



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1148929
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1148929

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Ariana 3419 1-18H
Doc ID	1148929

All Electric Logs Run

Horizontal Final
Porosity
Resistivity
Prizm Log

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Ariana 3419 1-18H
Doc ID	1148929

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9630-9775	1500 gals 15% HCL, 3470 bbls Fresh Slickwater, Running TLTR 3762 bbls	
5	9202-9475	1500 gals 15% HCL, 4228 bbls Fresh Slickwater, Running TLTR 8140 bbls	
5	8832-9125	1500 gals 15% HCL, 4260 bbls Fresh Slickwater, Running TLTR 12542 bbls	
5	8438-8715	1500 gals 15% HCL, 4224 bbls Fresh Slickwater, Running TLTR 16890 bbls	
5	8010-8288	1500 gals 15% HCL, 4224 bbls Fresh Slickwater, Running TLTR 21228 bbls	
5	7682-7908	1500 gals 15% HCL, 3631 bbls Fresh Slickwater, Running TLTR 24662 bbls	
5	7388-7568	1500 gals 15% HCL, 3059 bbls Fresh Slickwater, Running TLTR 27816 bbls	
5	6983-7232	1500 gals 15% HCL, 4178 bbls Fresh Slickwater, Running TLTR 32044 bbls	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Ariana 3419 1-18H
Doc ID	1148929

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	6613-6865	1500 gals 15% HCL, 4178 bbls Fresh Slickwater, Running TLTR 32044 bbls	
5	6150-6476	1500 gals 15% HCL, 4219 bbls Fresh Slickwater, Running TLTR 40685 bbls	
5	5782-6042	1500 gals 15% HCL, 4204 bbls Fresh Slickwater, Running TLTR 44945 bbls	

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



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

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

June 20, 2013

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

Re: ACO1
API 15-033-21717-01-00
Ariana 3419 1-18H
NW/4 Sec.18-34S-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



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

TICKET

TICKET NUMBER: WY-28-1
TICKET DATE: 05/24/2013

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

YARD: WY WAYNOKA OK
LEASE: Ariana
WELL#: 3419 1-18H
RIG #: Lariat 38
Co/St: COMANCHE, KS

DESCRIPTION	QUANTITY	RATE	AMOUNT
5/23-24/2013 DRILLED 30" CONDUCTOR HOLE			
5/23-24/2013 20" CONDUCTOR PIPE (.250 WALL)			
5/23-24/2013 6' X 6' CELLAR TINHORN WITH PROTECTIVE RING			
5/23-24/2013 DRILL & INSTALL 6' X 6' CELLAR TINHORN			
5/23-24/2013 DRILLED 20" MOUSE HOLE (PER FOOT)			
5/23-24/2013 16" CONDUCTOR PIPE (.250 WALL)			
5/23-24/2013 MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE			
5/23-24/2013 WELDING SERVICES FOR PIPE & LIDS			
5/23-24/2013 PROVIDED EQUIPMENT & LABOR TO ASSIST IN PUMPING CONCRETE			
5/23-24/2013 PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR MOUSEHOLE PIPE)			
5/23-24/2013 10 SACK GROUT			
5/23-24/2013 TAXABLE ITEMS			6,405.00
5/23-24/2013 BID + TAXABLE ITEMS			14,845.00
		Sub Total:	21,250.00
		Tax COMANCHE COUNTY (6.3 %):	403.52
		TICKET TOTAL:	<u>\$ 21,653.52</u>

I, the undersigned, acknowledge the acceptance of the above listed goods and/or services.

Approved Signature _____

AFE Number: DC12956
 Well Name: Ariana 3419 1-18H
 Code: 850.010
 Amount: \$21,653.52
 Co. Man: John Fajane
 Co. Man Sig.: John Fajane 5/24/2013
 Notes: _____

JOB SUMMARY			PROJECT NUMBER SOK 2732	TICKET DATE 06/01/13
COUNTY Comanche	State Kansas	COMPANY Bridge Exploration & Produc	CUSTOMER REP Roger Barber	
LEASE NAME Ariana 3419	Well No. 1-18H	JOB TYPE Surface	EMPLOYEE NAME LOUIS ARNEY	

EMP NAME					
L. ARNEY					
M. QUINTANA					
R. STEVENS					
J. KLEMM					

Form. Name _____ Type: _____
 Packer Type _____ Set At _____ 0
 Bottom Hole Temp. _____ 80 Pressure _____
 Retainer Depth _____ Total Depth _____ 750'

Date	Called Out 6/1/2013	On Location 6/1/2013	Job Started 6/1/2013	Job Completed 6/1/2013
Time	0700	1300	1405	1530

