

Confidentiality Requested:

Yes No

#### Kansas Corporation Commission Oil & Gas Conservation Division

1108860

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 #			API No. 15					
Name:			Spot Description:					
Address 1:			Sec	TwpS. R				
Address 2:			Feet from North / South Line of Section					
City: St	ate: Zip	D:+	Feet	from East / West Line of Section				
Contact Person:			Footages Calculated from Ne	earest Outside Section Corner:				
Phone: ()			□ NE □ NW	☐ SE ☐ SW				
CONTRACTOR: License #			GPS Location: Lat:	, Long:				
Name:				g. xx.xxxxx) (e.gxxx.xxxxx)				
Wellsite Geologist:			Datum: NAD27 NAD27					
Purchaser:			County:					
Designate Type of Completion:			Lease Name:	Well #:				
New Well Re-	·Fntrv	Workover	Field Name:					
	_		Producing Formation:					
☐ Oil ☐ WSW	SWD	SIOW	Elevation: Ground:	Kelly Bushing:				
☐ Gas ☐ D&A ☐ OG	☐ ENHR	☐ SIGW ☐ Temp. Abd.	Total Vertical Depth:	Plug Back Total Depth:				
CM (Coal Bed Methane)	G3W	Temp. Abd.	Amount of Surface Pipe Set a	and Cemented at: Fee				
Cathodic Other (Core	Expl etc.)		Multiple Stage Cementing Co					
If Workover/Re-entry: Old Well Inf				Fee				
Operator:				nent circulated from:				
Well Name:			, ,	w/sx cm				
Original Comp. Date:			loot doparto.					
	_	NHR Conv. to SWD						
Deepening Re-perf. Plug Back	Conv. to GS		Drilling Fluid Management F (Data must be collected from the					
Commingled	Permit #:		Chloride content:	ppm Fluid volume: bbl				
Dual Completion	Permit #:		Dewatering method used:					
SWD	Permit #:		Location of fluid disposal if ha	auled offsite:				
☐ ENHR	Permit #:		One water Name .					
GSW	Permit #:							
				License #:				
Spud Date or Date Rea	iched TD	Completion Date or		TwpS. R				
Recompletion Date		Recompletion Date	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 III Approved by: Date:							

Page Two



Operator Name:				_ Lease I	Name: _			Well #:		
Sec Twp	S. R	East	West	County	:					
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in press o surface test, along v	ures, whe	ther shut-in pre chart(s). Attach	ssure reac extra shee	hed stati	c level, hydrosta space is neede	tic pressures, b d.	ottom hole temp	erature, fluid recov	
Final Radioactivity Lo files must be submitte						ogs must be ema	alled to kcc-well-	logs@kcc.ks.go	v. Digital electronic	
Drill Stem Tests Taker (Attach Additional		Y	es No			J	on (Top), Depth		Sample	
Samples Sent to Geo	logical Survey	Y	es No		Nam	е		Тор	Datum	
Cores Taken Electric Log Run			es  No							
List All E. Logs Run:										
				RECORD	Ne					
	0: 11.1					ermediate, product		" 0 1	T 15	
Purpose of String	Size Hole Drilled		ze Casing t (In O.D.)	Weig Lbs.		Setting Depth	Type of Cement	# Sacks Used	Type and Percer Additives	
			ADDITIONAL	CEMENTI	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Туре	of Cement # Sacks Used			Type and Percent Additives				
Perforate Protect Casing	Top Dottom									
Plug Back TD Plug Off Zone										
1 lug 0 li 20 lio										
Did you perform a hydrau	ulic fracturing treatment	on this well	?			Yes	No (If No, s	skip questions 2 a	nd 3)	
Does the volume of the t			-		-			skip question 3)		
Was the hydraulic fractur	ing treatment informatio	n submitted	to the chemical of	disclosure re	gistry?	Yes	No (If No, i	ill out Page Three	of the ACO-1)	
Shots Per Foot			RD - Bridge Plug Each Interval Perl				cture, Shot, Ceme	nt Squeeze Recor	rd Depth	
						(* *			200	
TUBING RECORD:	Size:	Set At:		Packer A	t·	Liner Run:				
		0017111				[	Yes N	o		
Date of First, Resumed	Production, SWD or EN	HR.	Producing Meth	nod:	g 🗌	Gas Lift (	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat	er B	bls.	Gas-Oil Ratio	Gravity	
DIODOCITI	01.05.040			4ETUOD 05	. 00145/	TION:		DDOD! ICT!		
DISPOSITION Solo	ON OF GAS:  Used on Lease		N Open Hole	∥ETHOD OF Perf.			mmingled	PRODUCTION	ON INTERVAL:	
	bmit ACO-18.)		Other (Specify)		(Submit		mit ACO-4)			

Form	ACO1 - Well Completion			
Operator SandRidge Exploration and Production LLC				
Well Name	Moore 3407 1-35H			
Doc ID	1108860			

