Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1123960

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: Joe Hileman
Purchaser: DCP Midstream, LP (gas) NCRA (oil)

Designate Type of Completion:

☑ New Well ☐ Re-Entry ☐ Workover

☑ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

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

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

2/7/2013	3/9/2013	4/13/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-033-21690-01-00
Spot Description:
SE - NE - NW - NW Sec. 7 Twp. 31 S. R. 19 ☐ East ☑ West
375 Feet from ☑ North / ☐ South Line of Section
1080 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: Brothers 3119 Well #: 1-6H
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 2169 Kelly Bushing: 2189
Total Vertical Depth: 9999 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: 10000 ppm Fluid volume: 2040 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Lojo Disposal
Lease Name: Unnamed License #: 56371
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: 06/03/2013
☑ **Confidential Release Date:** 06/03/2015
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 06/04/2013

1123960

Operator Name: SandRidge Exploration and Production LLC Lease Name: Brothers 3119 Well #: 1-6H

Sec. 7 Twp. 31 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	4208	
Lansing	4413	
Cherokee	4990	
Mississippian Lime	5130	

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. 4/16/2013

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	Brothers 3119 1-6H
Doc ID	1123960

All Electric Logs Run

Mud Log
Boresight
Density
Induction

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Brothers 3119 1-6H
Doc ID	1123960

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9625-9966	4265 bbls water, 36 bbls acid, 75M lbs sd, 4411.5 TLTR	
5	9232-9572	4335 bbls Slickwater, 36 bbls 15% HCl, 75039 lbs Ottawa sd, 8894 TLTR	
5	8862-9164	4416 bbls Slickwater, 36 bbls 15% HCl, 75048 lbs Ottawa sd, 13353 TLTR	
5	8448-8782	4441 bbls Slickwater, 36 bbls 15% HCl, 75186 lbs Ottawa sd, 17692 TLTR	
5	8070-8368	4422 bbls Slickwater, 36 bbls 15% HCl, 75140 lbs Ottawa sd, 22020 TLTR	
5	7669-7994	4322 bbls Slickwater, 36 bbls 15% HCl, 75020 lbs Ottawa sd, 26902 TLTR	
5	7258-7592	4507 bbls Slickwater, 36 bbls 15% HCl, 77079 lbs Ottawa sd, 31410 TLTR	
5	6868-7197	4248 bbls Slickwater, 36 bbls 15% HCl, 77335 lbs Ottawa sd, 35724 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Brothers 3119 1-6H
Doc ID	1123960

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	6326-6717	4497 bbls Slickwater, 36 bbls 15% HCl, 77010 lbs Ottawa sd, 40142 TLTR	
5	5950-6248	4524 bbls Slickwater, 36 bbls 15% HCl, 77359 lbs Ottawa sd, 44609 TLTR	
5	5462-5820	4353 bbls Slickwater, 36 bbls 15% HCl, 76085 lbs Ottawa sd, 48902 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Brothers 3119 1-6H
Doc ID	1123960

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	120	Pro Oilfield Services 10 Sack Grout	12	none
Surface	17.5	13.38	68	1008	Halliburton Extendacem/ Swiftcem Systems	265	3% Calcium Chloride, .25 lbm Poly-E-Flake/ 2% Calcium Chloride, .125 Poly-E-Flake
Intermediate	8.75	7	26	5572	Halliburton Econocem and Halcem Systems	300	.4% Halad (R)-9, 2 lbm Kol-Seal, 2% Bentonite/ .4% Halad (R)-9, 2 lbm Kol-Seal
Production Liner	6.13	4.5	11.6	10070	Halliburton Econocem System	550	2 lbm Kol-Seal, .25% SA-1015, .2% CFR-3, W/O Defoamer

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/

March 12, 2013

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

Re: ACO1
API 15-033-21690-01-00
Brothers 3119 1-6H
NW/4 Sec.07-31S-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 : 4188
Delivery Date : 2/8/2013
Office : 12/1/1901

Ordered By :
Lease/Well : BROTHERS 3119 1-6H
Rig Name/Number : LARIAT 41
AFE Number :
Site Contact :
:
:
:

Qty	Description	Min / Standby / Usage Charge	Add Day	Unit Price	Start Date / Stop Date	Extended Line Total
1	BROTHERS 3119 1-6H	$21,250.00	$0.00	$21,250.00	2/8/2013 2/8/2013	$21,250.00
120	DRILLED 30" CONDUCTOR HOLE	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
120	20" CONDUCTOR PIPE (.250 WALL)	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
1	6'X6' CELLAR TINHORN WITH PROTECTIVE RING	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
1	DRILL & INSTALL 6'X6' CELLAR TINHORN	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
75	DRILLED 20" MOUSE HOLE (PER FOOT)	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
75	16" CONDUCTOR PIPE (.250 WALL)	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
1	MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
1	WELDING SERVICES FOR PIPE & LIDS	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
1	PROVIDED EQUIPMENT & LABOR FOR DIRT REMOVAL	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
1	PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR THE MOUSEHOLE PIPE)	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
12	CEMENT 10 SACK GROUT	$0.00	$0.00	$0.00	2/8/2013 2/8/2013	
	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 #:** 2981252	**Quote #:**	**Sales Order #:** 900227840
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Hill, Richard	
Well Name: Brothers 3119	**Well #:** 1-6H		**API/UWI #:** 15-033-21690
Field:	**City (SAP):** COLDWATER	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 7 Township 31S Range 19W			
Contractor: Lariat	**Rig/Platform Name/Num:** 41		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: NGUYEN, VINH	**Srvc Supervisor:** TOWNSEND, JOE	**MBU ID Emp #:** 493000	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DAVIS, TROY Robert	6	498798	TOWNSEND, JOE D	6	493000	WALLS, JAMES Richard	6	396166

