Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1135657

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: Maggie Roden
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 #:

4/1/2013	4/19/2013	5/15/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-033-21702-01-00
Spot Description:
SW SE SW SW Sec. 6 Twp. 34 S. R. 19 ☐ East ☑ West
210 Feet from ☐ North / ☑ South Line of Section
685 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: Ariana 3419 Well #: 1-7H
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 1813 Kelly Bushing: 1834
Total Vertical Depth: 9999 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 329 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: 8160 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: 07/29/2013
☑ **Confidential Release Date:** 07/29/2015
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 07/29/2013

1135657

Operator Name: SandRidge Exploration and Production LLC Lease Name: Ariana 3419 Well #: 1-7H

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	4201	
Lansing	4410	
Cherokee	5077	
Mississippian Unc	5239	

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. 5/24/2013

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	Ariana 3419 1-7H
Doc ID	1135657

All Electric Logs Run

Boresight
Density
Induction
Horizontal Final
Vertical Final
Prizm

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Ariana 3419 1-7H
Doc ID	1135657

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9724-10052	4236 bbls water, 36 bbls acid, 75M lbs sd, 4124 TLTR	
5	9342-9648	4266 bbls water, 36 bbls acid, 75M lbs sd, 8773 TLTR	
5	8950-9258	4260 bbls water, 36 bbls acid, 75M lbs sd, 13168 TLTR	
5	8553-8885	4254 bbls water, 36 bbls acid, 75M lbs sd, 17413 TLTR	
5	8198-8505	4248 bbls water, 36 bbls acid, 75M lbs sd, 21504 TLTR	
5	7822-8125	4241 bbls water, 36 bbls acid, 75M lbs sd, 25891 TLTR	
5	7398-7754	4236 bbls water, 36 bbls acid, 75M lbs sd, 30280 TLTR	
5	7038-7318	4230 bbls water, 36 bbls acid, 75M lbs sd, 34421 TLTR	
5	6723-6984	4225 bbls water, 36 bbls acid, 75M lbs sd, 34463 TLTR	
5	6306-6620	4219 bbls water, 36 bbls acid, 75M lbs sd, 38739 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Ariana 3419 1-7H
Doc ID	1135657

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	5963-6210	4213 bbls water, 36 bbls acid, 75M lbs sd, 47292 TLTR	
5	5512-5830	4206 bbls water, 36 bbls acid, 75M lbs sd, 51706 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Ariana 3419 1-7H
Doc ID	1135657

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	14	None
Surface	17.5	13.38	68	329	Halliburton Extendacem and Swiftcem Systems	265	3% Calcium Chloride, .25 lbm Poly-E-Flake
Intermediate 1	12.25	9.63	36	796	Halliburton Extendacem and Swiftcem Systems	350	3% Calcium Chloride, .25 lbm Poly-E-Flake
Intermediate 2	8.75	7	26	5772	Halliburton Econocem and Halcem System	250	.4% Halad(R)-9, 2 lbm Kol-Seal, 2% Bentontie
Production Liner	6.13	4.5	11.6	10160	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 22, 2013

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

Re: ACO1
API 15-033-21702-01-00
Ariana 3419 1-7H
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

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 : 4767
Delivery Date : 4/10/2013
Office : 12/1/1901

Ordered By :
Lease/Well : ARIANA 3419 1-7H
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	ARIANA 3419 1-7H	$21,250.00	$0.00	$21,250.00	3/9/2013 3/9/2013	$21,250.00
120	DRILLED 30" CONDUCTOR HOLE	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
120	20" CONDUCTOR PIPE (.250 WALL)	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
1	6'X6' CELLAR TINHORN WITH PROTECTIVE RING	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
1	DRILL & INSTALL 6'X6' CELLAR TINHORN	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
78	DRILLED 20" MOUSE HOLE (PER FOOT)	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
78	16" CONDUCTOR PIPE (.250 WALL)	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
1	MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
1	WELDING SERVICES FOR PIPE & LIDS	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
1	PROVIDED EQUIPMENT & LABOR FOR DIRT REMOVAL	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
1	PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR THE MOUSEHOLE PIPE)	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
14	CEMENT 10 SACK GROUT	$0.00	$0.00	$0.00	3/9/2013 3/9/2013	
	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 #:** 2990480	**Quote #:**	**Sales Order #:** 900337920
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Hill, Richard	
Well Name: Ariana 3419	**Well #:** 1-7H		**API/UWI #:** 15-033-21702
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Lat: N 37.106 deg. OR N 37 deg. 6 min. 21.6 secs.		**Long:** W 99.431 deg. OR W -100 deg. 34 min. 9 secs.	
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:** THOMPSON, RAYLAND	**MBU ID Emp #:** 476826	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
THOMPSON, RAYLAND Heath	0.0	476826						

