

Confidentiality Requested:

Yes No

#### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1121056

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:					
Address 2:	Feet from				
City: State: Zip:+	Feet from _ East / _ West Line of Section				
Contact Person:	Footages Calculated from Nearest Outside Section Corner:				
Phone: ()	□NE □NW □SE □SW				
CONTRACTOR: License #	GPS Location: Lat:, Long:				
Name:	(e.g. xx.xxxxxx) (e.gxxx.xxxxxxx)				
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84				
Purchaser:	County:				
Designate Type of Completion:	Lease Name: Well #:				
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:				
□ Oil □ WSW □ SHOW   □ 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:	Producing Formation: Kelly Bushing: Total Vertical Depth: Plug Back Total Depth: Feet Multiple Stage Cementing Collar Used? Yes No  If yes, show depth set: Feet				
Operator:	If Alternate II completion, cement circulated from:				
Well Name:	feet depth to:w/sx cmt.				
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 #:	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:				
☐ ENHR         Permit #:           ☐ GSW         Permit #:	Operator Name:				
GSW Permit #:	Lease Name: License #:				
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	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 Approved by: Date:			

Page Two



Operator Name:				Lease Name: Well #:						
Sec Twp	S. R	East	West	County	:					
<b>INSTRUCTIONS:</b> Shopen and closed, flow and flow rates if gas to	ing and shut-in pressu	ires, whe	ther shut-in pre	ssure reac	hed stati	c level, hydrosta	tic pressures, bott			
Final Radioactivity Log files must be submitte						gs must be ema	iled to kcc-well-lo	gs@kcc.ks.go	v. Digital elec	tronic log
Drill Stem Tests Taken (Attach Additional S		Ye	es No		L		on (Top), Depth an		Samp	
Samples Sent to Geol	ogical Survey	_ Ye	es No		Nam	е		Тор	Datur	n
Cores Taken Electric Log Run		Y€								
List All E. Logs Run:										
				RECORD	☐ Ne					
				conductor, su	rface, inte	ermediate, producti			I	
Purpose of String	Size Hole Drilled		e Casing (In O.D.)	Weig Lbs./		Setting Depth	Type of Cement	# Sacks Used	Type and P Additiv	
			ADDITIONAL	CEMENTIN	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Туре	of Cement	# Sacks	# Sacks Used Type and Percent Additives					
Perforate Protect Casing	Jop Zollow									
Plug Back TD Plug Off Zone										
1 ag on zono										
Did you perform a hydrau	ılic fracturing treatment o	n this well?	•			Yes	No (If No, ski	p questions 2 ar	nd 3)	
	otal base fluid of the hydra		J	,	0		_ , ,	p question 3)	(" 100 ")	
Was the hydraulic fractur	ing treatment information	submitted	to the chemical o	disclosure re	gistry?	Yes	No (If No, fill	out Page Three	of the ACO-1)	
Shots Per Foot			D - Bridge Plug Each Interval Perf				cture, Shot, Cement			Depth
	. ,							,		
TUBING RECORD:	Size:	Set At:		Packer At	t:	Liner Run:				
							Yes No			
Date of First, Resumed Production, SWD or ENHR.  Producing Meth Flowing			nod:	g 🗌	Gas Lift C	Other (Explain)				
Estimated Production Per 24 Hours	Oil B	bls.	Gas	Mcf	Wate	er Bl	ols. G	as-Oil Ratio	Gr	ravity
DISDOSITIO	ON OF GAS:			METHOD OF	COMPLE	TION:		PRODUCTIO	ON INTERVAL:	
Vented Sold			Open Hole	Perf.	Dually	Comp. Con	nmingled	THODOUTIC	ZIV IIVI LTIVAL.	
(If vented, Sub			Other (Specify)		(Submit )	ACO-5) (Subi	mit ACO-4)			

Form	ACO1 - Well Completion		
Operator	SandRidge Exploration and Production LLC		
Well Name	Michael 3507 1-7H		
Doc ID	1121056		

## All Electric Logs Run

Boresight	
Density	
Induction	
Mudlog	

Form	ACO1 - Well Completion		
Operator	SandRidge Exploration and Production LLC		
Well Name	Michael 3507 1-7H		
Doc ID	1121056		

#### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
2	9488-9830	4220 bbls water, 36 bbls acid, 75M lbs sd, 4303 TLTR	
5	9157-9437	4215 bbls water, 36 bbls acid, 75M lbs sd, 9193 TLTR	
5	8794-9058	4209 bbls water, 36 bbls acid, 75M lbs sd, 13921 TLTR	
5	8409-8699	4203 bbls water, 36 bbls acid, 75M lbs sd, 18592 TLTR	
5	8132-8358	4199 bbls water, 36 bbls acid, 75M lbs sd, 22968 TLTR	
5	7661-8000	4192 bbls water, 36 bbls acid, 75M lbs sd, 27286 TLTR	
5	7280-7587	4186 bbls water, 36 bbls acid, 75M lbs sd, 31604 TLTR	
5	6992-7222	4181 bbls water, 36 bbls acid, 75M lbs sd, 35886 TLTR	
5	6576-6894	4175 bbls water, 36 bbls acid, 75M lbs sd, 41062 TLTR	
5	6571-6894	4205 bbls water, 36 bbls acid, 75M lbs sd, 45777 TLTR	

Form	ACO1 - Well Completion		
Operator	SandRidge Exploration and Production LLC		
Well Name	Michael 3507 1-7H		
Doc ID	1121056		

## 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	20	20	75	90	Mid- Continent Conductor grout	10	none
Surface	12.25	9.63	36	823	Schlumber ger Class C Cement	210	1115 lb Bentonite Extender, 73 cf LITEPOZ 3 Extender, 53 lb Polyester Flake, 366 lb Calcium Chloride 77 pct concentra tion

Form	ACO1 - Well Completion		
Operator	SandRidge Exploration and Production LLC		
Well Name	Michael 3507 1-7H		
Doc ID	1121056		

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Intermedia	8.75	7	25	5317	50/50 POZ Class H		32 lb Chemical Extender, 368 lb Bentonite Extender, 95 cf LITEPOZ 3 Extender, 380 lb KOLITE Lost Circulation Additive, 51 lb Antifoam Agent, 18 lb TIC Dispersan t, 96 lb FLAC Fluid Loss Additive

Form	ACO1 - Well Completion		
Operator	SandRidge Exploration and Production LLC		
Well Name	Michael 3507 1-7H		
Doc ID	1121056		

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Production Liner	6.12	4.5	11.6	9956	Class H Cement	385	627 lb Bentonite Extender, 286 cf LITEPOZ 3 Extender, 400 lb KOLITE Lost Circluation Additive, 96 lb Antifoam Agent, 49 lb TIC Dispersan t, 96 lb Chemical Extender, 286 lb FLAC Fluid Loss Additive

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

March 04, 2013

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

Re: ACO1 API 15-077-21901-01-00 Michael 3507 1-7H NW/4 Sec.07-35S-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

# Mid-Continent Conductor, LC

Invoice

Date	Invoice #
1/21/2013	1666

P.O. Box 1570

Woodward, OK 73802

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

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
Ricky Beene	Net 45	1/21/2013	Michael 3507 1-7H, Harper Cnty, KS	Horizon 15

ltem	Quantity				Description	
Conductor Hole 20" Pipe Mouse Hole 16" Pipe Cellar Hole 6' X 6' Tinhorn Mud and Water Transport Truck - Conductor Grout & Trucking Grout Pump Fence Panels Welder & Materials Dirt Removal Cover Plate Permits		90 80 80 1 1 1 1 10 1 4 1 1	Drilled 90 ft. conductor Furnished 90 ft. of 20 in Drilled 80 ft. mouse her Furnished 80 ft. of 16 in Drilled 6' x 6' cellar hor Furnished and set 6' X in Furnished mud and was a furnished grout and transport mud and set furnished grout pump furnished and set fence furnished welder and refurnished labor and eq furnished cover plates in Permits	inch conductoble inch mouse hole inch mouse hole 6' tinhorn iter to location ucking to loc e panels aroun materials juipment for	nole pipe n n eation and conductor holes	AIMEU PRIET
				Subto	tal	\$17.340.0
	2			Sales	Tax (0.0%)	\$0.0
					Total	\$17,340.00