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
2/19/13	6	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. ft	Job Depth TVD			
Water Depth		Wk Ht Above Floor	4 ft		
Perforation Depth (MD)	From		To		

Job Times

	Date	Time	Time Zone
Called Out	19 - Feb - 2013	08:30	CST
On Location	19 - Feb - 2013	13:30	CST
Job Started	19 - Feb - 2013	18:14	CST
Job Completed	19 - Feb - 2013	18:40	CST
Departed Loc	19 - Feb - 2013	20:15	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" Surface Casing	Unknown		13.375	12.415	68.		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		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	13.375	1	
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	13.375	1	
Stage Tool										Centralizers			

Miscellaneous Materials

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

Fluid Data

Stage/Plug #: 1

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water		10.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	EXTENDACEM (TM) SYSTEM (452981)	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		43.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	43	Shut In: Instant		Lost Returns	NO	Cement Slurry	81	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	20	Actual Displacement	43	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	

Rates							
Circulating		Mixing	5	Displacement	5	Avg. Job	5

Cement Left In Pipe	Amount	37 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 #:** 2981252	**Quote #:**	**Sales Order #:** 900245895
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** ., Luis	
Well Name: Brothers 3119	**Well #:** 1-6H		**API/UWI #:** 15-033-21690
Field:	**City (SAP):** COLDWATER	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 7 Township 31S Range 19W			
Contractor: Lariat	**Rig/Platform Name/Num:** 41		
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well	**Job Type:** Cement Intermediate Casing		
Sales Person: NGUYEN, VINH	**Srvc Supervisor:** LEE, SEITH	**MBU ID Emp #:** 483600	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
GARCIA, DAVID F	13.5	519312	LEE, SEITH Adam	13.5	483600	NASH, JONATHAN Clark	13.5	524600

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
3/2/2013	13.5	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	5578. ft	**Job Depth TVD**			
Water Depth		**Wk Ht Above Floor**	20		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	01 - Mar - 2013	16:00	CST
On Location	02 - Mar - 2013	00:30	CST
Job Started	02 - Mar - 2013	10:30	CST
Job Completed	02 - Mar - 2013	12:00	CST
Departed Loc	02 - Mar - 2013	02:00	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				1000.	5578.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5578.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	1000.		

Sales/Rental/3rd Party (HES)

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

Tools and Accessories

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

Miscellaneous Materials

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

Fluid Data

Stage/Plug #: 1

HALLIBURTON

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Rig Supplied Gel Spacer		30.00	bbl	8.33	.0	.0	3	
2	Lead Cement	ECONOCEM (TM) SYSTEM (452992)	200.0	sacks	13.6	1.53	7.24	4.5	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	3	5.08
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	2 lbm	KOL-SEAL, BULK (100064233)							
	5.076 Gal	FRESH WATER							
4	Displacement		210.00	bbl	8.33	.0	.0	6	

Calculated Values		Pressures		Volumes					
Displacement	210	Shut In: Instant		Lost Returns	0	Cement Slurry	75	Pad	
Top Of Cement	3605	5 Min		Cement Returns	0	Actual Displacement	210	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	

Rates

Circulating	7	Mixing	4	Displacement	6	Avg. Job	5.5

Cement Left In Pipe	Amount	90 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 #:** 2981252	**Quote #:**	**Sales Order #:** 900281048
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Hill, Richard	
Well Name: Brothers 3119	**Well #:** 1-6H		**API/UWI #:** 15-033-21690
Field:	**City (SAP):** COLDWATER	**County/Parish:** Comanche	**State:** Kansas
Legal Description: Section 7 Township 31S Range 19W			
Job Purpose: Cement Production Liner			
Well Type: Development Well	**Job Type:** Cement Production Liner		
Sales Person: NGUYEN, VINH	**Srvc Supervisor:** RALSTON, ANTHONY	**MBU ID Emp #:** 448065	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BECERRA, JUAN Carlos	7	491933	JOURNAGAN, MICHAEL D	5	524224	RALSTON, ANTHONY Kenneth	7	448065
REYES GANDARA, JUAN Armando	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
3/11/2013	7	7						
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	10104. ft	**Job Depth TVD**	10104. ft		
Water Depth		**Wk Ht Above Floor**	15. ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out			
On Location			
Job Started			
Job Completed	15 - Feb - 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				5578.	10104.		
4.5" Production Liner	Unknown		4.5	4.	11.6	LTC	N-80	5174.	10104.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5578.		
4" Drill Pipe	Unknown		4.	3.34	14.	Unknown		.	5174.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			Baker
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			Baker
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 Spacer		30.00	bbl	8.5	.0	.0	4	
2	Primary Cement E923	ECONOCEM (TM) SYSTEM (452992)	550.0	sacks	13.6	1.48	6.9	5.5	6.9
	2 lbm	KOL-SEAL, BULK (100064233)							
	0.25 %	SA-1015, 50 LB SACK (102077046)							
	0.2 %	CFR-3, W/O DEFOAMER, 50 LB SK (100003653)							
	6.901 Gal	FRESH WATER							
3	Displacement		132.00	bbl	8.33	.0	.0	6	

Calculated Values		Pressures		Volumes					
Displacement	124	Shut In: Instant		Lost Returns		Cement Slurry	145	Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement	124	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	300

Rates							
Circulating		Mixing	5.5	Displacement	5.5	Avg. Job	5.5

Cement Left In Pipe	Amount	84 ft	Reason	Shoe Joint

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

The Information Stated Herein Is Correct	Customer Representative Signature

Sandridge Energy, INC.(mid-con.)