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Val	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing		36#	9 1/2"		Surface	750'	1,500
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			12 1/4"		Surface	750'	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	9 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	resh Water	BBL.	10 8.33
Spacer type		BBL.	
Acid Type		Gal.	%
Acid Type		Gal.	%
Surfactant		Gal.	In
NE Agent		Gal.	In
Fluid Loss		Gal/Lb	In
Gelling Agent		Gal/Lb	In
Fric. Red.		Gal/Lb	In
MISC.		Gal/Lb	In

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
6/1	2.5	6/1	1.5	Surface
Total	2.5	Total	1.5	

Perpac Balls _____ Qty. _____
 Other _____
 Other _____
 Other _____
 Other _____

Pressures			
MAX	1,500 PSI	AVG.	150
Average Rates in BPM			
MAX	6 BPM	AVG	6
Cement Left in Pipe			
Feet	44	Reason	SHOE JOINT

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	290	TEX Lite Premium Plus 68	(6% Gel) 2% Calcium Chloride - 1/2pps Cello-Flake - .5% C-41P	10.88	1.84	12.70
2	170	Premium Plus (Class C)	2% Calcium Chloride - 1/2pps Cello-Flake	6.32	1.32	14.80
3	*100	Premium Plus (Class C)	*2% Calcium Chloride on side to use if necessary	*6.32	*1.32	*14.8

Summary					
Preflush Breakdown	Type: _____	MAXIMUM _____	1,500 PSI	Preflush: BBI _____	10.00
	Lost Returns-N _____	NO/FULL _____		Load & Bkdn: Gal - BBI _____	N/A
	Actual TOC _____	SURFACE _____		Excess /Return BBI _____	51
Average	Bump Plug PSI: _____	640		Calc. TOC: _____	SURFACE
151F _____ 5 Min.	10 Min _____	15 Min _____		Final Circ. PSI: _____	200
				Cement Slurry: BBI _____	135.0
				Total Volume BBI _____	198.00

CUSTOMER REPRESENTATIVE _____ SIGNATURE _____

JOB SUMMARY			PROJECT NUMBER	TICKET DATE
COUNTY	State	COMPANY	SOK 2760	06/07/13
Comanche	Kansas	Sandridge Exploration & Production	CUSTOMER REP Roger Barber	
LEASE NAME	Well No.	JOB TYPE	EMPLOYEE NAME	
Ariana 3419	1-18H	Intermediate	Johnny Breeze	

EMP NAME				
Johnny Breeze		Flo Helkena		
Bryan Douglas				
Roy Morris				
Dustin Odom				

Form. Name _____ Type: _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. 155 Pressure _____
 Retainer Depth _____ Total Depth 5,748'

Date	Called Out	On Location	Job Started	Job Completed
	6/7/2013	6/7/2013	6/7/2013	6/8/2013
Time	1000	1700	2303	0200

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Val	0	IR
Centralizers	0	IR
Top Plug	1	IR
HEAD	1	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data						
	New/Used	Weight	Size	Grade	From	To
Casing		26#	7"		Surface	5,748
Liner						
Liner						
Tubing			0			
Drill Pipe						
Open Hole			8 3/4"		Surface	5,755'
Perforations						
Perforations						
Perforations						

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	8.33	
Spacer type	Barite BBL.	15	10.00
Spacer type	BBL.		
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		in
NE Agent	Gal.		in
Fluid Loss	Gal/Lb		in
Gelling Agent	Gal/Lb		in
Fric. Red.	Gal/Lb		in
MISC.	Gal/Lb		in

Perfpac Balls _____ Qty. _____
 Other _____
 Other _____
 Other _____
 Other _____

Hours On Location				Operating Hours				Description of Job
Date	Hours	Date	Hours	Date	Hours			
6/7	7.0	6/8	3.0	Intermediate				
6/8	2.0	6/8	1.0					
Total	9.0	Total	4.0					

Pressures		
MAX	5,000 PSI	AVG. 400
Average Rates in BPM		
MAX	8 BPM	AVG 5
Cement Left in Pipe		
Feet	93	Reason SHOE JOINT

Cement Data				W/Rq.	Yield	Lbs/Gal
Stage	Sacks	Cement	Additives			
1	145	50/50 POZ PREMIUM	4% Gel - 0.4% FL-17 - 0.2% C-51 - 0.1% C-20 - 0.1% C-37 - 0.5% C-41P	6.77	1.44	13.60
2	100	Premium	0.4% FL-17 - 0.1% C-51 - 0.1% C-20 - 0.4% C-41P	5.20	1.18	15.60
3	0	0		0	0.00	0.00