## Schlumberger

## Service Contract Receipt SCHLUMBERGER TECHNOLOGY CORPORATION

Service Contract Number

				C4PA-00147
Invoice Mailing Address:		Left District	Date: 10-F	eb-2013 Time: 5:00 AM
SANDRIDGE ENERGY INC	FOR ELECTRONIC INVOICING ONLY (EDI)	Arrive Location	Date: 10-F	eb-2013 Time: 8:00 AM
		Start Job	Date: 10-F	eb-2013 Time: 6:00 PM
123 ROBERT S. KERR AVENUE		Complete Job	Date: 10-Fe	eb-2013 Time: 7:00 PM
		Leave Location	Date: 10-Fe	eb-2013 Time: 8:00 PM
OKLAHOMA CITY	OK	Arrived District	Date: 11-F	eb-2013 Time: 12:00 AM
73102-6406	USA	Service Description:	Cementing Prim	ary, Primary Surface
Customer PO	Contract	Well Name & Number MICHAEL -3507-		Fleid OKAN
AFE DC 12310	Cust Ref	County/Parish/Block/ Harper	Borough	State/Province KS
Customer or Authorized Representative Ismael Franco		SLB Location El Reno, OK		Legal Location
API/UWI 15077219010100	Pricebook B0JS / WSV_GEOREF_USL_2011_USD_F	Pressure_Pumping_US_		Rig Horizon 15
Service Instructions: cement 9 5/8 casing				

THE ESTIMATED CHARGES AND DATA SHOWN BELOW ARE SUBJECT TO CORRECTION BY SCHLUMBERGER

Item	_ 650° 0" * *	ŷ·,	: 211	P - 7.5	230	2003.0
Products						***
56704095	Plug, Top Rubber Alum Core 9.625 in	ه	-EA-	665.00	47.00%	9,00
<del>-5672000</del> 5	Plug, Cementing Bottom Aluminum 9.625 in	6	EA	890,00	47.00%	0.00
D020	Bentonite Extender	1115 <sup>1</sup>	LB	0.50	47.00%	(05748)
D035-CF	LITEPOZ 3 Extender	73 24	CF	9.20	47.00%	(MARCH)-1
D130	Polyester Flake	53 ×	LB	4.40	47.00%	(23.50)
D903	Cement, Class C	327 ₩	CF	22.95	47.00%	(3,977,46)
S001	Calcium Chloride 77pct concentration	366	LB	1.44	47.00%	(275,30)
				Products Su Die	ibtotal: count:	(475.59)
				Products	Total:	5.022.07
Services						
48019000	Bulk Unit, Per Hr on location	8	HR	115.00	47.00%	(MIX.00)
48601000	Cement Plug Container	1	JOB	556.40	47.00%	(CONTRACT)
49100000	Cement Blending Charge	424	CF	2.43	47.00%	(346,07)
49102000	Transportation, Cement Ton-mile	943	MI	2.16	47.00%	(079.56)
59200002	Transportation, Mileage Heavy Vehicles	100	IM	5.91	47.00%	(E) (E) (E)
59200005	Transportation, Mileage Light Vehicles	100	MI	3.47	47.00%	460000
59697004	CernCAT Monitoring System	1	JOB	941.60	47.00%	699104)
102871020	Pump, Casing Cement 0-2000 ft	1	EA	2,396.80	47.00%	0/270/20
102946000	Fuel Surcharge (non-discounted)	3	EA	450.00		(350.00)
107138100	Circulating Equipment before job	Ĭ	EA	1,498.00	25.00%	(9)123.50)
107264001	Regulatory Conformance Charge	3	EA	364.87		(1094.61)
18020000	Pump, Cement Add Hr	6-8	HR	609.90	35.00%	(Firm)
18019000	Bulk Unit, Per Hr on location	12 10	HR	115.00	35.00%	distriction.
102476000	Service Supervisor/Field Engineer	7. 4	HR	112.35	35.00%	
102476001	Equipment Operator/Service Technician	, 25	HR	90.95	35.00%	(15.00)
		6		Services Su	btotal:	386,4
				Dis	count:	7,538,23

Total (Before Discount):

Discount:
Special Discount:
0.00 Estimated Discounted Total (USD):