Comanche County (KS27S)
Sec 07-T31S-R19W
Brothers 1-6H/ Job #04109-431-22/ Lariat 41

Wellbore #1

Design: Wellbore #1

Standard Survey Report

25 March, 2013

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Brothers 1-6H/ Job #04109-431-22/ Lariat 41
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Site:	Sec 07-T31S-R19W	**MD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Well:	Brothers 1-6H/ Job #04109-431-22/ Lariat 41	**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 07-T31S-R19W

Site Position:		**Northing:**	256,387.00 usft	**Latitude:**	37° 22' 1.418 N
From:	Map	**Easting:**	1,728,232.00 usft	**Longitude:**	99° 26' 6.478 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-0.57 °

Well Brothers 1-6H/ Job #04109-431-22/ Lariat 41

Well Position	**+N/-S**	0.0 usft	**Northing:**	256,011.00 usft	**Latitude:**	37° 21' 57.807 N
	+E/-W	0.0 usft	**Easting:**	1,729,303.00 usft	**Longitude:**	99° 25' 53.166 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	2,160.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	02/15/13	5.39	65.28	51,825

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	0.71

Survey Program **Date** 03/25/13

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
1,219.0	10,070.0	Archer MWD Surveys (Wellbore #1)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1,219.0	1.10	285.50	1,218.9	3.1	-11.3	3.0	0.09	0.09	0.00
First Archer MWD Survey									
1,676.0	1.20	240.80	1,675.8	2.0	-19.7	1.7	0.19	0.02	-9.78
2,137.0	1.70	243.40	2,136.7	-3.5	-30.0	-3.8	0.11	0.11	0.56
2,597.0	1.10	263.50	2,596.6	-7.0	-40.5	-7.5	0.17	-0.13	4.37
3,054.0	1.00	51.00	3,053.5	-5.0	-41.8	-5.5	0.44	-0.02	32.28
3,511.0	0.70	80.10	3,510.5	-2.0	-35.9	-2.4	0.11	-0.07	6.37
3,967.0	1.70	39.70	3,966.4	3.7	-28.8	3.3	0.27	0.22	-8.86
4,150.0	1.30	50.50	4,149.3	7.1	-25.5	6.8	0.27	-0.22	5.90

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Brothers 1-6H/ Job #04109-431-22/ Lariat 41
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Site:	Sec 07-T31S-R19W	**MD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Well:	Brothers 1-6H/ Job #04109-431-22/ Lariat 41	**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)
4,181.0	1.20	52.60	4,180.3	7.5	-25.0	7.2	0.35	-0.32	6.77
4,211.0	2.60	23.50	4,210.3	8.3	-24.5	8.0	5.53	4.67	-97.00
4,242.0	5.20	23.90	4,241.2	10.3	-23.6	10.0	8.39	8.39	1.29
4,272.0	7.40	26.10	4,271.0	13.2	-22.2	13.0	7.38	7.33	7.33
4,303.0	9.30	25.70	4,301.7	17.3	-20.2	17.0	6.13	6.13	-1.29
4,333.0	10.70	29.50	4,331.2	21.9	-17.8	21.7	5.16	4.67	12.67
4,363.0	12.10	29.90	4,360.7	27.0	-14.9	26.9	4.67	4.67	1.33
4,394.0	13.60	27.80	4,390.9	33.1	-11.6	32.9	5.07	4.84	-6.77
4,424.0	14.50	24.30	4,420.0	39.6	-8.4	39.5	4.12	3.00	-11.67
4,454.0	15.30	19.80	4,449.0	46.8	-5.5	46.7	4.69	2.67	-15.00
4,485.0	17.20	13.00	4,478.7	55.1	-3.1	55.0	8.66	6.13	-21.94
4,515.0	20.00	9.10	4,507.2	64.5	-1.3	64.5	10.21	9.33	-13.00
4,546.0	23.20	6.80	4,536.0	75.8	0.3	75.8	10.68	10.32	-7.42
4,576.0	25.40	4.60	4,563.3	88.1	1.5	88.1	7.93	7.33	-7.33
4,606.0	27.70	1.30	4,590.2	101.4	2.2	101.5	9.11	7.67	-11.00
4,637.0	30.00	359.40	4,617.3	116.4	2.3	116.4	7.99	7.42	-6.13
4,667.0	32.10	358.80	4,643.0	131.9	2.0	131.9	7.08	7.00	-2.00
4,698.0	34.20	358.30	4,669.0	148.8	1.6	148.8	6.83	6.77	-1.61
4,728.0	36.40	358.60	4,693.5	166.1	1.1	166.1	7.36	7.33	1.00
4,758.0	38.60	359.00	4,717.3	184.4	0.8	184.4	7.38	7.33	1.33
4,789.0	39.90	359.30	4,741.3	204.0	0.5	204.0	4.24	4.19	0.97
4,819.0	41.10	359.20	4,764.1	223.5	0.2	223.5	4.01	4.00	-0.33
4,850.0	42.40	359.10	4,787.2	244.1	-0.1	244.1	4.20	4.19	-0.32
4,880.0	44.00	358.80	4,809.1	264.7	-0.5	264.6	5.38	5.33	-1.00
4,911.0	45.90	358.80	4,831.0	286.6	-0.9	286.5	6.13	6.13	0.00
4,941.0	48.00	358.80	4,851.5	308.5	-1.4	308.4	7.00	7.00	0.00
4,971.0	49.00	358.80	4,871.4	330.9	-1.9	330.9	3.33	3.33	0.00
5,002.0	49.10	358.20	4,891.7	354.3	-2.5	354.3	1.50	0.32	-1.94
5,032.0	48.80	358.10	4,911.4	377.0	-3.2	376.9	1.03	-1.00	-0.33
5,063.0	48.90	358.30	4,931.8	400.3	-3.9	400.2	0.58	0.32	0.65
5,093.0	48.80	358.70	4,951.5	422.9	-4.5	422.8	1.06	-0.33	1.33
5,124.0	49.10	358.50	4,971.9	446.2	-5.1	446.1	1.08	0.97	-0.65
5,154.0	49.40	359.00	4,991.5	469.0	-5.6	468.9	1.61	1.00	1.67
5,185.0	51.00	359.50	5,011.3	492.8	-5.9	492.7	5.31	5.16	1.61
5,215.0	53.00	359.60	5,029.8	516.4	-6.1	516.3	6.67	6.67	0.33
5,245.0	55.60	359.70	5,047.3	540.8	-6.2	540.7	8.67	8.67	0.33
5,276.0	59.30	359.80	5,064.0	566.9	-6.4	566.8	11.94	11.94	0.32
5,307.0	63.00	359.20	5,078.9	594.1	-6.6	593.9	12.06	11.94	-1.94
5,337.0	66.10	359.50	5,091.8	621.1	-6.9	621.0	10.37	10.33	1.00
5,368.0	68.80	359.90	5,103.7	649.8	-7.1	649.6	8.79	8.71	1.29
5,398.0	71.30	0.40	5,113.9	678.0	-7.0	677.8	8.48	8.33	1.67
5,428.0	73.30	1.10	5,123.0	706.5	-6.6	706.4	7.03	6.67	2.33