## All Electric Logs Run

Induction		
Porosity		
Mud Log		
Boresight		

Form	ACO1 - Well Completion			
Operator SandRidge Exploration and Production LLC				
Well Name	Moore 3407 1-35H			
Doc ID	1108860			

### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8404-8723	4202 bbls water, 36 bbls acid, 75M lbs sd, 4316 TLTR	
5	7916-8310	4195 bbls water, 36 bbls acid, 75M lbs sd, 8254 TLTR	
5	7593-7854	4190 bbls water, 36 bbls acid, 75M lbs sd, 12110 TLTR	
5	7026-7400	4181 bbls water, 36 bbls acid, 75M lbs sd, 16199 TLTR	
5	6712-6908	3423 bbls water, 36 bbls acid, 60M lbs sd, 20254 TLTR	
5	6386-6504	2666 bbls water, 36 bbls acid, 45M lbs sd, 23841 TLTR	
5	5698-5860	3108 bbls water, 36 bbls acid, 60M lbs sd, 26457 TLTR	

Form	ACO1 - Well Completion			
Operator SandRidge Exploration and Production LLC				
Well Name	Moore 3407 1-35H			
Doc ID	1108860			

#### 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	106	Mid- Continent Conductor grout	10	none
Surface	12.25	9.63	36	822	O-Tex Lite Premium Plus 65/ Premium Plus (Class C)	520	(6% gel) 2% Calcium Chloride, 1/4 pps Cello- Flake, .5% C-41P
Intermedia te	8.75	7	26	5267	50/50 Poz Premium/ Premium	280	4% gel, .4% C12, .1% C37, .5% C41P, 2 lb/sk Phenoseal
Liner	6.12	4.5	11.6	8800	50/50 Premium Poz	365	4% gel, .4% C12, .1% C37, .5% C41P, 2 lb/sk Phenoseal

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/

Sam Brownback, Governor

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

January 21, 2013

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

Re: ACO1 API 15-077-21889-01-00 Moore 3407 1-35H SE/4 Sec.35-34S-07W Harper 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



P.O. Box 1570

Woodward, OK 73802

Phone: (580)254-5400 Fax: (580)254-3242

Date	Invoice #
12/11/2012	1604

Invoice

#### Bill To

SandRidge Energy, Inc. Attn: Purchasing Mgr. 123 Robert S. Kerr Avenue Oklahoma City, OK. 73102

Ordered By	Terms	Date of Service	Lease Name/Legal Desc.	Drilling Rig
Parker	Net 45	12/11/2012	Moore 3407 1-35H, Harper Cnty, KS	Unit 9

		1,00 10		12/11/2012	Moore 5407 1-5511, Tranper City, KS		Olit 9			
	Item	Quantity		Description						
20" Pipe				Drilled 90 ft. cor Furnished 90 ft. Drilled 80 ft. mo Furnished 80 ft. Drilled 6' X 6' cc Furnished and se Furnished mud a Transport mud ar Furnished grout Furnished delder Furnished labor a Furnished cover Furnished and se Permits	of 20 i use hot of 16 i use hot 16 i lilar hot 16 i lilar hot 6 i X nd wa and wat and tru oump i and i equal to the composition of the composition	nch conduct le nch mouse h le of tinhorn ter er to location teking to loc materials uipment for panels arou  E Numbe ell Name ode: 850 mount: 1	nole pipe n eation	zur+		
						Subto	tal Tax (0.0%)		\$17,340.0 \$0.0	$\dashv$
							Total	\$17,340		_