Date Printed: 10-Feb-2013 7:19 PM

## Schlumberger

# Service Contract Receipt SCHLUMBERGER TECHNOLOGY CORPORATION

Service Contract Number

•		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1	C4PA-00181	
Invoice Mailing Address:		Left District	Date: 17-F	eb-2013	Time: 2:00 AM	
SANDRIDGE ENERGY INC FOR ELECTRONIC INVOICING ONLY (EDI)  123 ROBERT S. KERR AVENUE		Arrive Location	Date: 17-F	Date: 17-Feb-2013		
		Start Job	Date: 17-Fe	eb-2013	Time: 8:30 AM	
		Complete Job	Date: 17-Fe	eb-2013	Time: 10:00 AM	
		Leave Location	Date: 17-Fe	eb-2013	Time: 11:00 AM	
OKLAHOMA CITY	OK	Arrived District	Date: 17-F	eb-2013	Time: 3:00 PM	
73102-6406	USA	Service Description: Cementing Primary, Primary Intermediate				
Customer PO	Contract	Well Name & Number MICHAEL -3507-		Fleid OKAN		
AFE DC12310	Cust Ref	County/Parish/Block/Borough Harper		State/Province KS		
Customer or Authorized Representative Jaime Prieto		SLB Location El Reno, OK		Legal Loc	ation	
API/UWI 15077219010100	Pricebook B0JS / WSV_GEOREF_USL_2011_USD_F	Pricebook Rig B0JS / WSV GEOREF USL 2011 USD_Pressure Pumping_US_ Ho				
Pandan historictions:						

Service Instructions:

To provide services, equipment, personnel and materials to safely cement a 7" intermediate casing as per client request.

THE ESTIMATED CHARGES AND DATA SHOWN BELOW ARE SUBJECT TO CORRECTION BY SCHLUMBERGER

	IMATED CHARGES AND DATA SHOWN BE					
liệm .		7 Ob	nor.	Pripe	77.50	100,000
Products	Chemical Extender		· · ·	- 05	47%	
10079 has		32			2.51 14.1 14.5	01100
56784878 58498000	Plug, Top Rubber Alum Core 7 in	_ 1	EA	400.00	47.00%	(32,000)
B306	PSG Polymer Slumy B306	5 -	GA .	105.00	47.00%	
√D013	Retarder	9′	LB	2,79	47.00%	(12.24)
√D020	Bentonite Extender	638	LB	0.50	47.00%	069.00
D035-CF	LITEPOZ 3 Extender	95⁄	CF	9.20	47.00%	63,22
√D042	KOLITE Lost Circulation Additive	380	LB	0.99	47.00%	(199139)
√D046	Antifoam Agent, All Purpose	51	ĹВ	5.90	47.00%	(59.48)
√D065	TIC Dispersant	18	LB	7.86	47.00%	(6.65ii)
<b>√</b> D112	FLAC Fluid Loss Additive	96*	LB	15.29	47.00% LT	(13.33)
√ D909	Cement, Class H	195	CF	24.13	47.00%	93.84
				Products Sul		2.215.52
				Disc	count:	4331.28
				Products	Total:	384.2A
Services	•					-
48019000	Bulk Unit, Per Hr on location	67	- HR	115.00	47.00%	(Charles)
48020000	Pump, Cement Add Hr	2+		609.90	35.00%	(12030) (92.01)
48601000	Cement Plug Container	1	JOB	556.40	47.00%	(BALES)
49100000	Cement Blending Charge	307	CF	2,43	47.00%	(95:39)
49102000	Transportation, Cement Ton-mile	663 <del>-1326</del>	- MI	2.16	47.00%	-(21800) JOY (V)
59200002	Transportation, Mileage Heavy Vehicles	100	MI	5.91	47.00%	(53.23)
59200005	Transportation, Mileage Light Vehicles	100	MI	3.47	47.00%	<b>COLUMN</b>
59697004	CemCAT Monitoring System	1	JOB	941.60	47.00%	(199.05)
102871060	Pump, Casing Coment 5501-6000 ft	1	EA	3,745.00	47.00%	(1984.80)
102946000	Fuel Surcharge (non-discounted)	2-8	- EA	450.00		1362.30 TOU CO
107138100	Circulating Equipment before job	1	EA	1,498.00	25.00%	(123.50)
107264001	Regulatory Conformance Charge	2-3	EA	364.87		COMMAND TO SERVICE
				Services Sul	btotal:	6,368,48
				Dise	count:	distanta)
				Services	Total:	0.373.38
Total (Before Discour	nt);				700	245
Discou	And the second s			LAURDI	0.11	290
Special Discou	nt: 0.00	Estimated Discour	ted lots	າ (ບຽບ):	N-1	