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Brothers 1-6H/ Job #04109-431-22/ Lariat 41
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Site:	Sec 07-T31S-R19W	**MD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Well:	Brothers 1-6H/ Job #04109-431-22/ Lariat 41	**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)
5,459.0	75.80	1.60	5,131.3	736.4	-5.9	736.3	8.21	8.06	1.61
5,489.0	78.20	1.30	5,138.0	765.6	-5.2	765.5	8.06	8.00	-1.00
5,520.0	80.70	1.40	5,143.7	796.1	-4.4	796.0	8.07	8.06	0.32
5,550.0	84.30	0.70	5,147.6	825.8	-3.9	825.7	12.22	12.00	-2.33
5,565.0	86.00	0.30	5,148.9	840.8	-3.8	840.7	11.64	11.33	-2.67
5,616.0	90.70	359.50	5,150.4	891.7	-3.9	891.6	9.35	9.22	-1.57
5,647.0	90.90	359.70	5,149.9	922.7	-4.1	922.6	0.91	0.65	0.65
5,679.0	91.10	359.40	5,149.4	954.7	-4.3	954.6	1.13	0.63	-0.94
5,711.0	91.80	359.10	5,148.6	986.7	-4.7	986.6	2.38	2.19	-0.94
5,742.0	91.90	359.30	5,147.6	1,017.7	-5.2	1,017.5	0.72	0.32	0.65
5,774.0	90.20	358.90	5,147.0	1,049.7	-5.7	1,049.5	5.46	-5.31	-1.25
5,805.0	89.30	0.10	5,147.1	1,080.7	-5.9	1,080.5	4.84	-2.90	3.87
5,837.0	89.80	0.80	5,147.4	1,112.7	-5.7	1,112.5	2.69	1.56	2.19
5,868.0	89.80	2.40	5,147.5	1,143.7	-4.8	1,143.5	5.16	0.00	5.16
5,900.0	90.60	3.00	5,147.4	1,175.6	-3.3	1,175.5	3.12	2.50	1.88
5,931.0	90.90	2.90	5,147.0	1,206.6	-1.7	1,206.5	1.02	0.97	-0.32
5,963.0	91.20	2.80	5,146.4	1,238.5	-0.1	1,238.4	0.99	0.94	-0.31
5,994.0	91.90	3.00	5,145.5	1,269.5	1.4	1,269.4	2.35	2.26	0.65
6,025.0	92.40	3.20	5,144.4	1,300.4	3.1	1,300.4	1.74	1.61	0.65
6,057.0	91.10	3.10	5,143.4	1,332.4	4.9	1,332.3	4.07	-4.06	-0.31
6,088.0	91.20	3.30	5,142.8	1,363.3	6.6	1,363.3	0.72	0.32	0.65
6,120.0	88.80	2.60	5,142.8	1,395.3	8.2	1,395.2	7.81	-7.50	-2.19
6,152.0	88.20	2.40	5,143.6	1,427.2	9.6	1,427.2	1.98	-1.88	-0.63
6,183.0	88.40	1.50	5,144.5	1,458.2	10.7	1,458.2	2.97	0.65	-2.90
6,214.0	89.00	1.70	5,145.2	1,489.2	11.6	1,489.2	2.04	1.94	0.65
6,246.0	89.40	1.70	5,145.7	1,521.1	12.5	1,521.2	1.25	1.25	0.00
6,277.0	88.60	2.20	5,146.2	1,552.1	13.6	1,552.2	3.04	-2.58	1.61
6,309.0	88.80	2.70	5,146.9	1,584.1	14.9	1,584.1	1.68	0.63	1.56
6,340.0	89.70	3.60	5,147.4	1,615.0	16.6	1,615.1	4.11	2.90	2.90
6,372.0	90.10	3.90	5,147.4	1,647.0	18.7	1,647.1	1.56	1.25	0.94
6,403.0	88.90	3.00	5,147.7	1,677.9	20.6	1,678.0	4.84	-3.87	-2.90
6,435.0	88.80	2.80	5,148.3	1,709.9	22.2	1,710.0	0.70	-0.31	-0.63
6,466.0	88.80	2.20	5,149.0	1,740.8	23.6	1,741.0	1.94	0.00	-1.94
6,498.0	88.50	2.30	5,149.7	1,772.8	24.8	1,773.0	0.99	-0.94	0.31
6,529.0	89.10	2.90	5,150.4	1,803.7	26.2	1,803.9	2.74	1.94	1.94
6,561.0	89.90	2.40	5,150.7	1,835.7	27.7	1,835.9	2.95	2.50	-1.56
6,592.0	90.10	1.90	5,150.7	1,866.7	28.9	1,866.9	1.74	0.65	-1.61
6,624.0	90.40	2.30	5,150.5	1,898.7	30.0	1,898.9	1.56	0.94	1.25
6,655.0	89.90	1.70	5,150.4	1,929.7	31.1	1,929.9	2.52	-1.61	-1.94
6,687.0	90.20	2.00	5,150.4	1,961.6	32.2	1,961.9	1.33	0.94	0.94
6,718.0	89.90	2.10	5,150.4	1,992.6	33.3	1,992.9	1.02	-0.97	0.32
6,813.0	90.40	1.70	5,150.1	2,087.6	36.4	2,087.9	0.67	0.53	-0.42
6,907.0	91.30	1.40	5,148.7	2,181.5	39.0	2,181.8	1.01	0.96	-0.32