JOB SUMMARY						SOK 2292 01/05/13				₹			
Harper	State Kan:		COMPANY	dridge Exploration & Produc				CUSTOMER REP					
LEASE NAME		Vel No.	JOB TYPE	OB TYPE EN				Dewayne Burt					
Moore 34	07 1-	35H	Surfac	e					Danie	I We	ells		
Daniel Wells		T				_				1			
Emmit Brock		+			$\vdash$	_				$\vdash$			
David Settlemier		$\dashv$			$\vdash$	-				$\vdash$			
Dustin Odom		$\top$			$\vdash$	-				$\vdash$			
Form. Name	7	Type:			11					Ш			
Packer Type		Set At	#REF!		Call		Out	On Location		Job	Started		ompleted
Bottom Hole Terr		ressu		Date	1	1/0	6/2013	1/6/2	013		1/6/2013	1.	/7/2013
Retainer Depth		otal D		Time	l	15	500	1900			2319		0.40
	Tools and Acce			THIC			,,,,	Well I			2013		040
Type and	Size Qt		Make				New/Used	Weight		rade	From	To	Max, Allow
Auto Fill Tube	0		IR	Casing				36#	9 5/8"		Surface	827'	1,500
Insert Float Val	0		IR	Liner									
Centralizers	0		IR	Liner									
Top Plug HEAD	1	-	IR	Tubing		_			0				
Limit clamp	0	-	IR IR	Drill Pi									
Weld-A	0	+	IR IR	Open F					12 1/4	1"	Surface	822'	Shots/Ft.
Texas Pattern Gu		+-	IR IR	Perfora Perfora						-+			
Cement Basket	0		İR	Perfora						-			
	Materials			Hours			tion	Operating	Hours		Descrint	ion of Job	·
Mud Type	WBM Densi	ty	9 Lb/Gal	Date			lours	Date	Hour	s	Surface	מטע וס ווסנו	
Disp. Fluid F Spacer type res	resh Water Densi sh Wate BBL.	10	8.33 Lb/Gal	1/6	_			1/7			Surface		
Spacer type 1es	BBL.	10	8.33	-	-					_			
Acid Type	Gal		%	-	$\rightarrow$					_			
Acid Type	Gal.		%							$\dashv$	-		
Surfactant	Gal.		In		$\neg$				-	_			
NE Agent	Gal		In								1		
Fluid Loss	Gal/Lb		ln										
Gelling Agent Fric. Red.	Gal/Lb Gal/Lb _		In		_								
MISC.	Gal/Lb —		In	Total	$\dashv$		0.0	T-4-1	0.0	_	-		
	100 0000 0-2000		""	rotai	L		0.0	Total	0.0				
Perfpac Balls	Q	ty.	-					Pre	essures				
Other				MAX		1.50	00 PSI	AVG.	30	0			
Other								Average	Rates in	BPN	1		
Other				MAX		6	BPM	AVG					
Other				I			4-9		Left in F				
Otrici				Feet	-	-	47	Reason	SHOE	MIOIN	1		
				Ce	men	t Da	ata						
Stage Sacks	Cement			Additives	5						W/Rq.	Yield	Lbs/Gal
1 360 FEX 2 160 Pr	Lite Premium Pl	us 65	(6% Gel) 2% Calci	um Chlori	de - '	1/4p	ps Cello-Fl	ake5% C	-41P		10.88	1.84	12.70
2 160 Pr	emium Plus (Clas	s C)	2% Calcium Chlor	ide - 1/4p <sub>l</sub>	os Ce	ello-	-Flake				6.32	1.32	14.80
		$\rightarrow$											
				Cum									
Preflush	Tv	pe:		Suii	man		lush:	вы	10.0	70	T	F	A/
Breakdown		AXIML	JM 1,	500 PSI				Gal - BBI	N/A		Type: Pad:Bbl -	Fresh	N/A
22				O/FULL	E	xce	ess /Return		33		Calc.Dist		60
Average		tual T		JRFACE			. TOC:		SURF		_ Actual Di		60.00
sip5 Min.		Min	lug PSI: 15 Min	1,040				PSI:	320		Disp:Bbl		60.00
O mill i.		- (VIIII)	15 IVIII				ent Slurry: I Volume		156				
		T			- 1	Utal	volume	BBI	226.	UU			
							2						
CUSTOMER	REPRESENT	ΔΤΙ\/		ayn	P	13	w.t.						
- COOTOMEN	THE INLOCIVE	/\IIV	- 1400	wy	~/	9	cuel.	SIGNATURE					
						-		SICIALI OILE					1

		OB SUMI	MAR'	/		PROJECT NUMBER	2317	TICK		01/12/13		
COUNTY State COMPANY Harper Kansas Sandridge Exploration & Production							Dwayne Burt					
Harper r	Well No.							EMPLOYEE NAME				
Moore 3407	1-35H	Intermedi	iate				Louis	Arney	Υ			
EMP NAME												
Lewis Arney		le Womack						_				
Jason Jones	Er	ic Parsons						_				
Marcos Quintana				-								
Danny Tewell				$\perp$					-			
Form. Name	гуре:			Cal	led Out	On Location	n	Job St	tarted	Job Co	mpleted	
Packer Type	Set At	3,880	Date	Out	1/12/2013	1/12/2	013		12/2013	1/1	12/2013	
Bottom Hole Temp. 155		ure										
Retainer Depth	Total !	Depth 5287	Time		5:00am	9:00 Well [	2010	1	0:30	1 72	2:15	
Tools and					New/Used	Weight		ade	From	То	Max. Allow	
Type and Size Auto Fill Tube	Qty 0	Make IR	Casing		Newrosed	26#	7"		Surface	10	5,000	
Insert Float Va	0	IR	Liner									
Centralizers	0	IR	Liner									
Top Plug	0	IR	Tubing				0					
HEAD	0	IR	Drill Pip									
Limit clamp	0	IR	Open F				8 3/4	-	Surface	5,287	Shots/Ft.	
Weld-A	0	IR IR	Perfora					-				
Texas Pattern Guide Shoe Cement Basket	0	İR	Perfora					_				
Materi	als				ocation	Operating	Hours		Descrip	tion of Job		
	Density	9 Lb/Gal	1/12		Hours 3.3	Date 1/12	Hour 1.8	S	Intermed	diate		
Disp. Fluid Fresh Water Spacer type resh Wate BBL	Density	8.33 Lb/Gal 8.33	1/12	-	3.3	1/12	1.0	-				
Spacer type Caustic BBL	10	8.40										
Acid Type Gal		%										
Acid Type Gal		%						-	1			
Surfactant Gal NE Agent Gal		In		-								
	Lb	In										
Gelling Agent Gal.	/Lb	In I										
Fric. Red. Gal.	Lb	_ln	L		3.3	Total	1,8	_				
MISCGal	/Lb	-in	Total	Į	3.3	Total	1.0					
Perfpac Balls	Otv.					Pre	essures					
Other			MAX		5,000 PSI	AVG.	50					
Other			LAAV		0 0 0 0 0 0	Average AVG					1	
Other			MAX	_	8 BPM	Cemen						
Other			Feet		93'	Reason						
Cine												
			C	eme	nt Data							
Stage Sacks Ceme			Additive						W/Rq		Lbs/Gal	
1 180 50/50 POZ P		4% Gel - 0,4% C-1		-37 -	0.5% C-41P - 2	2 Ib/sk Pheno	seal		6.77 5.20	1.44	13.60 15.60	
2 100 Premi	um	0.4% C-12 - 0.1%	0-31						0.00	0.00	0.00	
0								`	1			
						200						
				nma		BBI		0.0	7-	MEICH	TED OF	
Preflush 10	Type:		sh Water 5,000 PSI		Preflush: Load & Bkdn:	BBI Gal - BBI	30 N	.00 /A	Type: Pad:Bb		N/A	
Breakdown	MAXIN		NO/FULL		Excess /Retu		N	A	Calc.Dis	sp Bbl	198	
	Actual	TOC	0.500		Calc. TOC:		3,4		_Actual [	Disp.	196.00	
Average	Bump 10 Mir	Plug PSI: 15 M	2,700		Final Circ. Cement Slurr	PSI:	67	00	Disp:Bb			
ISIP 5 Min	IU IVIII	113101			Total Volume		293					
					. 5.0. 7 6.0.70							
			7		1	0						
CUSTOMER REPRES	ENTATI	VE 1/1	was	171	0 12118	1						
OUSTOWER REFRES	VEIA I VATI	1 - 160	nuy	15	ceryon	SIGNATURE						