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
4/3/13	10	0	4/4/13	24	6	4/5/13	3	1
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name			
Formation Depth (MD)	**Top**		**Bottom**
Form Type		**BHST**	
Job depth MD	300. m	**Job Depth TVD**	
Water Depth		**Wk Ht Above Floor**	
Perforation Depth (MD)	**From**		**To**

Job Times

	Date	Time	Time Zone
Called Out	03 - Apr - 2013	06:30	CST
On Location	03 - Apr - 2013	14:00	CST
Job Started	04 - Apr - 2013	03:00	CST
Job Completed	05 - Apr - 2013	01:00	CST
Departed Loc	05 - Apr - 2013	02:30	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
17.5" Open Hole				17.5				.	300.		
13.375" Water String	Unknown		13.375	12.415	68.	BTC	N-80	.	300.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,13 3/8,HWE,11.79 MIN/12.72	1	EA		
SUGAR - GRANULATED	40	LB		

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

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	Fresh Water		10.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	EXTENDACEM (TM) SYSTEM (452981)	150.0	sacks	12.4	2.11	11.57		11.57
3 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.25 lbm		POLY-E-FLAKE (101216940)							
11.571 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		39.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	44	Shut In: Instant		Lost Returns	YES	Cement Slurry		Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	20	Actual Displacement	44	Treatment	
Frac Gradient		15 Min		Spacers	10	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 #:** 2990480	**Quote #:**	**Sales Order #:** 900336874
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Hill, Richard	
Well Name: Ariana 3419	**Well #:** 1-7H		**API/UWI #:** 15-033-21702
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Lat: N 37.106 deg. OR N 37 deg. 6 min. 21.6 secs.		**Long:** W 99.431 deg. OR W -100 deg. 34 min. 9 secs.	
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:** RODRIGUEZ, EDGAR	**MBU ID Emp #:** 442125	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
RAMIREZ, JORGE	5.5	498481	RODRIGUEZ, EDGAR Alejandro	5.5	442125	SPENCE, PAT	5.5	534792
TORRES, CLEMENTE	5.5	344233	YANEZ, BENJAMIN	5.5	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
4/5/2013	3	1	4/6/2013	2.5	2			
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	801. ft	**Job Depth TVD**	796. ft		
Water Depth		**Wk Ht Above Floor**	5. ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	05 - Apr - 2013	14:00	CST
On Location	05 - Apr - 2013	20:00	CST
Job Started	06 - Apr - 2013	00:25	CST
Job Completed	06 - Apr - 2013	01:17	CST
Departed Loc	06 - Apr - 2013	02:40	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		
SUGAR - GRANULATED	40	LB		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9 5/8	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9 5/8	1	HES
Stage Tool										Centralizers			

Miscellaneous Materials

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

HALLIBURTON

Cementing Job Summary

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
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	11.57		11.57
3 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.25 lbm		POLY-E-FLAKE (101216940)							
11.571 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		58.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	58	Shut In: Instant		Lost Returns		Cement Slurry	114	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	50	Actual Displacement	58	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	182

