94	0.00	-0.94
6,877.0	90.90	1.40	5,264.4	2,008.4	-3.1	2,008.4	0.65	0.00	-0.65
6,909.0	90.70	1.10	5,264.0	2,040.4	-2.4	2,040.4	1.13	-0.63	-0.94

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Clay 3419 1-6H/Job #04140-431-22/Lariat 20
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Site:	Sec 06-T34S-R19W	**MD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Well:	Clay 3419 1-6H/Job #04140-431-22/Lariat 20	**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)
6,941.0	90.60	1.30	5,263.6	2,072.4	-1.7	2,072.4	0.70	-0.31	0.63
6,972.0	90.60	1.00	5,263.3	2,103.4	-1.1	2,103.4	0.97	0.00	-0.97
7,004.0	89.80	0.70	5,263.2	2,135.4	-0.6	2,135.4	2.67	-2.50	-0.94
7,036.0	88.90	0.10	5,263.5	2,167.4	-0.4	2,167.4	3.38	-2.81	-1.88
7,067.0	89.30	360.00	5,264.0	2,198.4	-0.4	2,198.4	1.33	1.29	-0.32
7,099.0	89.20	359.70	5,264.5	2,230.4	-0.5	2,230.4	0.99	-0.31	-0.94
7,131.0	90.60	359.40	5,264.5	2,262.4	-0.7	2,262.3	4.47	4.38	-0.94
7,162.0	90.90	0.30	5,264.1	2,293.4	-0.8	2,293.3	3.06	0.97	2.90
7,194.0	91.00	0.10	5,263.6	2,325.3	-0.7	2,325.3	0.70	0.31	-0.63
7,224.0	90.80	360.00	5,263.1	2,355.3	-0.7	2,355.3	0.75	-0.67	-0.33
7,258.0	90.30	0.50	5,262.8	2,389.3	-0.5	2,389.3	2.08	-1.47	1.47
7,289.0	89.90	0.40	5,262.7	2,420.3	-0.3	2,420.3	1.33	-1.29	-0.32
7,321.0	89.80	359.90	5,262.8	2,452.3	-0.2	2,452.3	1.59	-0.31	-1.56
7,352.0	91.50	360.00	5,262.5	2,483.3	-0.2	2,483.3	5.49	5.48	0.32
7,384.0	93.80	359.40	5,261.0	2,515.3	-0.4	2,515.3	7.43	7.19	-1.88
7,416.0	94.90	359.50	5,258.5	2,547.2	-0.7	2,547.2	3.45	3.44	0.31
7,447.0	94.10	359.20	5,256.1	2,578.1	-1.0	2,578.1	2.76	-2.58	-0.97
7,479.0	91.60	359.00	5,254.5	2,610.1	-1.5	2,610.1	7.84	-7.81	-0.63
7,511.0	91.30	359.30	5,253.7	2,642.0	-2.0	2,642.0	1.33	-0.94	0.94
7,542.0	91.10	359.00	5,253.1	2,673.0	-2.5	2,673.0	1.16	-0.65	-0.97
7,574.0	90.40	359.10	5,252.6	2,705.0	-3.0	2,705.0	2.21	-2.19	0.31
7,606.0	90.10	359.20	5,252.5	2,737.0	-3.5	2,737.0	0.99	-0.94	0.31
7,637.0	90.10	358.80	5,252.5	2,768.0	-4.0	2,768.0	1.29	0.00	-1.29
7,669.0	90.20	358.70	5,252.4	2,800.0	-4.7	2,800.0	0.44	0.31	-0.31
7,701.0	90.10	358.30	5,252.3	2,832.0	-5.6	2,832.0	1.29	-0.31	-1.25
7,732.0	89.50	359.40	5,252.4	2,863.0	-6.2	2,863.0	4.04	-1.94	3.55
7,764.0	89.40	358.90	5,252.7	2,895.0	-6.6	2,895.0	1.59	-0.31	-1.56
7,796.0	90.00	359.60	5,252.9	2,927.0	-7.1	2,927.0	2.88	1.88	2.19
7,827.0	90.00	1.00	5,252.9	2,958.0	-6.9	2,958.0	4.52	0.00	4.52
7,859.0	90.10	1.10	5,252.8	2,990.0	-6.3	2,990.0	0.44	0.31	0.31
7,890.0	90.50	0.90	5,252.7	3,021.0	-5.8	3,021.0	1.44	1.29	-0.65
7,922.0	90.50	1.00	5,252.4	3,053.0	-5.2	3,052.9	0.31	0.00	0.31
7,954.0	90.60	0.90	5,252.1	3,085.0	-4.7	3,084.9	0.44	0.31	-0.31
7,985.0	91.10	0.90	5,251.6	3,116.0	-4.2	3,115.9	1.61	1.61	0.00
8,017.0	91.70	0.60	5,250.8	3,147.9	-3.8	3,147.9	2.10	1.88	-0.94
8,049.0	90.40	0.90	5,250.3	3,179.9	-3.4	3,179.9	4.17	-4.06	0.94
8,080.0	90.50	1.00	5,250.0	3,210.9	-2.9	3,210.9	0.46	0.32	0.32
8,112.0	90.60	1.10	5,249.7	3,242.9	-2.3	3,242.9	0.44	0.31	0.31
8,144.0	88.60	1.30	5,249.9	3,274.9	-1.6	3,274.9	6.28	-6.25	0.63
8,175.0	88.20	1.10	5,250.8	3,305.9	-1.0	3,305.9	1.44	-1.29	-0.65
8,207.0	89.30	0.60	5,251.5	3,337.9	-0.5	3,337.9	3.78	3.44	-1.56
8,239.0	90.20	1.20	5,251.6	3,369.9	0.0	3,369.9	3.38	2.81	1.88