Jo		SOK 2351			01/24/13							
		B SUMMARY  ridge Exploration & Produc					CUSTOMER REP					
Harper Kansas	Dridge Explorat	ion & F	roc	luc	EMPLOYEE NAM	Jerry Bais						
Moore 3407 1-35H												
Matt Wilson I IDus	stin Ödom											
Jared Green	sun Odom		+				$\dashv$					
David Thomas			$\dashv$				$\dashv$					
Emmit Brock							$\neg$		-			
Form. NameType:												
Packer Type Set At	5,267'	Date		ed Out 1/23/2012	On Location 1/24/2		Job	Started 1/24/2013		ompleted		
Bottom Hole Temp. 150 Pressui	re	Date		1/20/2012	1124/2	.013		1/24/2013	10.	24/2013		
Retainer Depth Total D	epth 8800	Time		8:00 pm	7:00			3:25 pm	6	:00 pm		
Tools and Accessories Type and Size Qty	s Make			New/User	Well I	Size Gr	- 3.1	F		10.		
Auto Fill Tube 0 W	leatherford	Casing		New/Osec	11.6	4 1/2	ade	From 4838	To 8,799	Max. Allow		
Insert Float Val 0		Drill Pip					$\dashv$	3,890	4,838			
Centralizers 0		HWDP						2,508	3,890			
Top Plug 0 HEAD 0		Drill Pip				3 1/2"	4	0	2,508			
Limit clamp 0		Open H				6 1/8"		Surface	9,560'	Chata/FI		
Weld-A 0		Perforat				0 170	一	Surface	3,300	Shots/Ft.		
Texas Pattern Guide Shoe 0 Cement Basket 0		Perforat										
Materials		Perforati Hours O		oation	Operating	Llaura		Descrip	Atamar F 1 a 1			
Mud Type WBM Density	9.1 Lb/Gal	Date		Hours	Operating Date	Hours	7		tion of Job			
Disp. Fluid Fresh Water Density 8 Spacer type resh Wate BBL 20	3.33 Lb/Gal	1/24	$\perp$	11.0	1/24	6.0		Liner				
Spacer type Caustic BBL. 10	8.33 8.40		+				_					
Acid Type Gal.	%		+				$\dashv$					
	%											
Surfactant Gal   NE Agent Gal I	In		+				_	-				
Fluid Loss Gal/Lb	in		+				$\dashv$					
Gelling Agent Gal/Lb I	n l											
riic. RedGal/LbI	in L	Total	_	11.0	Tital	0.0	$\Box$					
		lotai	L	11.0	Total	6.0		-				
Perfpac BallsQty.				8650 SI 6	Pre	essures						
Other Other		MAX	3	.500 PSI	AVG	200	)					
Other		MAX		6 BPM	Average I			1				
Other				, , , ,		Left in P						
Other		Feet		48	Reason			Τ				
		0.00		Data								
Stage Sacks Cement		Additives		Data				W/Rg.	Yield	Lbs/Gal		
1 365 50/50 Premium Poz (4	4%Gel)4% C12	1% C37	- 0.5	% C-41P - 21	b/Sk Phenos	eal		6.77	1.44	13.60		
2 0 0 0 3 0								0.00	0.00	0.00		
3 0 0								0 0.00	0.00	0.00		
									$\dashv$			
		Sumr	nary									
Preflush Type: Breakdown MAXIMU	18.6	(2)		eflush:	BBI	30,0	-	Type:	8.59#\$1			
BreakdownMAXIMU Lost Retu		D PSI FULL		oad & Bkdn: kcess /Retur		N/A N/A		Pad:Bbl Calc.Dis		N/A 104		
Actual TO	OC 4,6	597'	Ca	alc. TOC:		4,33		Actual D		104.00		
Average Bump Plusies Bump Plusies 10 Min 10 Min	ug PSI:15 Min			nal Circ. ement Slurry	PSI:	180		Disp:Bbl	-			
10 34111	1010111_			otal Volume	BBI	94.0 228.0						
			1	I John Tolling	201	220.0	Ī					
	1. 1	) j	15	1	-							
CUSTOMER REPRESENTATIVE		11-	1	ca-								
	-//				SIGNATURE							
	1/											