Rates

Circulating	5	Mixing	5	Displacement	5	Avg. Job	5

Cement Left In Pipe	Amount	45.91 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 #:** 2990480	**Quote #:**	**Sales Order #:** 900355038
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** ..., Louise	
Well Name: Ariana 3419	**Well #:** 1-7H		**API/UWI #:** 15-033-21702
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Lat: N 37.106 deg. OR N 37 deg. 6 min. 21.6 secs.		**Long:** W 99.431 deg. OR W -100 deg. 34 min. 9 secs.	
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:** RODRIGUEZ, EDGAR	**MBU ID Emp #:** 442125	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
JOURNAGAN, MICHAEL	11	524224	RAMIREZ, JORGE	11	498481	RODRIGUEZ, EDGAR Alejandro	11	442125

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
4/13/2013	3	1	4/14/2013	8	2.5			
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	5779. ft	**Job Depth TVD**	5795. ft		
Water Depth		**Wk Ht Above Floor**	5. ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	13 - Apr - 2013	17:00	CST
On Location	13 - Apr - 2013	19:30	CST
Job Started	14 - Apr - 2013	04:50	CST
Job Completed	14 - Apr - 2013	06:13	CST
Departed Loc	14 - Apr - 2013	07:50	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.	5820.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5820.		
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	7	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	7	1	HES
Stage Tool										Centralizers			

Miscellaneous Materials

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

Fluid Data

Stage/Plug #: 1

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	Rig Supplied Gel Water		30.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	ECONOCEM (TM) SYSTEM (452992)	150.0	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		217.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	217	Shut In: Instant		Lost Returns	YES	Cement Slurry	62	Pad	
Top Of Cement	3588	5 Min		Cement Returns	NO	Actual Displacement	217	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	309

Rates

Circulating	5	Mixing	5	Displacement	5	Avg. Job	5

Cement Left In Pipe	Amount	87.22 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 #:** 2990480	**Quote #:**	**Sales Order #:** 900379111
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** ., LOUIS	
Well Name: Ariana 3419	**Well #:** 1-7H		**API/UWI #:** 15-033-21702
Field:	**City (SAP):** PROTECTION	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 6 Township 34S Range 19W			
Lat: N 37.106 deg. OR N 37 deg. 6 min. 21.6 secs.		**Long:** W 99.431 deg. OR W -100 deg. 34 min. 9 secs.	
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:** ARTURO, VILLARREAL	**MBU ID Emp #:** 106127	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ARTURO, VILLARREAL	15	106127	DALRYMPLE, BRIAN	15	456242	JOHNSON, MATHEW	15	525955
MENDOZA, VICTOR	15	442596						

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
4-21-13	15	2						
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	10160. ft	**Job Depth TVD**	5335. ft		
Water Depth		**Wk Ht Above Floor**	5. ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out			
On Location			
Job Started			
Job Completed	02 - Apr - 2013	02:00	GMT
Departed Loc			

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
6.125" Open Hole				6.125				5820.	10165.		
4.5" Production Liner	Unknown		4.5	4.	11.6	LTC	N-80	5415.	10165.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5820.		
4" Drill Pipe	Unknown		4.	3.34	14.	Unknown		.	5415.		

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	

HALLIBURTON

Cementing Job Summary

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
1	Rig Supplied Gel Water		20.00	bbl	9.	.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		1,311.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	120	Shut In: Instant		Lost Returns	NO	Cement Slurry	133	Pad	
Top Of Cement	3913.94 PIPE IN	5 Min		Cement Returns	NA	Actual Displacement	120	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	

Rates

Circulating		Mixing	5	Displacement	4.5	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

Directional Survey Calculations	Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
SHL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-210	5495	685	4533
BHL	10160	91.30	177.60	5334.40	-5164.60	-1.40	5164.50	0.00	4955	330	695	4521
Miss Entry	5382	50.48	186.74	5239.03	-428.29	-76.44	428.81	2.95	219	5066	609	4608
Top Perf	5512	60.49	181.75	5314.83	-533.20	-85.30	533.80	12.22	324	4961	600	4617
Bottom Perf	10051	91.02	176.75	5336.62	-5055.79	-6.41	5055.69	1.24	4846	439	690	4527

Survey Points		X	Y
	NW Corner XY Coord	1727844	161114
	SW Corner XY Coord	1727832	155829
	NE Corner XY Coord	1733061	161087
	SE Corner XY Coord	1733048	155800