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Clay 3419 1-6H/Job #04140-431-22/Lariat 20
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Site:	Sec 06-T34S-R19W	**MD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Well:	Clay 3419 1-6H/Job #04140-431-22/Lariat 20	**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)
8,270.0	90.90	0.90	5,251.3	3,400.9	0.6	3,400.9	2.46	2.26	-0.97
8,302.0	91.40	1.20	5,250.7	3,432.9	1.2	3,432.9	1.82	1.56	0.94
8,334.0	91.40	1.20	5,249.9	3,464.8	1.8	3,464.8	0.00	0.00	0.00
8,365.0	90.30	1.20	5,249.5	3,495.8	2.5	3,495.8	3.55	-3.55	0.00
8,397.0	90.20	0.90	5,249.3	3,527.8	3.1	3,527.8	0.99	-0.31	-0.94
8,429.0	90.70	0.60	5,249.1	3,559.8	3.5	3,559.8	1.82	1.56	-0.94
8,460.0	91.30	0.40	5,248.5	3,590.8	3.8	3,590.8	2.04	1.94	-0.65
8,492.0	92.20	0.20	5,247.5	3,622.8	3.9	3,622.8	2.88	2.81	-0.63
8,524.0	91.50	1.20	5,246.5	3,654.8	4.3	3,654.8	3.81	-2.19	3.13
8,555.0	91.10	0.90	5,245.8	3,685.8	4.9	3,685.8	1.61	-1.29	-0.97
8,587.0	90.10	1.00	5,245.5	3,717.8	5.4	3,717.8	3.14	-3.13	0.31
8,619.0	89.70	1.10	5,245.5	3,749.8	6.0	3,749.8	1.29	-1.25	0.31
8,650.0	89.90	0.80	5,245.6	3,780.8	6.5	3,780.8	1.16	0.65	-0.97
8,682.0	90.30	1.00	5,245.6	3,812.7	7.0	3,812.8	1.40	1.25	0.63
8,714.0	90.90	0.50	5,245.2	3,844.7	7.4	3,844.7	2.44	1.88	-1.56
8,745.0	90.90	0.60	5,244.8	3,875.7	7.7	3,875.7	0.32	0.00	0.32
8,777.0	90.80	360.00	5,244.3	3,907.7	7.9	3,907.7	1.90	-0.31	-1.88
8,809.0	90.70	359.60	5,243.9	3,939.7	7.8	3,939.7	1.29	-0.31	-1.25
8,840.0	90.20	359.30	5,243.6	3,970.7	7.5	3,970.7	1.88	-1.61	-0.97
8,872.0	89.50	358.10	5,243.7	4,002.7	6.8	4,002.7	4.34	-2.19	-3.75
8,904.0	89.80	358.30	5,243.9	4,034.7	5.8	4,034.7	1.13	0.94	0.63
8,935.0	90.30	357.70	5,243.9	4,065.7	4.7	4,065.7	2.52	1.61	-1.94
8,967.0	90.10	357.60	5,243.8	4,097.7	3.4	4,097.7	0.70	-0.63	-0.31
8,999.0	90.10	357.10	5,243.7	4,129.6	1.9	4,129.6	1.56	0.00	-1.56
9,030.0	90.30	356.90	5,243.6	4,160.6	0.3	4,160.6	0.91	0.65	-0.65
9,062.0	90.50	356.80	5,243.4	4,192.5	-1.5	4,192.5	0.70	0.63	-0.31
9,094.0	90.90	356.30	5,243.0	4,224.5	-3.4	4,224.5	2.00	1.25	-1.56
9,126.0	90.60	356.00	5,242.6	4,256.4	-5.6	4,256.4	1.33	-0.94	-0.94
9,157.0	89.70	357.20	5,242.5	4,287.3	-7.4	4,287.3	4.84	-2.90	3.87
9,189.0	89.40	357.00	5,242.7	4,319.3	-9.0	4,319.3	1.13	-0.94	-0.63
9,220.0	89.90	357.10	5,242.9	4,350.3	-10.6	4,350.2	1.64	1.61	0.32
9,252.0	90.50	356.50	5,242.8	4,382.2	-12.4	4,382.2	2.65	1.88	-1.88
9,284.0	90.80	356.70	5,242.5	4,414.1	-14.3	4,414.1	1.13	0.94	0.63
9,315.0	90.10	357.20	5,242.2	4,445.1	-16.0	4,445.1	2.77	-2.26	1.61
9,347.0	89.80	357.50	5,242.2	4,477.1	-17.4	4,477.0	1.33	-0.94	0.94
9,379.0	90.10	357.80	5,242.3	4,509.0	-18.8	4,509.0	1.33	0.94	0.94
9,410.0	90.70	358.40	5,242.0	4,540.0	-19.8	4,540.0	2.74	1.94	1.94
9,442.0	91.30	357.70	5,241.5	4,572.0	-20.9	4,571.9	2.88	1.88	-2.19
9,474.0	91.60	358.50	5,240.7	4,604.0	-21.9	4,603.9	2.67	0.94	2.50
9,505.0	91.70	358.70	5,239.8	4,634.9	-22.7	4,634.9	0.72	0.32	0.65
9,537.0	92.70	358.40	5,238.6	4,666.9	-23.5	4,666.8	3.26	3.13	-0.94
9,570.0	93.20	358.10	5,236.9	4,699.9	-24.5	4,699.8	1.77	1.52	-0.91
Last Archer MWD Survey									