Wellbore	ne	Created	11 = = = = = :	Last Revised	1		
Moore 3407		12-Dec-2012		21-Jan-2013			
Well							
Nai Moore 340		Government ID		Last Revise 12-Dec-2012			
Slot							
Name Moore 3407 1-35H	Grid Northing         Grid E           137437.0000         21343	asting Latitude 5.0000 N37 2 35.5360	<b>Longitude</b> W98 2 22.8101	North 2823.87S	<b>East</b> 601.97W		
Installation							
Name Harper County	<b>Easting</b> 2134967.0000	Northing 140261.0001	Coord System Name KS-S on NORTH AMERICAN DATUM	/ 1927 datum	North Alignment Grid		
Field							
<b>Name</b> Sec 35 - 34S - 7W	<b>Easting</b> 2134967.0000	<b>Northing</b> 140261.0001	Coord System Name KS-S on NORTH AMERICAN DATUM	/ 1927 datum	North Alignment Grid		
Created By							
Comments							
FINAL surveys							
MD 9560 is a pro	jection to bit @ TD						



Wallnoth (Crid) Banart

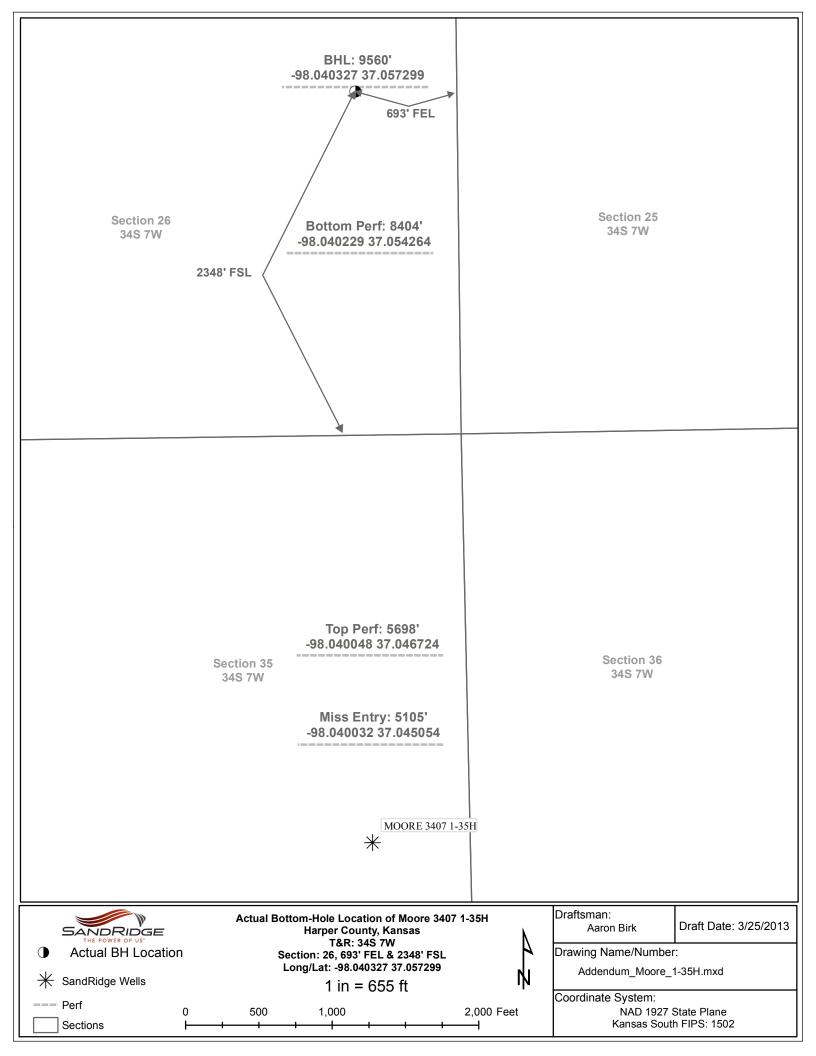
	n (Grid) Re								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft	Easting	Northing
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	2134365.00	137437.00
872.00	0.50	129.100	871.99	2.40S	2.95E	0.06	-2.46	2134367.95	137434.60
1334.00	1.10	115.100	1333.94	5.558	8.53E	0.14	-5.72	2134373.53	137431.45
1809.00	1.00	124.300	1808.86	9.828	16.09E	0.04	-10.13	2134381.09	137427.18
2283.00	0.70	101.900	2282.81	12.758	22 34F	0.09	-13.18	2134387.34	137424.25
2854.00	2.00	350.800	2853.70	3.63S	24.16E 24.74E	0.41	-4.10 7.69	2134389.16	137433.37
3327.00	1.00	27.500	3326.54	8.18N	24.74E	0.28	7.69	2134389.74	137445.18
3801.00	0.40	99.600	3800.51	11.57N	28.28E	0.20	11.02	2134393.29	137448.57
3894.00	1.40	333.800	3893.50	12.54N	28.10E	1.79	11.98	2134393.10	137449.54
3925.00 3957.00	3.60 5.30	331.900 340.000	3924.47 3956.37	13.73N 16.01N	27.48E 26.50E	7.10 5.65	13.20 15.49	2134392.48	137450.73
3989.00	6.40	349.800	3988.20	19.15N	25.68E	4.63	18.49	2134391.50 2134390.68	137453.01 137456.15
4020.00	8.30	350.500	4018.95	23.06N	25.00E	6.14	18.65 22.57 27.51	2134390.00	137460.06
4052.00	9.70	348.500	4050.55	27.98N	24.08E	4.48	27.51	2134389.08	137464.98
4084.00	10.50	348.800	4082.06	33.48N	24.08E 22.98E	2.51	33.03	2134387.98	137470.48
4115.00	11.20	348.900	4112.50	39.21N	21.85E	2.26	38.77	2134386.85	137476.21
4147.00	12.30	348.900	4143.83	45.60N	20.60E	3.44	45.19	2134385.60	137482.60
4179.00	13.40	349.400	4175.03	52.59N	19.26E	3.45	52.21	2134384.26	137489.59
4210.00	15.60	351.000	4205.04	60.24N	17.94E	7.21	59.88	2134382.95	137497.24
4241.00	18.60	352.900	4234.67	69.27N	16.68E	9.84	68.93	2134381.68	137506.27
4273.00 4305.00	21.40 23.80	354.100 355.000	4264.73 4294.27	80.14N	15.45E 14.29E 13.15E	8.84 7.58	79.82	2134380.45	137517.14
4336.00	26.10	355.000	4322.38	92.38N 105.41N	19.295	7.56 7.42	92.08 105.13	2134379.29 2134378.15	137529.39 137542.41
4368.00	28.70	354.500	4350.79	120.07N	11.80E	8.16	119.82	2134376.80	137557.08
4399.00	31.00	353.500	4377.67	135.41N	10.18E	7.59	135.19	2134375.18	137572.42
4431.00	33.20	352.900	4404.78	152.30N	8.16E	6.95	152.11	2134373.16	137589.30
4462.00	35.40	353.400	4430.39	169.64N	6.08E	6.95 7.15	169.49	2134371.08	137606.65
4494.00	37.70	354.300	4456.09	188.59N	4.05E	7.38 8.76 10.72	188.47	2134369.05	137625.60
4526.00	40.50	354.500	4480.92	208.67N	2.08E	8.76	208.59 229.34	2134367.08	137645.68