	X	Y
Surface XY	1728529	161320

	m
North Line slope	-0.0051754
East Line slope	0.0024589
South Line slope	-0.0055598
West Line slope	0.0022706

	Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
	0	0.0	0	0	0	0	0	0	-210	5495	685	4533
	982	0.10	240.70	982.00	0	-1	0.40	0.00	-209	5494	684	4533
	1439	0.20	78.50	1439.00	-1	0	0.50	0.10	-209	5494	684	4533
	1914	0.20	178.90	1914.00	-1	1	1.10	0.10	-208	5494	685	4532
	2389	0.80	230.20	2389.00	-4	-2	4.10	0.10	-205	5491	683	4535
	2864	0.80	242.10	2863.90	-8	-8	7.80	0.00	-202	5487	677	4540
	3339	0.40	268.60	3338.90	-9	-12	9.40	0.10	-200	5486	672	4545
	3814	0.40	75.00	3813.90	-9	-12	9.00	0.20	-201	5486	672	4545
	4289	0.20	266.80	4288.90	-9	-11	8.60	0.10	-201	5486	673	4544
	4426	0.30	245.60	4425.90	-9	-12	8.80	0.10	-201	5486	673	4544
	4458	0.70	247.10	4457.90	-9	-12	8.90	1.30	-201	5486	672	4545
	4490	1.90	225.50	4489.90	-9	-13	9.40	4.00	-200	5486	672	4545
	4521	4.60	205.20	4520.80	-11	-14	10.90	9.30	-199	5484	671	4546
	4553	6.90	201.90	4552.70	-14	-15	13.80	7.30	-196	5481	670	4547
	4585	9.10	197.70	4584.40	-18	-16	18.00	7.10	-192	5477	668	4549
	4616	11.30	193.90	4614.90	-23	-18	23.30	7.40	-186	5472	667	4550
	4648	12.30	193.50	4646.20	-30	-19	29.70	3.10	-180	5465	665	4552
	4680	12.70	191.90	4677.40	-36	-21	36.50	1.70	-173	5458	664	4553
	4711	15.00	189.30	4707.50	-44	-22	43.80	7.70	-166	5451	662	4555
	4743	18.00	185.20	4738.20	-53	-23	52.80	10.10	-157	5442	661	4556
	4775	20.70	183.70	4768.40	-63	-24	63.40	8.60	-146	5432	660	4557
	4806	22.50	185.60	4797.20	-75	-25	74.70	6.20	-135	5420	660	4558
	4838	24.30	185.90	4826.60	-87	-26	87.40	5.60	-122	5408	658	4559
	4870	25.80	186.90	4855.60	-101	-28	100.90	4.90	-109	5394	657	4560
	4901	26.90	188.60	4883.40	-114	-30	114.50	4.30	-95	5380	655	4562
	4933	28.20	187.20	4911.70	-129	-32	129.20	4.50	-80	5366	653	4564
	4965	30.60	186.20	4939.60	-145	-34	144.80	7.70	-65	5350	651	4566
	4996	33.10	187.80	4965.90	-161	-36	161.00	8.50	-49	5334	649	4568
	5028	35.80	188.30	4992.30	-179	-38	179.00	8.50	-31	5316	647	4570
	5060	38.50	187.30	5017.80	-198	-41	198.10	8.65	-11	5297	644	4573
	5091	40.40	189.90	5041.80	-217	-44	217.60	8.12	8	5277	641	4576
	5123	43.20	190.10	5065.60	-238	-48	238.70	8.76	29	5256	638	4579