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Brothers 1-6H/ Job #04109-431-22/ Lariat 41
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Site:	Sec 07-T31S-R19W	**MD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Well:	Brothers 1-6H/ Job #04109-431-22/ Lariat 41	**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)
7,002.0	92.30	1.40	5,145.8	2,276.4	41.3	2,276.8	1.05	1.05	0.00
7,096.0	90.20	1.20	5,143.7	2,370.4	43.4	2,370.7	2.24	-2.23	-0.21
7,191.0	91.00	1.90	5,142.7	2,465.3	46.0	2,465.7	1.12	0.84	0.74
7,285.0	89.10	1.80	5,142.6	2,559.3	49.0	2,559.7	2.02	-2.02	-0.11
7,348.0	86.20	2.50	5,145.2	2,622.2	51.4	2,622.6	4.74	-4.60	1.11
7,380.0	86.90	1.90	5,147.1	2,654.1	52.6	2,654.6	2.88	2.19	-1.88
7,412.0	88.40	2.00	5,148.4	2,686.1	53.7	2,686.5	4.70	4.69	0.31
7,444.0	89.30	2.10	5,149.1	2,718.0	54.8	2,718.5	2.83	2.81	0.31
7,475.0	91.50	0.90	5,148.9	2,749.0	55.6	2,749.5	8.08	7.10	-3.87
7,507.0	92.10	359.80	5,147.9	2,781.0	55.8	2,781.5	3.91	1.88	-3.44
7,539.0	92.10	359.20	5,146.7	2,813.0	55.6	2,813.5	1.87	0.00	-1.88
7,570.0	92.20	359.40	5,145.5	2,844.0	55.2	2,844.4	0.72	0.32	0.65
7,602.0	93.20	359.40	5,144.0	2,875.9	54.8	2,876.4	3.13	3.13	0.00
7,634.0	93.80	359.10	5,142.1	2,907.9	54.4	2,908.3	2.10	1.88	-0.94
7,666.0	94.60	358.90	5,139.7	2,939.8	53.9	2,940.2	2.58	2.50	-0.63
7,697.0	94.40	358.80	5,137.3	2,970.7	53.2	2,971.1	0.72	-0.65	-0.32
7,729.0	93.00	359.60	5,135.2	3,002.6	52.8	3,003.0	5.04	-4.38	2.50
7,761.0	93.00	360.00	5,133.6	3,034.5	52.7	3,035.0	1.25	0.00	1.25
7,793.0	91.90	358.90	5,132.2	3,066.5	52.4	3,066.9	4.86	-3.44	-3.44
7,824.0	91.80	358.70	5,131.2	3,097.5	51.7	3,097.9	0.72	-0.32	-0.65
7,856.0	91.80	358.00	5,130.2	3,129.5	50.8	3,129.9	2.19	0.00	-2.19
7,888.0	92.70	358.40	5,128.9	3,161.4	49.8	3,161.8	3.08	2.81	1.25
7,919.0	92.70	358.20	5,127.5	3,192.4	48.9	3,192.7	0.64	0.00	-0.65
7,951.0	93.30	358.10	5,125.8	3,224.3	47.9	3,224.7	1.90	1.88	-0.31
7,983.0	90.90	358.00	5,124.6	3,256.3	46.8	3,256.6	7.51	-7.50	-0.31
8,014.0	89.10	358.80	5,124.6	3,287.3	45.9	3,287.6	6.35	-5.81	2.58
8,046.0	89.50	358.70	5,125.0	3,319.2	45.2	3,319.6	1.29	1.25	-0.31
8,078.0	89.90	358.00	5,125.2	3,351.2	44.3	3,351.5	2.52	1.25	-2.19
8,110.0	90.30	357.60	5,125.1	3,383.2	43.1	3,383.5	1.77	1.25	-1.25
8,141.0	91.50	358.80	5,124.6	3,414.2	42.1	3,414.4	5.47	3.87	3.87
8,173.0	92.10	359.00	5,123.6	3,446.2	41.5	3,446.4	1.98	1.88	0.63
8,205.0	92.20	359.10	5,122.4	3,478.1	40.9	3,478.4	0.44	0.31	0.31
8,236.0	91.70	358.80	5,121.4	3,509.1	40.4	3,509.3	1.88	-1.61	-0.97
8,268.0	91.80	0.70	5,120.4	3,541.1	40.2	3,541.3	5.94	0.31	5.94
8,300.0	92.30	0.50	5,119.2	3,573.1	40.6	3,573.3	1.68	1.56	-0.63
8,332.0	92.80	0.70	5,117.8	3,605.0	40.9	3,605.3	1.68	1.56	0.63
8,363.0	91.50	0.70	5,116.7	3,636.0	41.3	3,636.3	4.19	-4.19	0.00
8,394.0	91.20	0.40	5,115.9	3,667.0	41.6	3,667.2	1.37	-0.97	-0.97
8,426.0	89.80	1.40	5,115.7	3,699.0	42.1	3,699.2	5.38	-4.38	3.13
8,457.0	89.70	1.40	5,115.8	3,730.0	42.8	3,730.2	0.32	-0.32	0.00
8,489.0	89.90	1.40	5,115.9	3,762.0	43.6	3,762.2	0.63	0.63	0.00
8,520.0	89.30	1.90	5,116.1	3,793.0	44.5	3,793.2	2.52	-1.94	1.61