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Clay 3419 1-6H/Job #04140-431-22/Lariat 20
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Site:	Sec 06-T34S-R19W	**MD Reference:**	WELL @ 1828.0usft (Original Well Elev)
Well:	Clay 3419 1-6H/Job #04140-431-22/Lariat 20	**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)
9,618.2	93.20	358.10	5,234.2	4,748.0	-26.1	4,747.9	0.00	0.00	0.00
PBHL Clay 1-6H									
9,620.0	93.20	358.10	5,234.1	4,749.7	-26.2	4,749.7	0.00	0.00	0.00
Projection to TD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
879.0	879.0	-4.6	0.5	First Archer MWD Survey
9,570.0	5,236.9	4,699.9	-24.5	Last Archer MWD Survey
9,620.0	5,234.1	4,749.7	-26.2	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

PRO OILFIELD SERVICES, LLC

P.O. BOX 3660
HOUMA, LA 70361-3660

Customer : SAN400

BILL TO : **SANDRIDGE ENERGY**
123 ROBERT S KERR AVENUE
OKLAHOMA CITY, OK 73102-6406
PHONE: (405) 753-5500 FAX: ()

Division : 0701
Delivery Ticket : 4464
Delivery Date : 3/11/2013
Office : 12/1/1901

Ordered By :
Lease/Well : CLAY 3419 1-6H
Rig Name/Number : LARIAT 20
AFE Number :
Site Contact :