	5154	44.70	190.30	5087.90	-260	-51	259.90	4.86	50	5235	634	4583
Top of Tangent	5186	46.90	189.50	5110.20	-282	-55	282.50	7.10	73	5212	630	4587
@ 5218'	5218	48.40	188.20	5131.80	-306	-59	305.90	5.57	96	5189	626	4591
	5250	48.60	188.60	5153.00	-329	-62	329.60	1.13	120	5165	623	4594
	5281	48.70	188.80	5173.50	-352	-66	352.60	0.58	143	5142	619	4598
	5313	49.20	188.50	5194.50	-376	-70	376.50	1.72	167	5118	616	4601
Btm of Tangent	5344	49.60	187.70	5214.70	-399	-73	399.80	2.35	190	5095	613	4604
@ 5413'	5376	50.40	186.80	5235.20	-424	-76	424.20	3.30	215	5071	610	4607
	5408	50.80	186.50	5255.60	-448	-79	448.80	1.44	239	5046	607	4610
	5439	52.80	186.10	5274.70	-472	-82	473.00	6.53	263	5022	604	4613
	5471	55.90	183.90	5293.40	-498	-84	498.90	11.18	289	4996	602	4615
	5503	59.30	182.10	5310.50	-525	-85	525.90	11.64	316	4969	601	4616
	5534	63.40	180.90	5325.40	-553	-86	553.10	13.65	343	4942	600	4617
	5566	67.00	179.40	5338.80	-582	-86	582.10	12.03	372	4913	600	4617
	5598	69.70	178.30	5350.60	-611	-85	611.90	9.02	402	4883	601	4616
	5629	72.80	177.50	5360.60	-641	-84	641.20	10.29	431	4854	602	4615
	5661	76.50	176.90	5369.00	-671	-83	672.00	11.70	462	4823	603	4614
	5693	80.10	176.60	5375.50	-703	-81	703.20	11.29	494	4792	605	4612
	5724	82.90	176.30	5380.10	-733	-79	733.80	9.08	524	4761	607	4610
	5790	87.00	176.40	5385.90	-799	-75	799.40	6.21	590	4696	612	4605
	5820	89.10	176.40	5386.90	-829	-73	829.30	7.00	620	4666	613	4604
	5851	90.50	177.00	5387.00	-860	-71	860.20	4.91	651	4635	615	4602
	5881	91.20	177.00	5386.60	-890	-70	890.20	2.33	681	4605	617	4600
	5912	91.40	176.90	5385.90	-921	-68	921.10	0.72	712	4574	619	4598
	5943	90.70	177.10	5385.30	-952	-66	952.10	2.35	742	4543	620	4597
	5973	91.00	177.30	5384.90	-982	-65	982.00	1.20	772	4513	622	4595
	6004	91.00	177.60	5384.30	-1013	-64	1013.00	0.97	803	4482	623	4594
	6034	90.00	176.80	5384.10	-1043	-62	1042.90	4.27	833	4452	625	4592
	6065	89.10	176.20	5384.30	-1073	-60	1073.80	3.49	864	4421	627	4590
	6095	88.70	175.80	5384.90	-1103	-58	1103.70	1.89	894	4391	629	4588
	6126	88.40	175.70	5385.70	-1134	-56	1134.60	1.02	925	4360	631	4585
	6156	89.10	175.70	5386.30	-1164	-54	1164.50	2.33	955	4330	634	4583
	6187	90.10	175.60	5386.60	-1195	-51	1195.40	3.24	986	4299	636	4581

Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
6217	90.40	175.70	5386.40	-1225	-49	1225.30	1.05	1016	4270	638	4578
6248	90.70	175.60	5386.10	-1256	-47	1256.20	1.02	1047	4239	641	4576
6278	90.90	175.70	5385.70	-1286	-44	1286.10	0.75	1076	4209	643	4574
6309	91.50	175.70	5385.10	-1317	-42	1317.00	1.94	1107	4178	646	4571
6339	91.80	175.40	5384.20	-1347	-40	1346.90	1.41	1137	4148	648	4569
6370	90.90	175.40	5383.50	-1378	-37	1377.70	2.90	1168	4117	651	4566
6400	90.50	175.10	5383.10	-1407	-35	1407.60	1.67	1198	4087	653	4564
6431	90.50	175.30	5382.80	-1438	-32	1438.50	0.65	1229	4056	656	4561
6461	90.60	175.80	5382.50	-1468	-30	1468.40	1.70	1259	4027	658	4559
6492	90.30	176.70	5382.30	-1499	-28	1499.30	3.06	1290	3996	660	4557
6522	90.20	176.60	5382.20	-1529	-26	1529.20	0.47	1320	3966	662	4555
6553	90.10	177.00	5382.10	-1560	-24	1560.20	1.33	1351	3935	664	4553
6584	89.70	176.40	5382.10	-1591	-22	1591.10	2.33	1382	3904	666	4551
6614	89.60	177.00	5382.30	-1621	-21	1621.00	2.03	1411	3874	668	4549
6645	90.00	178.00	5382.40	-1652	-19	1652.00	3.47	1442	3843	669	4548
6675	90.50	178.40	5382.30	-1682	-18	1682.00	2.13	1472	3813	670	4547
6706	90.30	178.80	5382.10	-1713	-18	1713.00	1.44	1503	3782	671	4546
6736	90.20	178.80	5382.00	-1743	-17	1743.00	0.33	1533	3752	671	4545
6767	89.80	179.30	5382.00	-1774	-17	1773.90	2.07	1564	3721	672	4545
6798	89.80	179.40	5382.10	-1805	-16	1804.90	0.32	1595	3690	673	4544
6828	90.00	179.30	5382.10	-1835	-16	1834.90	0.75	1625	3660	673	4544
6859	90.30	179.40	5382.00	-1866	-15	1865.90	1.02	1656	3629	673	4543
6889	90.70	179.00	5381.80	-1896	-15	1895.90	1.89	1686	3599	674	4543
6920	91.30	179.10	5381.20	-1927	-15	1926.90	1.96	1717	3568	674	4542
6950	91.20	179.50	5380.60	-1957	-14	1956.90	1.37	1747	3538	675	4542
6981	90.50	180.10	5380.10	-1988	-14	1987.90	2.97	1778	3507	675	4542
7011	90.10	181.10	5380.00	-2018	-14	2017.90	3.59	1808	3477	675	4542
7042	89.50	180.70	5380.10	-2049	-15	2048.90	2.33	1839	3446	674	4542
7072	89.40	180.40	5380.40	-2079	-15	2078.90	1.05	1869	3416	674	4543
7102	89.30	180.80	5380.70	-2109	-15	2108.90	1.37	1899	3386	674	4543
7134	89.50	180.30	5381.00	-2141	-16	2140.90	1.68	1931	3354	674	4543
7166	89.70	180.40	5381.30	-2173	-16	2172.90	0.70	1963	3322	674	4543
7197	90.00	180.10	5381.30	-2204	-16	2203.90	1.37	1994	3291	673	4543
7292	90.70	179.70	5380.80	-2299	-16	2298.90	0.85	2089	3196	674	4543
7387	91.50	179.50	5378.90	-2394	-15	2393.80	0.87	2184	3101	675	4542
7482	93.00	179.30	5375.20	-2489	-14	2488.80	1.59	2279	3006	676	4541
7577	93.10	178.10	5370.10	-2584	-12	2583.60	1.27	2374	2911	678	4538
7672	92.60	178.00	5365.40	-2678	-9	2678.40	0.54	2469	2816	682	4535
7767	92.90	178.20	5360.90	-2773	-6	2773.20	0.38	2564	2722	685	4531
7862	91.20	179.30	5357.50	-2868	-4	2868.10	2.13	2659	2627	687	4529
7957	90.90	180.80	5355.70	-2963	-4	2963.10	1.61	2754	2532	688	4529
8052	90.90	180.80	5354.20	-3058	-5	3058.10	0.00	2849	2437	686	4530
8147	88.00	181.70	5355.10	-3153	-7	3153.00	3.20	2944	2342	685	4532
8242	88.00	181.50	5358.50	-3248	-10	3248.00	0.21	3039	2247	682	4534
8337	89.20	181.70	5360.80	-3343	-12	3342.90	1.28	3133	2152	680	4537
8432	89.70	181.10	5361.70	-3438	-15	3437.90	0.82	3228	2057	678	4539
8527	90.60	181.30	5361.40	-3533	-17	3532.90	0.97	3323	1962	676	4541
8622	91.30	181.40	5359.90	-3628	-19	3627.80	0.74	3418	1867	674	4543
8717	91.50	181.50	5357.50	-3723	-21	3722.80	0.24	3513	1772	672	4545
8812	91.80	181.60	5354.80	-3818	-24	3817.70	0.33	3608	1677	669	4547
8907	91.60	181.30	5352.00	-3913	-26	3912.70	0.38	3703	1582	667	4549
9002	89.60	180.60	5351.00	-4008	-28	4007.70	2.23	3798	1487	666	4551
9097	88.70	180.10	5352.40	-4103	-29	4102.70	1.08	3893	1392	665	4551
9192	88.90	179.70	5354.40	-4198	-28	4197.60	0.47	3988	1297	666	4551
9287	88.90	179.40	5356.20	-4293	-28	4292.60	0.32	4083	1202	667	4550
9382	90.70	178.90	5356.60	-4388	-26	4387.60	1.97	4178	1107	668	4548
9477	93.30	178.60	5353.20	-4482	-24	4482.50	2.75	4273	1012	671	4546