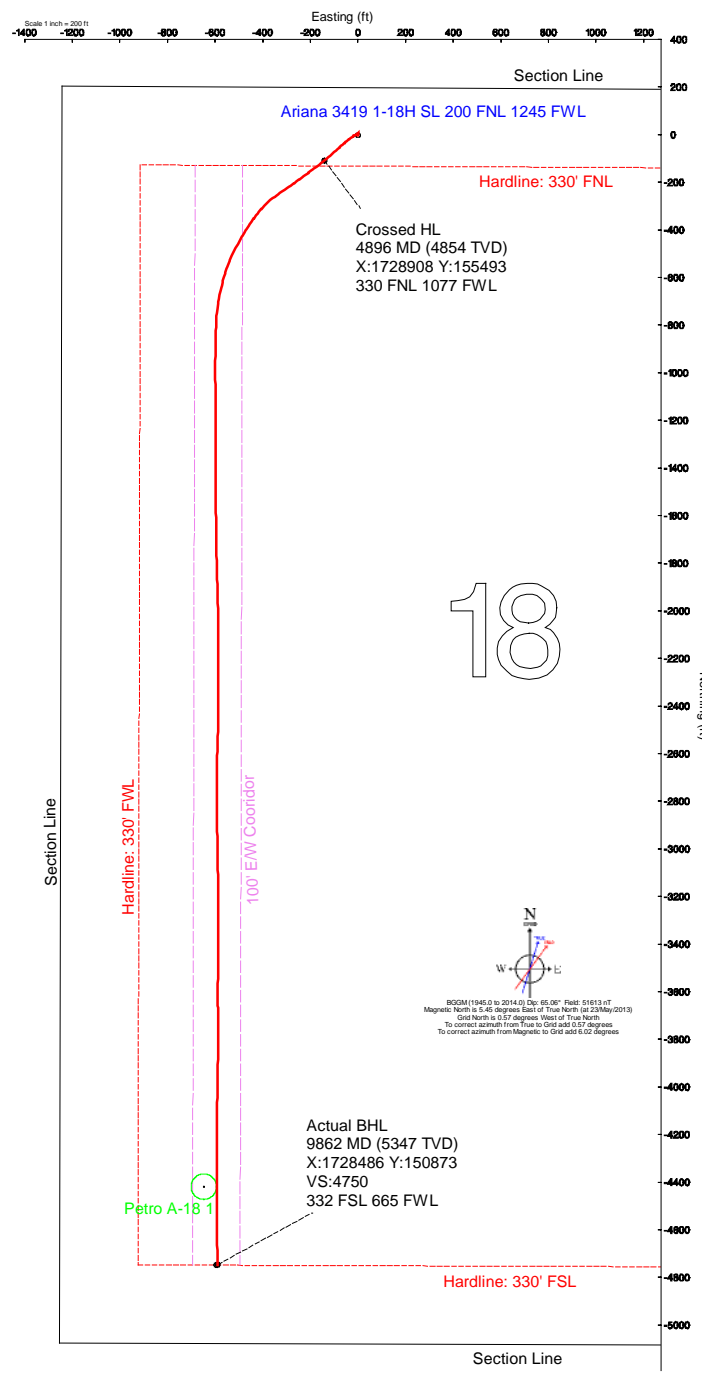
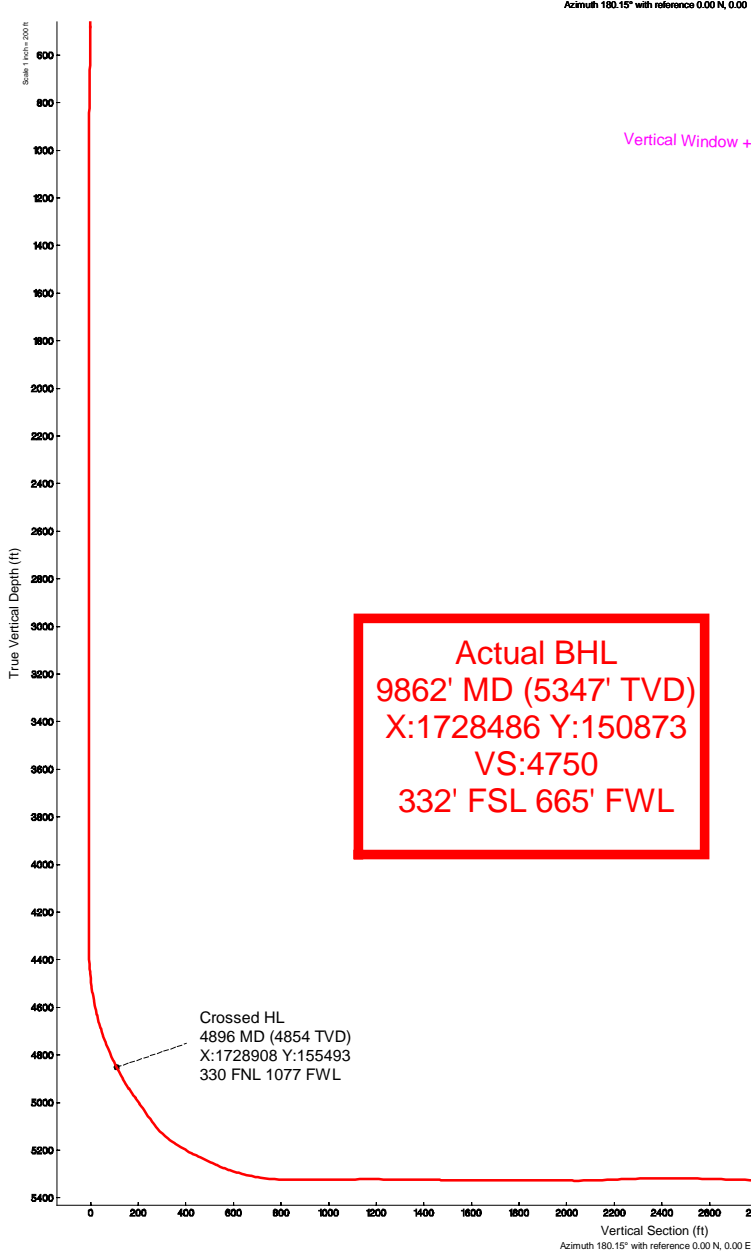
Summary							
Preflush Breakdown	_____	Type: _____	_____	Preflush: BBI	15.00	Type: 10ppm Barite Spacer	_____
	_____	MAXIMUM	5,000 PSI	Load & Bkdn: Gal - BBI	N/A	Pad:Bbl -Gal	N/A
	_____	Lost Returns-N	NO/FULL	Excess /Return BBI	N/A	Calc. Disp Bbl	216
	_____	Actual TOC	4,195	Calc. TOC:	4,195	Actual Disp.	216.02
Average	_____	Bump Plug PSI:	NA	Final Circ. PSI:	700	Disp:Bbl	_____
isp	5 Min. _____	10 Min. _____	15 Min. _____	Cement Slurry: BBI	58.2		
				Total Volume BBI	289.23		