Qty	Description	Min / Standby / Usage Charge	Add Day	Unit Price	Start Date / Stop Date	Extended Line Total
1	CLAY 3419 1-6H	$21,250.00	$0.00	$21,250.00	3/6/2013 3/6/2013	$21,250.00
120	DRILLED 30" CONDUCTOR HOLE	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
120	20" CONDUCTOR PIPE (.250 WALL)	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
1	6'X6' CELLAR TINHORN WITH PROTECTIVE RING	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
1	DRILL & INSTALL 6'X6' CELLAR TINHORN	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
77	DRILLED 20" MOUSE HOLE (PER FOOT)	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
77	16" CONDUCTOR PIPE (.250 WALL)	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
1	MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
1	WELDING SERVICES FOR PIPE & LIDS	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
1	PROVIDED EQUIPMENT & LABOR FOR DIRT REMOVAL	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
1	PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR THE MOUSEHOLE PIPE)	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
16	CEMENT 10 SACK GROUT	$0.00	$0.00	$0.00	3/6/2013 3/6/2013	
	Sub Total:	$21,250.00	$0.00			$21,250.00

Print Name

Signature

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 2985271	**Quote #:**	**Sales Order #:** 900277460
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Hill, Richard	
Well Name: Clay 3419	**Well #:** 1-6H		**API/UWI #:** 15-033-21697
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Contractor: Lariat	**Rig/Platform Name/Num:** 20		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** WOODROW, JOHN	**MBU ID Emp #:** 105848	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
JOURNAGAN, MICHAEL D	24	524224	MENDOZA, VICTOR	12	442596	SMITH, THOMAS Miles	47	493032
WOODROW, JOHN Phillip	47	105848	YANEZ, BENJAMIN	12	538038			

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
3/9/13	23.5	2	3/10/13	24				
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	327. ft	**Job Depth TVD**	327. ft		
Water Depth		**Wk Ht Above Floor**	6. ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	08 - Mar - 2013	17:00	CST
On Location	09 - Mar - 2013	01:00	CST
Job Started	09 - Mar - 2013	17:15	CST
Job Completed	10 - Mar - 2013	22:30	CST
Departed Loc	11 - Mar - 2013	00:00	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
17.5" Open Hole				17.5				.	300.		
13.375" Water String	Unknown		13.375	12.415	68.	BTC	N-80	.	300.		

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

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

Stage/Plug #: 1

HALLIBURTON

Cementing Job Summary

Stage/Plug #: 1									
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)	150.0	sacks	12.4	2.11	11.64		11.64
3 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.25 lbm		POLY-E-FLAKE (101216940)							
11.637 Gal		FRESH WATER							
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	115.0	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		38.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	42.5	Shut In: Instant		Lost Returns	45	Cement Slurry	227	Pad	
Top Of Cement	GL	5 Min		Cement Returns		Actual Displacement	42.5	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	

Rates							
Circulating	5	Mixing	5	Displacement	5	Avg. Job	5

Cement Left In Pipe	Amount	39 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 #:** 2985271	**Quote #:**	**Sales Order #:** 900276774
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** ..., Louise	
Well Name: Clay 3419	**Well #:** 1-6H		**API/UWI #:** 15-033-21697
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Contractor: Lariat	**Rig/Platform Name/Num:** 20		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** AGUILERA, FABIAN	**MBU ID Emp #:** 442123	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
AGUILERA, FABIAN J	9.5	442123	HEIDT, JAMES Nicholas	9.5	517102	JOURNAGAN, MICHAEL D	9.5	524224
REYES GANDARA, JUAN Armando	9.5	440529						

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
3/12/2013	9.5	1.5						
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	829.5 ft	**Job Depth TVD**	829.5 ft
Water Depth		**Wk Ht Above Floor**	5. ft
Perforation Depth (MD)	**From**		**To**

Job Times

	Date	Time	Time Zone
Called Out	12 - Mar - 2013	10:00	CST
On Location	12 - Mar - 2013	14:30	CST
Job Started	12 - Mar - 2013	20:48	CST
Job Completed	12 - Mar - 2013	21:40	CST
Departed Loc	13 - Mar - 2013	00:00	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
12.25" Open Hole				12.25				300.	800.		
13.375" Water String	Unknown		13.375	12.415	68.	BTC	N-80	.	300.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	800.		