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/8/2013
Job End Date:	5/12/2013
State:	Kansas
County:	Comanche
API Number:	15-033-21702-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Ariana 3419 1-7H
Longitude:	-99.43080000
Latitude:	37.10590000
Datum:	NAD27
Federal/Tribal Well:	NO
Total Base Water Volume (gal):	2,151,483
Total Base Non Water Volume:	

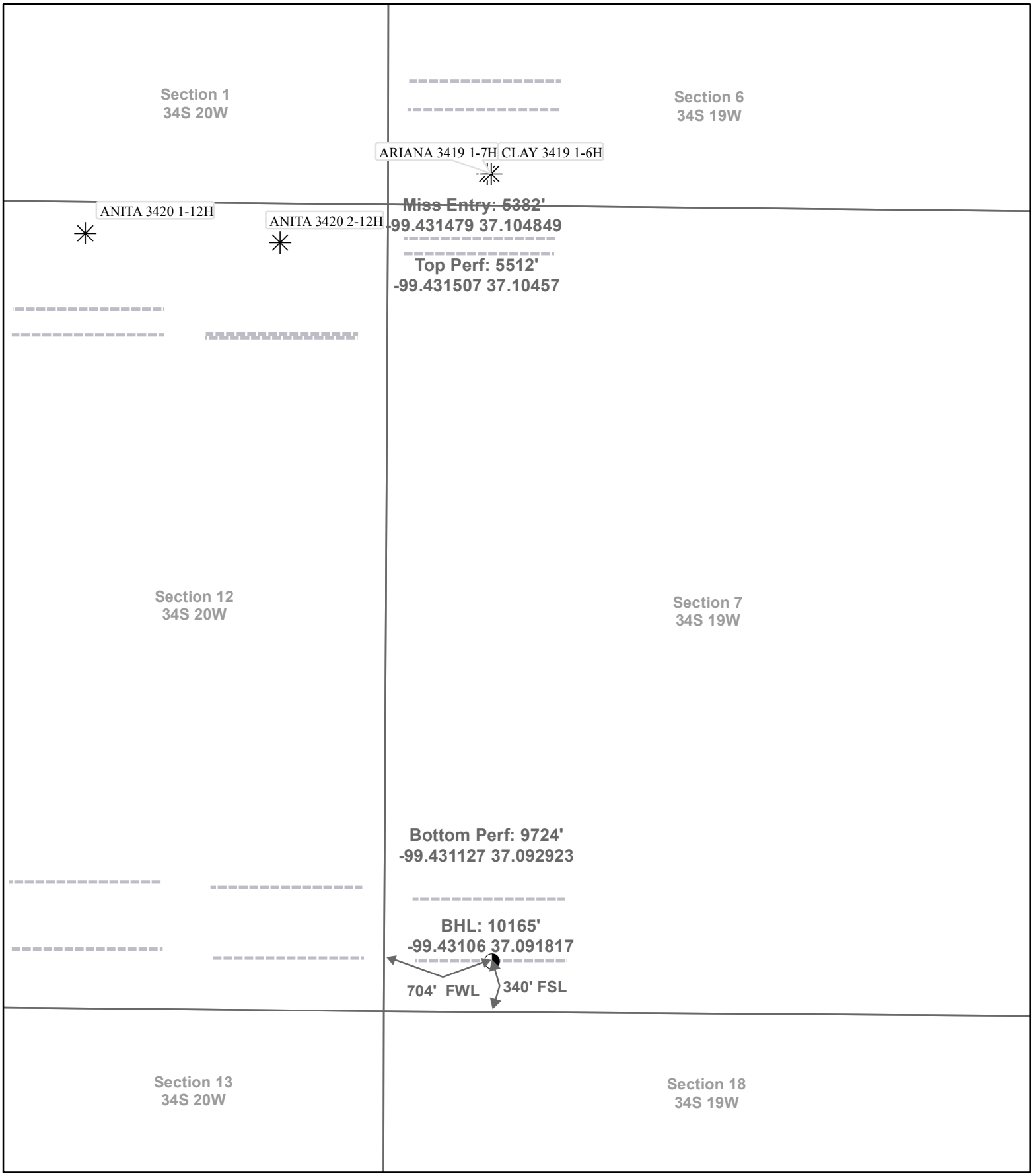
Hydraulic Fracturing Fluid Composition:

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, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Water (Including Mix Water Supplied by Client)*	NA		95.03218	
			Crystalline silica	14808-60-7	96.03660	4.77093	
			Hydrogen chloride	7647-01-0	2.83560	0.14087	
			Distillates (petroleum), hydrotreated light	64742-47-8	0.32598	0.01619	
			Acrylamide/ammonium acrylate copolymer	26100-47-0	0.24837	0.01234	
			Ammonium chloride	12125-02-9	0.15523	0.00771	
			Polyethylene glycol monohexyl ether	31726-34-8	0.11809	0.00587	
			Sorbitan monooleate	1338-43-8	0.03105	0.00154	
			Ethoxylated oleic acid	9004-96-0	0.03105	0.00154	
			Trisodium ortho phosphate	7601-54-9	0.03047	0.00151	
			Sodium erythorbate	6381-77-7	0.02344	0.00116	
			Methanol	67-56-1	0.01058	0.00053	
			Sorbitol Tetraoleate	61723-83-9	0.00931	0.00046	

			Ethane-1,2-diol	107-21-1	0.00867	0.00043	
			Sodium sulfocyanate	540-72-7	0.00807	0.00040	
			Fatty acids, tall-oil	61790-12-3	0.00777	0.00039	
			2-Propenoic acid, ammonium salt	10604-69-0	0.00761	0.00038	
			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.00640	0.00032	
			Alcohols, C10-C16, ethoxylated	68002-97-1	0.00621	0.00031	
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00518	0.00026	
			Alcohols, C12-C14, ethoxylated	68439-50-9	0.00466	0.00023	
			Alcohols, C12-C16, ethoxylated	68551-12-2	0.00466	0.00023	
			C14 alpha olefin ethoxylate	84133-50-6	0.00466	0.00023	
			Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00298	0.00015	
			Prop-2-yn-1-ol	107-19-7	0.00198	0.00010	
			Alkenes, C>10 a-	64743-02-8	0.00132	0.00007	
			2-propenamid	79-06-1	0.00140	0.00007	
			Propan-2-ol	67-63-0	0.00104	0.00005	
			Potassium hydroxide	1310-58-3	0.00024	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)



SANDRIDGE
THE POWER OF US

Actual BH Location

SandRidge Wells

Perf

Sections

Actual Bottom-Hole Location of Ariana 3419 1-7H
Comanche County, Kansas
T&R: 34S 20W
Section: 7, 704' FWL & 340' FSL
Long/Lat:-99.43106 37.091817

1 in = 833 ft

0 625 1,250 2,500 Feet

N

Draftsman: Aaron Birk	Draft Date: 7/24/2013
Drawing Name/Number: Addendum_Ariana 3419 1-7H.mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	

Remarks

Tiffany Golay 04/22/013 11:29 am	TD 10,165