4557.00	43.80	355.100	4503.90	229.38N	0.20E	10.72	229.34	2134365.20	137666.40
4589.00	46.40	356.000	4526.49	251.98N	1.56W 2.93W	8.37	251.96	2134363.44	137688.99
4620.00	48.00 49.80	357.100	4547.55	274.68N 298.77N	2.93W	5.78	274.69	2134362.07	137711.70
4652.00 4747.00	49.60	357.800 356.800	4568.59 4630.03	371.14N	4.00W 7.41W	5.86 0.83	298.79 371.22	2134361.00 2134357.59	137735.79 137808.16
4778.00	49.10	356.000	4650.23	394.62N	8.88W	2.54	394.72	2134356.12	137831.64
4810.00	48.40	356.000	4671.33	418.62N	10.56W	2.19	418.74	2134354.44	137855.64
4842.00	49.90	356.800	4692.26	442.77N	12.08W	5.05	442.93	2134352.92	137879.80
4874.00	52.10	358.500	4712.39	467.62N	13.09W	8.02	467.79	2134351.91	137904.64
4906.00	54.40	360.000	4731.54	493.25N	13.42W	8.11	493.42	2134351.57	137930.28
4938.00	57.60	1.000	4749.43	519.78N	13.19W	10.33	519.94	2134351.81	137956.80
4969.00	61.50	1.600	4765.14	546.49N	12.58W	12.69	546.63	2134352.42	137983.52
5001.00	65.40	1.500	4779.44	575.10N	11.81W	12.19	575.22	2134353.19	138012.13
5034.00 5065.00	69.20 72.00	0.900 359.900	4792.17 4802.47	605.53N 634.77N	11.17W 10.97W	11.64	605.63 634.86	2134353.83	138042.56
5097.00	75.30	359.500	4811.48	665.47N	11.13W	9.53 10.38	665.56	2134354.03 2134353.87	138071.80 138102.50
5128.00	78.50	359.100	4818.50	695.65N	11.50W	10.40	695.75	2134353.50	138132.69
5161.00	81.30	359.000	4824.29	728.14N	12.04W	8.49	728.23	2134352.96	138165.17
5192.00	84.40	359.000	4828.15	758.89N	12.58W	10.00	758.99	2134352.42	138195.92
5239.00	89.60	359.400	4830.60	805.80N	13.23W	11.10	805.91	2134351.77	138242.84
5336.00	91.70	359.000	4829.50	902.78N	14.58W	2.20	902.89	2134350.41	138339.82
5429.00	91.50	358.900	4826.91	995.73N	16.29W	0.24	995.86	2134348.71	138432.78
5522.00	89.50	359.500	4826.10	1088.71N	17.59W	2.25	1088.85	2134347.41	138525.76
5616.00	88.60	359.800	4827.65	1182.69N	18.16W	1.01	1182.82	2134346.84	138619.75
5707.00	88.50	359.300	4829.96	1273.66N	18.87W	0.56	1273.79	2134346.12	138710.73
5800.00 5892.00	90.80 91.00	358.300	4830.52 4829.08	1366.63N	20.82W	2.70	1366.78	2134344.18	138803.70
5985.00	91.70	358.500 358.100	4826.89	1458.59N 1551.52N	23.39W 26.15W	0.31 0.87	1458.76 1551.73	2134341.61 2134338.85	138895.66 138988.59
6078.00	91.10	358.100	4824.62	1644.44N	29.23W	0.65	1644.70	2134335.77	139081.52
6172.00	90.30	357.600	4823.47	1738.36N	32.76W	1.00	1738.67	2134332.24	139175.45
6267.00	91.20	358.800	4822.22	1833.31N	35.74W	1.58	1833.65	2134329.26	139270.40
6362.00	91.60	358.500	4819.90	1928.25N	37.98W	0.53	1928.63	2134327.02	139365.35
6457.00	91.20	358.500	4817.58	2023.19N	40.46W	0.42	2023.59	2134324.53	139460.29
6551.00	92.20	358.000	4814.79	2117.10N	43.33W	1.19	2117.55	2134321.66	139554.21
6645.00	90.70	358.600	4812.42	2211.03N	46.12W	1.72	2211.51	2134318.88	139648.14
6740.00	91.50	359.500	4810.59	2306.00N	47.70W	1.27	2306.49	2134317.30	139743.11
6835.00	91.40	359.400	4808.19	2400.96N	48.61W	0.15	2401.45	2134316.39	139838.08
6929.00	90.40	0.300	4806.71	2494.95N	48.85W	1.43	2495.43	2134316.14	139932.07
7024.00	91.20	0.100	4805.38	2589.94N	48.52W	0.87	2590.39	2134316.48	140027.07
7118.00	90.30	359.500	4804.15	2683.93N	48.85W	1.15	2684.37	2134316.15	140121.06
7272.00	88.50	359.500	4805.77	2837.91N	50.19W	1.17	2838.35	2134314.80	140275.05



MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft	Easting	Northing
						[5	1		
7336.00	89.10	358.500	4807.11	2901.88N	51.31W	1.82	2902.33	2134313.69	140339.03
7431.00	89.20	358.100	4808.52	2996.83N	54.13W	0.43	2997.31	2134310.87	140433.98
7526.00	91.40	358.300	4808.02	3091.78N	57.11W	2.33	3092.30	2134307.88	140528.93
7622.00	91.90	359.000	4805.25	3187.71N	59.37W	0.90	3188.26	2134305.62	140624.87
7718.00	91.30	358.400	4802.57	3283.64N	61.55W	0.88	3284.22	2134303.45	140720.81
7812.00	91.10	358.800	4800.61	3377.60N	63.85W	0.48	3378.20	2134301.15	140814.76
7908.00	90.90	358.300	4798.93	3473.55N	66.28W	0.56	3474.18	2134298.72	140910.72
8003.00	91.50	358.800	4796.94	3568.50N	68.68W	0.82	3569.16	2134296.32	141005.67
8098.00	91.50	357.500	4794.45	3663.41N	71.75W	1.37	3664.12	2134293.25	141100.60
8192.00	91.10	356.100	4792.32	3757.24N	76.99W	1.55	3758.03	2134288.01	141194.43
8287.00	92.10	357.900	4789.67	3852.07N	81.96W	2.17	3852.93	2134283.03	141289.26
8383.00	92.10	359.400	4786.15	3947.97N	84.22W	1.56	3948.87	2134280.77	141385.17
8454.00	90.00	359.100	4784.85	4018.95N	85.15W	2.99	4019.85	2134279.85	141456.15
8549.00	89.20	358.100	4785.51	4113.92N	87.47W	1.35	4114.84	2134277.52	141551.12
8644.00	89.40	358.400	4786.67	4208.87N	90.37W	0.38	4209.83	2134274.62	141646.08
8739.00	92.90	359.000	4784.77	4303.81N	92.53W	3.74	4304.80	2134272.47	141741.02
8834.00	93.70	359.100	4779.30	4398.64N	94.10W	0.85	4399.64	2134270.90	141835.86
8929.00	92.20	359.000	4774.41	4493.50N	95.67W	1.58	4494.51	2134269.32	141930.72
9024.00	89.70	358.900	4772.83	4588.46N	97.41W	2.63	4589.49	2134267.58	142025.69
9119.00	90.90	357.800	4772.34	4683.42N	100.15W	1.71	4684.48	2134264.85	142120.65
9215.00	90.50	357.400	4771.16	4779.32N	104.17W	0.59	4780.45	2134260.83	142216.56
9310.00	88.20	357.800	4772.24	4874.23N	108.15W	2.46	4875.41	2134256.85	142311.47
9406.00	88.40	357.500	4775.09	4970.11N	112.08W	0.38	4971.35	2134252.91	142407.35
9502.00	90.10	357.400	4776.35	5066.00N	116.35W	1.77	5067.30	2134248.64	142503.25
9514.00	90.40	357.300	4776.29	5077.99N	116.91W	2.64	5079.30	2134248.09	142515.24
9560.00	90.40	357.300	4775.97	5123.93N	119.07W	==>	5125.28	2134245.92	142561.19