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

HALLIBURTON

Cementing Job Summary

Stage/Plug #: 1									
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)	240.0	sacks	12.4	2.11	11.64		11.64
3 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.25 lbm		POLY-E-FLAKE (101216940)							
11.637 Gal		FRESH WATER							
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	110.0	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		61.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	61 BBL	Shut In: Instant		Lost Returns	NO	Cement Slurry	114 BBL	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	42 BBL	Actual Displacement	61 BBL	Treatment	
Frac Gradient		15 Min		Spacers	10 BBL	Load and Breakdown		Total Job	

Rates							
Circulating	5	Mixing	5	Displacement	6	Avg. Job	5

Cement Left In Pipe	Amount	42 ft	Reason	Shoe Joint

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

The Information Stated Herein Is Correct	Customer Representative Signature

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 2985271	**Quote #:**	**Sales Order #:** 900299061
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** ..., Louise	
Well Name: Clay 3419	**Well #:** 1-6H		**API/UWI #:** 15-033-21697
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Contractor: Lariat	**Rig/Platform Name/Num:** 20		
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well	**Job Type:** Cement Intermediate Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** VILLARREAL, ARTURO	**MBU ID Emp #:** 106127	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DALRYMPLE, BRIAN Kieth	16.0	456242	JIMENEZ, JESUS Medrano	16.0	221813	RALSTON, NICHOLAS	16.0	496027
SPENCE, PAT J	16.0	534792	VILLARREAL, ARTURO	0.0	106127	VILLARREAL, ARTURO	16.0	106127

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025025	100 mile	11706673	100 mile	11748315	100 mile	11749437	100 mile
11808729	100 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
3-20-13	16	3						
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**	**Bottom**	
Form Type		**BHST**	
Job depth MD	5689. ft	**Job Depth TVD**	
Water Depth		**Wk Ht Above Floor**	
Perforation Depth (MD)	**From**	**To**	

Job Times

	Date	Time	Time Zone
Called Out	19 - Mar - 2013	22:07	CST
On Location	20 - Mar - 2013	06:00	CST
Job Started	20 - Mar - 2013	18:00	CST
Job Completed	20 - Mar - 2013	20:00	CST
Departed Loc	20 - Mar - 2013	22:00	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
8.75" Open Hole				8.75				800.	5689.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5689.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	800.		

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		1	
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

HALLIBURTON

Cementing Job Summary

Stage/Plug #: 1									
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	Rig Supplied Gel Water		30.00	bbl	8.33	.0	.0	4	
2	Lead Cement	ECONOCEM (TM) SYSTEM (452992)	200.0	sacks	13.6	1.53	7.24	4	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	4	5.08
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	2 lbm	KOL-SEAL, BULK (100064233)							
	5.076 Gal	FRESH WATER							
4	Displacement		214.00	bbl	8.33	.0	.0	4	

Calculated Values		Pressures		Volumes					
Displacement	214	Shut In: Instant		Lost Returns	N	Cement Slurry	75	Pad	
Top Of Cement	2923.5	5 Min		Cement Returns	N	Actual Displacement	214	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	

Rates							
Circulating		Mixing	4	Displacement	4	Avg. Job	4

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

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 2985271	**Quote #:**	**Sales Order #:** 900327278
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** ..., Louise	
Well Name: Clay 3419	**Well #:** 1-6H		**API/UWI #:** 15-033-21697
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Contractor: Lariat	**Rig/Platform Name/Num:** 20		
Job Purpose: Cement Production Liner			
Well Type: Development Well	**Job Type:** Cement Production Liner		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** DURAN, EDUR	**MBU ID Emp #:** 445769	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DURAN, EDUR	14	445769	JOURNAGAN, MICHAEL D	14	524224	Daniel Martinez	14	529950
TORRES, CLEMENTE	14	344233						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10243558	100 mile	10244148	100 mile	10286731	100 mile	10872308	100 mile
11256865	100 mile	11288858	100 mile	11515200	100 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
03/30/2013	4	4	03/31/2013	2	2			
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	9623. m	**Job Depth TVD**	9623. m
Water Depth		**Wk Ht Above Floor**	5. m
Perforation Depth (MD)	**From**		**To**

Job Times

	Date	Time	Time Zone
Called Out	30 - Mar - 2013	12:00	CST
On Location	30 - Mar - 2013	20:00	CST
Job Started	30 - Mar - 2013	21:45	CST
Job Completed	30 - Mar - 2013	23:15	CST
Departed Loc	31 - Mar - 2013	02:00	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
6.125" Open Hole				6.125				5689.	9623.		
4.5" Production Liner	Unknown		4.5	4.	11.6	LTC	N-80	5287.	9623.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5689.		
4" Drill Pipe	Unknown		4.	3.34	14.	Unknown		.	5287.		