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Brothers 1-6H/ Job #04109-431-22/ Lariat 41
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Site:	Sec 07-T31S-R19W	**MD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Well:	Brothers 1-6H/ Job #04109-431-22/ Lariat 41	**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)
8,552.0	88.80	1.70	5,116.6	3,824.9	45.5	3,825.2	1.68	-1.56	-0.63
8,583.0	88.90	1.40	5,117.3	3,855.9	46.4	3,856.2	1.02	0.32	-0.97
8,615.0	89.00	1.70	5,117.9	3,887.9	47.2	3,888.2	0.99	0.31	0.94
8,646.0	89.30	1.70	5,118.3	3,918.9	48.1	3,919.2	0.97	0.97	0.00
8,678.0	89.80	2.00	5,118.6	3,950.9	49.2	3,951.2	1.82	1.56	0.94
8,709.0	90.00	2.20	5,118.6	3,981.9	50.3	3,982.2	0.91	0.65	0.65
8,741.0	90.30	2.10	5,118.5	4,013.8	51.5	4,014.2	0.99	0.94	-0.31
8,772.0	90.90	2.40	5,118.2	4,044.8	52.7	4,045.2	2.16	1.94	0.97
8,804.0	90.90	2.40	5,117.7	4,076.8	54.1	4,077.1	0.00	0.00	0.00
8,835.0	90.20	2.80	5,117.4	4,107.7	55.5	4,108.1	2.60	-2.26	1.29
8,867.0	90.30	2.60	5,117.3	4,139.7	57.0	4,140.1	0.70	0.31	-0.63
8,898.0	89.90	2.70	5,117.2	4,170.7	58.4	4,171.1	1.33	-1.29	0.32
8,930.0	89.40	2.30	5,117.4	4,202.6	59.8	4,203.1	2.00	-1.56	-1.25
8,961.0	89.50	2.00	5,117.7	4,233.6	61.0	4,234.1	1.02	0.32	-0.97
8,993.0	89.50	2.40	5,118.0	4,265.6	62.2	4,266.0	1.25	0.00	1.25
9,024.0	89.70	2.40	5,118.2	4,296.6	63.5	4,297.0	0.65	0.65	0.00
9,056.0	89.40	2.50	5,118.5	4,328.5	64.9	4,329.0	0.99	-0.94	0.31
9,087.0	89.30	2.40	5,118.8	4,359.5	66.2	4,360.0	0.46	-0.32	-0.32
9,119.0	89.60	2.10	5,119.1	4,391.5	67.4	4,392.0	1.33	0.94	-0.94
9,150.0	89.30	1.90	5,119.4	4,422.5	68.5	4,423.0	1.16	-0.97	-0.65
9,182.0	87.10	1.10	5,120.4	4,454.4	69.4	4,454.9	7.31	-6.88	-2.50
9,213.0	86.50	1.00	5,122.2	4,485.4	69.9	4,485.9	1.96	-1.94	-0.32
9,245.0	86.80	0.80	5,124.0	4,517.3	70.4	4,517.8	1.13	0.94	-0.63
9,276.0	86.80	0.40	5,125.8	4,548.3	70.8	4,548.8	1.29	0.00	-1.29
9,307.0	87.60	359.50	5,127.3	4,579.2	70.7	4,579.8	3.88	2.58	-2.90
9,339.0	88.40	359.00	5,128.4	4,611.2	70.3	4,611.7	2.95	2.50	-1.56
9,370.0	90.70	358.80	5,128.6	4,642.2	69.7	4,642.7	7.45	7.42	-0.65
9,402.0	91.80	358.10	5,127.9	4,674.2	68.9	4,674.7	4.07	3.44	-2.19
9,433.0	92.00	358.20	5,126.9	4,705.1	67.9	4,705.6	0.72	0.65	0.32
9,465.0	92.40	358.30	5,125.7	4,737.1	66.9	4,737.6	1.29	1.25	0.31
9,496.0	92.00	357.90	5,124.5	4,768.1	65.9	4,768.5	1.82	-1.29	-1.29
9,528.0	92.20	357.70	5,123.3	4,800.0	64.6	4,800.5	0.88	0.63	-0.63
9,559.0	92.60	357.70	5,122.0	4,831.0	63.4	4,831.4	1.29	1.29	0.00
9,591.0	91.30	357.20	5,120.9	4,862.9	62.0	4,863.3	4.35	-4.06	-1.56
9,622.0	91.00	356.90	5,120.3	4,893.9	60.4	4,894.2	1.37	-0.97	-0.97
9,654.0	89.70	357.00	5,120.1	4,925.8	58.7	4,926.2	4.07	-4.06	0.31
9,685.0	89.80	357.50	5,120.2	4,956.8	57.2	4,957.1	1.64	0.32	1.61
9,717.0	90.20	357.30	5,120.2	4,988.8	55.7	4,989.1	1.40	1.25	-0.63
9,748.0	90.50	358.00	5,120.0	5,019.7	54.4	5,020.0	2.46	0.97	2.26
9,780.0	90.50	357.40	5,119.8	5,051.7	53.2	5,052.0	1.87	0.00	-1.88
9,811.0	90.90	357.30	5,119.4	5,082.7	51.7	5,082.9	1.33	1.29	-0.32
9,843.0	91.30	357.50	5,118.8	5,114.6	50.3	5,114.9	1.40	1.25	0.63
9,874.0	91.80	357.30	5,117.9	5,145.6	48.9	5,145.8	1.74	1.61	-0.65