Comments MD[ft] 9560.00 TVD[ft] 4775.97 North[ft] 5123.93N East[ft] 119.07W Comment Projection to bit @ TD



## Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	2/27/2013	
State:	KS	
County:	Harper	
API Number:	15-077-21889	
Operator Name:		SandRidge Expl. & Prod. LLC
Well Name and Number:	Moore 3407 1-35H	
Longitude:	-98.0396	
Latitude:	37.0432	
Long/Lat Projection:	NAD27	
Production Type:	Oil	
True Vertical Depth (TVD):	4,775	
Total Water Volume (gal)*:	1,059,875	

### 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
HCL 15	Schlumberge r	Corrosion Inhibitor, Biocide, Surfactant, Acid, Gelling Agent, Clay Control Agent, Iron Control Agent, Scale Inhibitor, Propping Agent	Water (Including Mix Water Supplied by Client)*	-		93.38393%	
			Crystalline silica	14808-60-7	92.85780%	6.14354%	
			Hydrogen chloride	7647-01-0	3.88260%	0.25688%	
			Calcium magnesium sodium phosphate frit	65997-18-4	1.00712%	0.06663%	
			Ethanaminium,n,n,n-trimethyl-methyl-ox o, chloride, polymer with propenamide	35429-19-7	0.60843%	0.04025%	
			Distillates (petroleum), hydrotreated light	64742-47-8	0.39466%	0.02611%	
			Methanol	67-56-1	0.25584%	0.01693%	
			Sodium chloride	7647-14-5	0.25493%	0.01687%	
			Magnesium chloride	7786-30-3	0.23899%	0.01581%	
			Alcohol, C11 linear, ethoxylated	34398-01-1	0.10194%	0.00674%	
			Alcohol, C9-C11, Ethoxylated	68439-46-3	0.06796%	0.00450%	
			Alcohols, c11-15-secondary, ethoxylated	68131-40-8	0.06578%	0.00435%	
			Sorbitan monooleate	1338-43-8	0.04933%	0.00326%	
			Glutaraldehyde	111-30-8	0.04528%	0.00300%	
			Sodium erythorbate	6381-77-7	0.03511%	0.00232%	
			Calcium chloride	10043-52-4	0.03346%	0.00221%	
			Poly(dimethylaminoethylmethylacrylate) dimethyl sulphate quat.	27103-90-8	0.02875%	0.00190%	
			Fatty acids, tall-oil	61790-12-3	0.01281%	0.00085%	
			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.01054%	0.00070%	
			Alkyl(c12-16) dimethylbenzyl ammonium	68424-85-1	0.00809%	0.00053%	

	chloride				
	Potassium chloride	7447-40-7	0.00637%	0.00042%	
	Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00490%	0.00032%	
	Prop-2-yn-1-ol	107-19-7	0.00327%	0.00022%	
	Alkenes, C>10 a-	64743-02-8	0.00218%	0.00014%	
	Ethanol	64-17-5	0.00097%	0.00006%	

<sup>\*</sup> Total Water Volume sources may include fresh water, produced water, and/or recycled water

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

<sup>\*\*</sup> Information is based on the maximum potential for concentration and thus the total may be over 100%

#### Remarks

Tiffany Golay 04/09/013 10:25 am	TVD 4,775'
Tiffany Golay 03/18/013 08:10 am	Conductor weight= 94 lbs/ft