CUSTOMER REPRESENTATIVE Julio [Signature] SIGNATURE



Sandridge Energy
 Ariana 3419 1-18H (Final)
 Ariana 3419 1-18H SL 200 FNL 1245 FWL
 Comanche County, Kansas (Sandridge Energy) NAD27 / Grid

Plot reference wellpath is Plan 3		Grid System: NAD27 / Lambert Kansas SP, Southern Zone (1602), US feet	
True vertical depths are referenced to Larist 38 (RT)		North Reference: Grid north	
Measured depths are referenced to Larist 38 (RT)		Scale: True distance	
Larist 38 (RT) to Mean Sea Level: 1801 feet		Depths are in feet	
Mean Sea Level to Mud line (At Slot: Ariana 3419 1-18H SL 200 FNL 1245 FWL): -1781 feet		Created by boughac on 30/May/2013	
Coordinates are in feet referenced to Slot			
Location Information			
Facility Name		Grid East (US ft)	Grid North (US ft)
Ariana 3419 1-18H Sec. 18-34S-19W		1729077.000	155622.000
Slot		Local N (ft)	Local E (ft)
Ariana 3419 1-18H SL 200 FNL 1245 FWL		0.00	0.00
Larist 38 (RT) to Mud line (At Slot: Ariana 3419 1-18H SL 200 FNL 1245 FWL)		Grid East (US ft)	Grid North (US ft)
Mean Sea Level to Mud line (At Slot: Ariana 3419 1-18H SL 200 FNL 1245 FWL)		1729077.000	155622.000
Larist 38 (RT) to Mean Sea Level		Latitude	Longitude
		37°05'25.270"N	99°25'43.578"W
		208	
		-1781ft	
		1801ft	





Actual Wellpath Report

Sandridge Ariana 3419 1-18H_Final Surveys.
Page n of nn



REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Ariana 3419 1-18H SL 200 FNL 1245 FWL
Area	Kansas	Well	Subject
Field	Comanche County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Ariana 3419 1-18H Actual
Facility	Ariana 3419 1-18H Sec. 18-34S-19W		

REPORT SETUP INFORMATION			
Projection System	NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet		
North Reference	Grid	Software System	WellArchitect™ 3.0.0
Convergence at slot	0.57° West	User	Adammic
Scale	1.00004	Report Generated	01/Jul/2013 at 2:41:26 PM
Wellbore last revised	05-23-2013	Database/Source file	intokcapp01

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	1729077.00	155622.00	37°05'25.270"N	99°25'43.578"W
Facility Reference Pt			1729077.00	155622.00	37°05'25.270"N	99°25'43.578"W
Field Reference Pt			1773194.47	191302.75	37°11'22.030"N	99°16'42.810"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Lariat 38 (RT) to Facility Vertical Datum	20.00ft
Horizontal Reference Pt	Slot	Lariat 38 (RT) to Mean Sea Level	1801.00ft
Vertical Reference Pt	Lariat 38 (RT)	Lariat 38 (RT) to Mud Line at Slot (Ariana 3419 1-18H SL 200 FNL 1245 FWL)	20.00ft
MD Reference Pt	Lariat 38 (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	180.15°