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	8.5	.0	.0	.0	
2	Primary Cement	ECONOCEM (TM) SYSTEM (452992)	500.0	sacks	13.6	1.5	6.76		6.76
	5 lbm	KOL-SEAL, BULK (100064233)							
	0.25 %	SA-1015, 50 LB SACK (102077046)							
	0.2 %	CFR-3, W/O DEFOAMER, 50 LB SK (100003653)							
	6.756 Gal	FRESH WATER							
3	Displacement		123.00	bbl	8.33	.0	.0	.0	

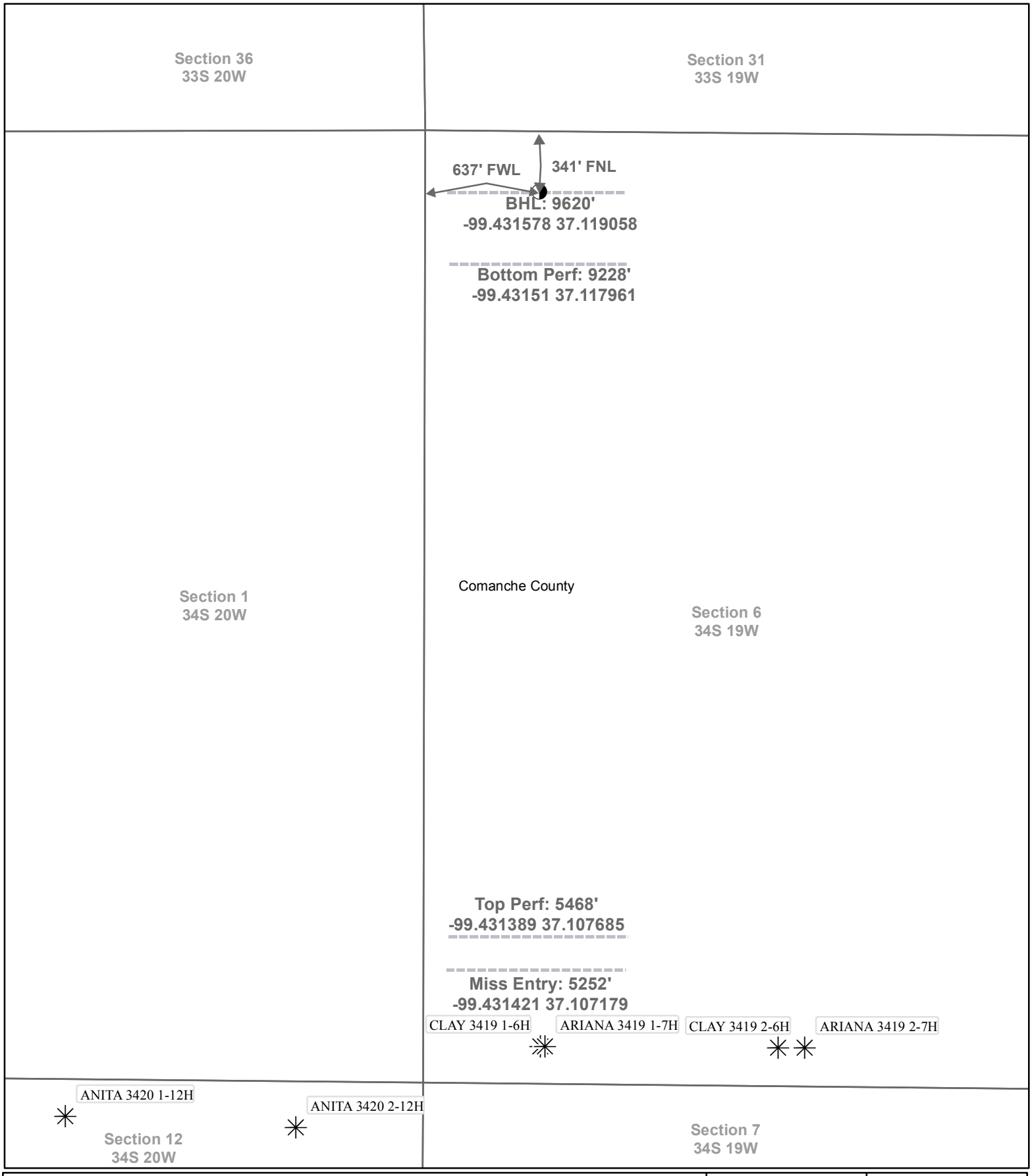
Calculated Values		Pressures		Volumes					
Displacement	117	Shut In: Instant		Lost Returns		Cement Slurry	133	Pad	
Top Of Cement	4425	5 Min		Cement Returns		Actual Displacement	117	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	