Archer

Survey Report

Company:	Sandridge Energy, INC.(mid-con.)	**Local Co-ordinate Reference:**	Well Brothers 1-6H/ Job #04109-431-22/ Lariat 41
Project:	Comanche County (KS27S)	**TVD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Site:	Sec 07-T31S-R19W	**MD Reference:**	WELL @ 2178.0usft (Original Well Elev)
Well:	Brothers 1-6H/ Job #04109-431-22/ Lariat 41	**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)
9,906.0	91.40	358.50	5,117.0	5,177.6	47.7	5,177.7	3.95	-1.25	3.75
9,937.0	90.90	358.20	5,116.4	5,208.5	46.8	5,208.7	1.88	-1.61	-0.97
9,969.0	90.10	357.50	5,116.1	5,240.5	45.6	5,240.7	3.32	-2.50	-2.19
10,000.0	89.90	357.60	5,116.1	5,271.5	44.3	5,271.6	0.72	-0.65	0.32
10,022.0	90.10	357.60	5,116.1	5,293.5	43.4	5,293.6	0.91	0.91	0.00
Last Archer MWD Survey									
10,070.0	90.10	357.60	5,116.1	5,341.4	41.4	5,341.5	0.00	0.00	0.00
Projection to TD - PBHL Brothers 1-6H									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,219.0	1,218.9	3.1	-11.3	First Archer MWD Survey
10,022.0	5,116.1	5,293.5	43.4	Last Archer MWD Survey
10,070.0	5,116.1	5,341.4	41.4	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/9/2013
Job End Date:	4/12/2013
State:	Kansas
County:	Comanche
API Number:	15-033-21690-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Brothers 3119 1-6H
Longitude:	-99.43140000
Latitude:	37.36600000
Datum:	NAD27
Federal/Tribal Well:	NO
Total Base Water Volume (gal):	1,991,814
Total Base Non Water Volume:	