Actual Wellpath Report

Sandridge Ariana 3419 1-18H_Final Surveys.
Page n of nn



REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Ariana 3419 1-18H SL 200 FNL 1245 FWL
Area	Kansas	Well	Subject
Field	Comanche County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Ariana 3419 1-18H Actual
Facility	Ariana 3419 1-18H Sec. 18-34S-19W		

WELLPATH DATA (110 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
0.00†	0.000	0.130	0.00	0.00	0.00	0.00	1729077.00	155622.00	0.00	
20.00	0.000	0.130	20.00	0.00	0.00	0.00	1729077.00	155622.00	0.00	
247.00	0.700	0.130	246.99	-1.39	1.39	0.00	1729077.00	155623.39	0.31	
499.00	0.400	12.470	498.98	-3.79	3.78	0.20	1729077.20	155625.79	0.13	
709.00	1.000	0.150	708.97	-6.33	6.33	0.36	1729077.36	155628.33	0.29	
964.00	0.040	79.730	963.95	-8.58	8.57	0.45	1729077.45	155630.57	0.39	
1454.00	0.030	52.250	1453.95	-8.69	8.68	0.72	1729077.72	155630.68	0.00	
1950.00	0.040	157.650	1949.95	-8.60	8.60	0.89	1729077.89	155630.60	0.01	
2425.00	0.030	324.840	2424.95	-8.55	8.55	0.88	1729077.88	155630.55	0.01	
2900.00	0.070	17.510	2899.95	-8.93	8.93	0.90	1729077.90	155630.93	0.01	
3375.00	0.030	146.450	3374.95	-9.11	9.10	1.05	1729078.05	155631.10	0.02	
3850.00	0.030	333.780	3849.95	-9.11	9.11	1.07	1729078.07	155631.11	0.01	
4312.00	0.030	54.340	4311.95	-9.29	9.29	1.11	1729078.11	155631.29	0.01	
4325.00	0.140	157.950	4324.95	-9.28	9.28	1.12	1729078.12	155631.28	1.15	
4356.00	1.180	240.890	4355.95	-9.09	9.09	0.86	1729077.86	155631.09	3.78	
4388.00	3.130	240.750	4387.93	-8.50	8.50	-0.19	1729076.81	155630.50	6.09	
4420.00	5.900	238.260	4419.82	-7.20	7.21	-2.35	1729074.65	155629.21	8.68	
4451.00	8.640	237.460	4450.57	-5.10	5.12	-5.67	1729071.33	155627.12	8.84	
4483.00	11.410	236.110	4482.08	-2.03	2.06	-10.33	1729066.67	155624.06	8.69	
4515.00	13.650	235.230	4513.32	1.90	-1.86	-16.06	1729060.94	155620.14	7.03	
4546.00	15.720	236.420	4543.30	6.33	-6.27	-22.56	1729054.44	155615.73	6.75	
4578.00	17.550	233.660	4573.96	11.61	-11.53	-30.06	1729046.94	155610.47	6.23	
4610.00	19.370	230.940	4604.31	17.83	-17.73	-38.07	1729038.93	155604.27	6.29	
4641.00	20.690	231.800	4633.44	24.48	-24.36	-46.36	1729030.63	155597.64	4.36	
4673.00	22.460	229.720	4663.20	31.95	-31.81	-55.47	1729021.53	155590.19	6.02	
4705.00	25.280	227.860	4692.46	40.52	-40.34	-65.20	1729011.80	155581.65	9.12	
4736.00	28.070	228.030	4720.15	49.86	-49.66	-75.54	1729001.46	155572.33	9.00	
4768.00	30.620	228.170	4748.05	60.37	-60.14	-87.21	1728989.79	155561.86	7.97	
4800.00	32.360	229.460	4775.33	71.40	-71.14	-99.79	1728977.21	155550.86	5.83	
4831.00	33.650	228.510	4801.33	82.52	-82.22	-112.53	1728964.47	155539.78	4.48	
4863.00	36.100	229.480	4827.58	94.55	-94.22	-126.34	1728950.66	155527.77	7.85	
4894.00	37.940	230.790	4852.33	106.55	-106.18	-140.67	1728936.33	155515.81	6.46	
4896.00†	38.088	230.808	4853.91	107.33	-106.96	-141.62	1728935.37	155515.04	7.43	Crossed HL 4896 MD (4854 TVD) X:1728908 Y:155493 330 FNL 1077 FWL
4926.00	40.310	231.060	4877.15	119.32	-118.91	-156.34	1728920.65	155503.09	7.43	
4958.00	43.060	234.310	4901.05	132.25	-131.79	-173.27	1728903.72	155490.20	10.93	
4989.00	45.620	234.760	4923.22	144.86	-144.36	-190.92	1728886.08	155477.64	8.32	
5021.00	48.530	232.080	4945.01	158.88	-158.33	-209.72	1728867.27	155463.67	10.97	
5053.00	50.570	234.610	4965.78	173.46	-172.86	-229.26	1728847.74	155449.14	8.76	
5084.00	50.560	232.450	4985.47	187.74	-187.09	-248.51	1728828.48	155434.91	5.38	
5116.00	50.720	235.730	5005.77	202.30	-201.59	-268.54	1728808.45	155420.40	7.94	
5148.00	50.480	234.340	5026.08	216.52	-215.76	-288.81	1728788.18	155406.23	3.44	
5179.00	50.520	236.600	5045.80	230.13	-229.32	-308.51	1728768.48	155392.67	5.63	
5211.00	50.650	234.490	5066.12	244.17	-243.31	-328.89	1728748.10	155378.68	5.11	
5243.00	50.650	233.980	5086.41	258.69	-257.77	-348.97	1728728.02	155364.22	1.23	
5275.00	52.200	230.870	5106.36	274.00	-273.03	-368.79	1728708.20	155348.96	9.01	