Rates							
Circulating		Mixing	5	Displacement	4.5	Avg. Job	4.5

Cement Left In Pipe	Amount	92 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



SANDRIDGE
THE POWER OF US

Actual BH Location

SandRidge Wells

Perf

Sections

Actual Bottom-Hole Location of Clay 3419 1-6H
Comanche County, Kansas
T&R: 34S 19W
Section: 6, 637' FWL & 341' FNL
-99.431578 37.119058

1 in = 703 ft

0 500 1,000 2,000 Feet

N

Draftsman: Aaron Birk	Draft Date: 6/17/2013
Drawing Name/Number: Addendum_Clay 3419 1-6H.mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/7/2013
Job End Date:	5/9/2013
State:	Kansas
County:	Comanche
API Number:	15-033-21697-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Clay 3419 1-6H
Longitude:	-99.43090000
Latitude:	37.10590000
Datum:	NAD27
Federal/Tribal Well:	NO
Total Base Water Volume (gal):	1,643,960
Total Base Non Water Volume:	

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
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, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Water (Including Mix Water Supplied by Client)*	NA		94.61745	
			Crystalline silica	14808-60-7	96.23699	5.18001	
			Hydrogen chloride	7647-01-0	2.74338	0.14766	
			Distillates (petroleum), hydrotreated light	64742-47-8	0.31481	0.01694	
			Acrylamide/ammonium acrylate copolymer	26100-47-0	0.26234	0.01412	
			Ammonium chloride	12125-02-9	0.15085	0.00812	
			Polyethylene glycol monohexyl ether	31726-34-8	0.11384	0.00613	
			Ethoxylated oleic acid	9004-96-0	0.02623	0.00141	
			Trisodium ortho phosphate	7601-54-9	0.02470	0.00133	
			Sorbitan monooleate	1338-43-8	0.02296	0.00124	
			Sodium erythorbate	6381-77-7	0.02114	0.00114	
			Sorbitol Tetraoleate	61723-83-9	0.01640	0.00088	
			Glutaraldehyde	111-30-8	0.01479	0.00080	

			Alcohols, C10-C16, ethoxylated	68002-97-1	0.01351	0.00073	
			Alcohols, C12-C16, ethoxylated	68551-12-2	0.01364	0.00073	
			Alcohols, C12-C14, ethoxylated	68439-50-9	0.01351	0.00073	
			Methanol	67-56-1	0.01129	0.00061	
			Fatty acids, tall-oil	61790-12-3	0.00818	0.00044	
			C14 alpha olefin ethoxylate	84133-50-6	0.00721	0.00039	
			Ethane-1,2-diol	107-21-1	0.00703	0.00038	
			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.00673	0.00036	
			2-Propenoic acid, ammonium salt	10604-69-0	0.00656	0.00035	
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00499	0.00027	
			Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00313	0.00017	
			Alkyl(c12-16) dimethylbenzyl ammonium chloride	68424-85-1	0.00264	0.00014	
			Prop-2-yn-1-ol	107-19-7	0.00209	0.00011	
			Alkenes, C>10 a-	64743-02-8	0.00139	0.00007	
			Propan-2-ol	67-63-0	0.00100	0.00005	
			Ethanol	64-17-5	0.00032	0.00002	
			Potassium hydroxide	1310-58-3	0.00023	0.00001	

* 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)

Remarks

Tiffany Golay 06/10/013 03:22 pm	Conductor weight= 106.5 lbs/ft