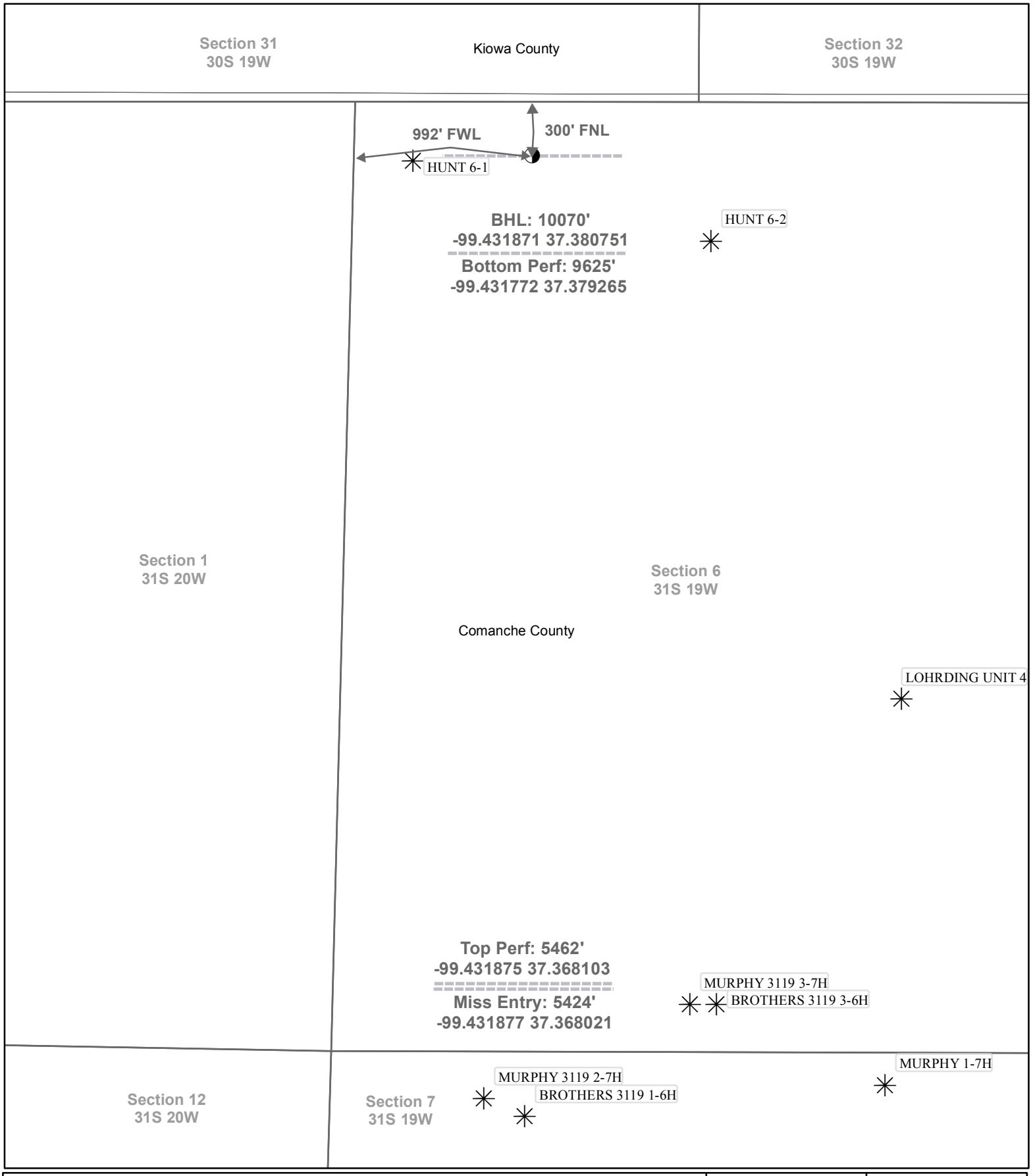
Hydraulic Fracturing Fluid Composition:

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)*	-		95.03520	
			Crystalline silica	14808-60-7	96.21285	4.77678	
			Hydrogen chloride	7647-01-0	2.69176	0.13364	
			Distillates (petroleum), hydrotreated light	64742-47-8	0.34827	0.01729	
			Acrylamide/ammonium acrylate copolymer	26100-47-0	0.29023	0.01441	
			Ammonium chloride	12125-02-9	0.16688	0.00829	
			Polyethylene glycol monohexyl ether	31726-34-8	0.10830	0.00538	
			Ethoxylated oleic acid	9004-96-0	0.02902	0.00144	
			Trisodium ortho phosphate	7601-54-9	0.02618	0.00130	
			Sorbitan monooleate	1338-43-8	0.02539	0.00126	
			Sodium erythorbate	6381-77-7	0.01900	0.00094	
			Sorbitol Tetraoleate	61723-83-9	0.01814	0.00090	
			Alcohols, C12-C16, ethoxylated	68551-12-2	0.01509	0.00075	

			Alcohols, C10-C16, ethoxylated	68002-97-1	0.01495	0.00074	
			Alcohols, C12-C14, ethoxylated	68439-50-9	0.01495	0.00074	
			Glutaraldehyde	111-30-8	0.01440	0.00071	
			Methanol	67-56-1	0.01158	0.00058	
			Fatty acids, tall-oil	61790-12-3	0.00840	0.00042	
			C14 alpha olefin ethoxylate	84133-50-6	0.00798	0.00040	
			Ethane-1,2-diol	107-21-1	0.00745	0.00037	
			2-Propenoic acid, ammonium salt	10604-69-0	0.00726	0.00036	
			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.00691	0.00034	
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00475	0.00024	
			Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00322	0.00016	
			Alkyl(c12-16) dimethylbenzyl ammonium chloride	68424-85-1	0.00257	0.00013	
			Prop-2-yn-1-ol	107-19-7	0.00215	0.00011	
			Alkenes, C>10 a-	64743-02-8	0.00143	0.00007	
			Propan-2-ol	67-63-0	0.00095	0.00005	
			Ethanol	64-17-5	0.00031	0.00002	
			Potassium hydroxide	1310-58-3	0.00022	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 Brothers 3119 1-6H
Comanche County, Kansas
T&R: 31S 19W
Section: 6, 992' FWL & 300' FNL
-99.431871 37.380751

1 in = 703 ft

0 500 1,000 2,000 Feet

N

Draftsman: Aaron Birk	Draft Date: 6/3/2013
Drawing Name/Number: Addendum_Brothers_1-6H.mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	

Remarks

Tiffany Golay 05/21/013 09:28 am	Additional Fluid Mgmt Info: 240 bbls hauled to Weinett Disposal LLC, NW/4 Section 1079 Block 43, Lipscomb, TX, 10-0992
Tiffany Golay 05/15/013 10:48 am	Conductor weight= 94 lbs/ft
Tiffany Golay 03/12/013 08:20 am	TD= 10,070'