Actual Wellpath Report

Sandridge Ariana 3419 1-18H_Final Surveys.
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Ariana 3419 1-18H SL 200 FNL 1245 FWL
Area	Kansas	Well	Subject
Field	Comanche County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Ariana 3419 1-18H Actual
Facility	Ariana 3419 1-18H Sec. 18-34S-19W		

WELLPATH DATA (110 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
5306.00	54.570	225.470	5124.86	290.64	-289.62	-387.31	1728689.68	155332.37	15.93	
5338.00	57.330	221.000	5142.78	310.01	-308.94	-405.45	1728671.54	155313.05	14.43	
5369.00	59.390	218.360	5159.05	330.37	-329.25	-422.29	1728654.70	155292.73	9.83	
5401.00	61.960	215.760	5174.72	352.67	-351.52	-439.09	1728637.89	155270.47	10.71	
5433.00	63.870	214.880	5189.29	375.96	-374.76	-455.56	1728621.42	155247.22	6.45	
5465.00	65.220	211.910	5203.04	400.13	-398.89	-471.46	1728605.52	155223.10	9.38	
5496.00	66.440	211.180	5215.74	424.27	-422.99	-486.25	1728590.73	155199.00	4.48	
5528.00	67.170	207.480	5228.34	449.94	-448.63	-500.66	1728576.33	155173.36	10.87	
5560.00	67.320	208.240	5240.72	476.07	-474.72	-514.45	1728562.54	155147.27	2.24	
5591.00	67.320	207.000	5252.67	501.45	-500.06	-527.71	1728549.27	155121.92	3.69	
5623.00	67.680	202.330	5264.93	528.34	-526.92	-540.04	1728536.94	155095.06	13.53	
5655.00	69.620	199.240	5276.58	556.23	-554.78	-550.61	1728526.37	155067.20	10.85	
5686.00	72.100	197.410	5286.74	584.05	-582.57	-559.81	1728517.17	155039.40	9.75	
5718.00	74.250	194.670	5296.01	613.50	-612.01	-568.27	1728508.71	155009.97	10.60	
5725.00	74.550	194.050	5297.89	620.04	-618.54	-569.94	1728507.04	155003.44	9.55	
5750.00	75.740	193.480	5304.30	643.53	-642.01	-575.69	1728501.29	154979.97	5.25	
5781.00	78.100	191.650	5311.31	673.01	-671.48	-582.25	1728494.72	154950.50	9.54	
5811.00	80.590	189.340	5316.86	702.01	-700.47	-587.62	1728489.36	154921.51	11.23	
5841.00	83.010	187.090	5321.14	731.41	-729.85	-591.86	1728485.12	154892.12	10.96	
5872.00	85.780	184.750	5324.17	762.10	-760.53	-595.04	1728481.94	154861.44	11.67	
5903.00	87.780	182.520	5325.91	792.99	-791.42	-597.00	1728479.97	154830.55	9.65	
5933.00	89.540	181.620	5326.61	822.96	-821.39	-598.09	1728478.89	154800.58	6.59	
6025.00	90.400	180.820	5326.66	914.94	-913.37	-600.05	1728476.93	154708.60	1.28	
6117.00	90.280	179.760	5326.11	1006.94	-1005.36	-600.51	1728476.47	154616.60	1.16	
6208.00	90.920	179.970	5325.16	1097.93	-1096.36	-600.30	1728476.68	154525.60	0.74	
6300.00	89.660	179.730	5324.69	1189.93	-1188.35	-600.06	1728476.92	154433.60	1.39	
6392.00	89.230	180.050	5325.59	1281.92	-1280.35	-599.88	1728477.10	154341.60	0.58	
6484.00	89.600	179.580	5326.52	1373.92	-1372.34	-599.58	1728477.40	154249.61	0.65	
6575.00	89.010	179.460	5327.63	1464.90	-1463.33	-598.82	1728478.16	154158.61	0.66	
6667.00	89.940	179.560	5328.47	1556.89	-1555.32	-598.03	1728478.94	154066.62	1.02	
6759.00	89.320	179.520	5329.07	1648.89	-1647.32	-597.29	1728479.68	153974.62	0.68	
6851.00	90.430	178.760	5329.27	1740.87	-1739.31	-595.91	1728481.06	153882.63	1.46	
6943.00	89.880	178.360	5329.02	1832.83	-1831.28	-593.60	1728483.38	153790.66	0.74	
7038.00	89.450	178.410	5329.57	1927.79	-1926.24	-590.92	1728486.05	153695.69	0.46	
7133.00	89.630	179.370	5330.34	2022.76	-2021.21	-589.08	1728487.89	153600.71	1.03	
7228.00	91.570	179.970	5329.34	2117.75	-2116.20	-588.54	1728488.44	153505.72	2.14	
7323.00	93.050	179.860	5325.51	2212.67	-2211.12	-588.40	1728488.58	153410.80	1.56	
7418.00	91.330	179.440	5321.88	2307.59	-2306.05	-587.82	1728489.16	153315.87	1.86	
7513.00	90.180	179.950	5320.63	2402.58	-2401.04	-587.31	1728489.67	153220.87	1.32	
7608.00	89.140	182.040	5321.19	2497.56	-2496.01	-588.96	1728488.02	153125.89	2.46	
7703.00	88.550	181.660	5323.11	2592.49	-2590.94	-592.03	1728484.95	153030.96	0.74	
7798.00	88.370	180.300	5325.66	2687.45	-2685.89	-593.65	1728483.33	152936.01	1.44	
7854.00	88.620	180.260	5327.13	2743.43	-2741.87	-593.92	1728483.05	152880.02	0.45	
7918.00	88.860	179.670	5328.54	2807.41	-2805.86	-593.89	1728483.09	152816.04	1.00	
8013.00	90.280	179.100	5329.25	2902.40	-2900.85	-592.87	1728484.11	152721.05	1.61	



Actual Wellpath Report

Sandridge Ariana 3419 1-18H_Final Surveys.
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REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Ariana 3419 1-18H SL 200 FNL 1245 FWL
Area	Kansas	Well	Subject
Field	Comanche County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Ariana 3419 1-18H Actual
Facility	Ariana 3419 1-18H Sec. 18-34S-19W		

WELLPATH DATA (110 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
8108.00	89.600	179.300	5329.35	2997.39	-2995.84	-591.54	1728485.44	152626.05	0.75	
8203.00	89.230	178.810	5330.32	3092.36	-3090.82	-589.97	1728487.01	152531.07	0.65	
8298.00	91.540	179.350	5329.68	3187.34	-3185.80	-588.45	1728488.53	152436.08	2.50	
8393.00	92.060	179.480	5326.70	3282.28	-3280.74	-587.48	1728489.50	152341.13	0.56	
8488.00	90.860	180.390	5324.28	3377.25	-3375.71	-587.37	1728489.61	152246.16	1.59	
8583.00	91.360	181.030	5322.44	3472.22	-3470.69	-588.55	1728488.43	152151.19	0.85	
8678.00	89.100	180.410	5322.06	3567.21	-3565.67	-589.74	1728487.24	152056.20	2.47	
8773.00	87.410	179.520	5324.95	3662.16	-3660.62	-589.68	1728487.29	151961.24	2.01	
8868.00	92.440	180.080	5325.08	3757.13	-3755.59	-589.35	1728487.63	151866.27	5.33	
8963.00	90.180	180.030	5322.90	3852.10	-3850.56	-589.44	1728487.54	151771.30	2.38	
9058.00	89.540	181.350	5323.14	3947.09	-3945.55	-590.59	1728486.39	151676.30	1.54	
9153.00	89.660	180.650	5323.80	4042.08	-4040.53	-592.24	1728484.73	151581.32	0.75	
9248.00	89.440	180.890	5324.54	4137.07	-4135.52	-593.52	1728483.46	151486.33	0.34	
9343.00	90.370	180.590	5324.70	4232.06	-4230.51	-594.75	1728482.23	151391.33	1.03	
9438.00	84.890	179.230	5328.63	4326.94	-4325.39	-594.60	1728482.38	151296.45	5.94	
9533.00	86.780	179.650	5335.53	4421.68	-4420.13	-593.68	1728483.30	151201.70	2.04	
9628.00	88.550	180.400	5339.40	4516.60	-4515.05	-593.72	1728483.26	151106.78	2.02	
9722.00	88.090	179.320	5342.16	4610.55	-4609.01	-593.49	1728483.49	151012.82	1.25	
9818.00	88.210	178.550	5345.25	4706.48	-4704.94	-591.70	1728485.27	150916.89	0.81	
9862.00	88.210	178.550	5346.63	4750.44	-4748.90	-590.59	1728486.39	150872.92	0.00	Actual BHL 9862 MD (5347 TVD) X:1728486 Y:150873 VS:4750 332 FSL 665 FWL

WELLPATH COMPOSITION - Ref Wellbore: Ariana 3419 1-18H Actual Ref Wellpath: AWP (Final)				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	499.00	EMS (Standard)	EMS	Ariana 3419 1-18H Actual
499.00	9818.00	NaviTrak (Standard)	Inteq MWD	Ariana 3419 1-18H Actual
9818.00	9862.00	Blind Drilling (std)	Projection to bit	Ariana 3419 1-18H Actual

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/10/2013
Job End Date:	7/12/2013
State:	Kansas
County:	Comanche
API Number:	15-033-21717-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Ariana 3419 1-18H
Longitude:	-99.42880000
Latitude:	37.09040000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	5,344
Total Base Water Volume (gal):	1,881,086
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					
			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	0.00301		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					

			Alcohols, C12-C14, ethoxylated	68439-50-9	0.00429		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sodium sulfocyanate	540-72-7	0.00744		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Crystalline silica	14808-60-7	96.04452		
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	0.00201		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Hydrogen chloride	7647-01-0	2.88397		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Methanol	67-56-1	0.01070		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sorbitan monooleate	1338-43-8	0.02862		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Polyethylene glycol monoethyl ether	31726-34-8	0.12231		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					

			2-propenamid	79-06-1	0.00129		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ethoxylated oleic acid	9004-96-0	0.02862		
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	0.00701		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Trisodium ortho phosphate	7601-54-9	0.03261		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alkenes, C>10 a-	64743-02-8	0.00134		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C10-C16, ethoxylated	68002-97-1	0.00572		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Distillates (petroleum), hydrotreated light	64742-47-8	0.30047		
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					

			Ammonium chloride	12125-02-9	0.14308		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sorbitol Tetraoleate	61723-83-9	0.00858		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			C14 alpha olefin ethoxylate	84133-50-6	0.00429		
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	0.00536		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C12-C16, ethoxylated	68551-12-2	0.00429		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Acrylamide/ammonium acrylate copolymer	26100-47-0	0.22893		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Fatty acids, tall-oil	61790-12-3	0.00786		
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	0.00647		

HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ethane-1,2-diol	107-21-1	0.00928		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Potassium hydroxide	1310-58-3	0.00025		
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sodium erythorbate	6381-77-7	0.02031		

* 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)

Section 12
34S 20W

Section 7
34S 19W

ARIANA 3419 1-18H



Miss Entry: 5426'
-99.430715 37.089337

Top Perf: 5782'
-99.431139 37.088518

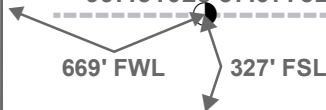
Section 13
34S 20W

Section 18
34S 19W

Comanche County

Bottom Perf: 9630'
-99.431046 37.077963

BHL: 9862'
-99.431028 37.077321



Section 24
34S 20W

Section 19
34S 19W



Actual Bottom-Hole Location of Ariana 3419 1-1H
Comanche County, Kansas
T&R: 34S 19W
Section: 18, 669' FWL & 327' FSL
-99.431028 37.077321

1 in = 632 ft

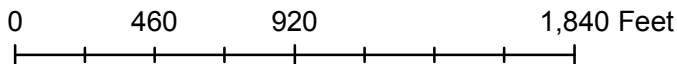


● Actual BH Location

* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Aaron Birk

Draft Date: 9/4/2013

Drawing Name/Number:

Addendum_Ariana 3419 1-18H .mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502

Remarks

Tiffany Golay 08/26/013 01:19 pm	Conductor weight= 94 lbs/ft Well was completed using an open hole packer system; no liner was cemented
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Tiffany Golay 09/10/013 08:37 am	Additional Fluid Mgmt Info: 180 bbls hauled to German #2, Nard, Inc., NE/4 28-29N-22W, Harper, OK; 4170 bbls hauled to Guard, 23-22N-13W, Major, OK; 160 bbls hauled to Harmon 1, KBW Oil & Gas Company, NW/4 11-33S-20W, Comanche, KS, D-22304
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