Date Printed: 17-Feb-2013 12:20 PM

Page 1 of 2

## Schlumberger

# Service Contract Receipt SCHLUMBERGER TECHNOLOGY CORPORATION

Service Contract Number

					CDL7-00116	
Invoice Mailing Address:		Left District	Date: 03-M	ar-2013	Time: 6:00 PM	
SANDRIDGE ENERGY INC FOR ELECTRONIC INVOICING ONLY (EDI)  123 ROBERT S. KERR AVENUE		Arrive Location	Date: 03-M	ar-2013	Time: 10:00 PM	
		Start Job	Date: 04-Ma	Date: 04-Mar-2013 Time		
		Complete Job	Date: 04-Ma	ar-2013	Time: 3:00 PM	
		Leave Location	Date: 04-Ma	ar-2013	Time: 4:00 PM	
OKLAHOMA CITY	OK	Arrived District	Date: 04-Ma	ar-2013	Time: 8:00 PM	
73102-6406	USA	Service Description: Cementing Primary, Primary Liner				
Customer PO	Contract	Well Name & Number Michael 3506 1-7H	<u> </u>	Field Harper		
AFE	Cust Ref	County/Parish/Block/E Harper	Borough	State/Provi Kansas	псе	
Customer or Authorized Representative ISMAEL FRANCO		SLB Location El Reno, OK		Legal Loca	tion	
API/UWI 15077219010100	Pricebook B0JS / WSV_GEOREF_USL_2011_USD_F				15	
				•		

#### Service Instructions:

To provide services, equipment, personnel and materials to safely cement a 4 1/2" liner as per client request. Pump 30 bbls of Gel water, 570 sks of 13.6 ppg slurry, drop dart, and displace as per clients request. / Only puped 385 sks per client request

THE ESTIMATED CHARGES AND DATA SHOWN BELOW ARE SUBJECT TO CORRECTION BY SCHLUMBERGER

Item	Description	Qty	UOM	Price	Disc	Amount
Products	,					
B306	PSG Polymer Slurry B306	6	GA	105.00	47.00%	000,000
D013	Retarder	105	LB	2.79	47.00%	(55,26)
D020	Bentonite Extender	627	LB	0.50	47.00%	(00.10)
D035-CF	LITEPOZ 3 Extender	286	CF	9.20	47.00%	(394.5)
D042	KOLITE Lost Circulation Additive	400	LB	0.99	47.00%	
D046	Antifoam Agent, All Purpose	96	LB	5.90	47.00%	000:19)
D065	TIC Dispersant	49	LB	7.86	47.00%	(204712)
D079	Chemical Extender	96	LB	3.05	47.00%	(55,18)
D112	FLAC Fluid Loss Additive	286	LB	15.20	47.00%	(30400
D909	Cement, Class H	287	CF	24.13	47.00%	6 670.41
				Products Su	btotal:	6,780.50
				Dis	count:	7,886.85
Camalana				Products	Total:	9,893,65
Services 48019000	Bulk Unit, Per Hr on location	16	HR	115.00	47.00%	07570
49100000	Cement Blending Charge	593	CF	2.43	47.00%	70070
49102000	Transportation, Cement Ton-mile	1246	MI	2.16	47.00%	GA26742)
59200002	Transportation, Mileage Heavy Vehicles	100	MI	5.91	47.00%	013/200
59200005	Transportation, Mileage Light Vehicles	100	MI	3.47	47.00%	(63)910
59697004	CemCAT Monitoring System	1	JOB	941.60	47.00%	(620,05)
102872105	Pump, Liner/Sqz/Plug 10001-10500 ft	1	EA	7,918.00	47.00%	4,196,541
102946000	Fuel Surcharge (non-discounted)	3	EA	450.00	1110070	(0)350,00)
107138100	Circulating Equipment before job	1	EA	1,498.00	25.00%	((12310)
107264001	Regulatory Conformance Charge	3	EA	364.87		too district
48020000	Pump, Cement Add Hr	10	HR	609.90	35.00%	(1984136)
48019000	Bulk Unit, Per Hr on location	20	HR	115.00	35.00%	495.00
102476001	Equipment Operator/Service Technician	30	HR	90.95	35.00%	077350
102476000	Service Supervisor/Field Engineer	10	HR	112.35	35.00%	(730,271)
	Product advances in the control of t			Services Su		31.963.58
					count:	2,974.20
				Services	Total:	9,889,32

# **Archer** Survey Report

Company: Archer Directional Services

Location: Sec 07-T35S-R07W

Well: Michael 3507 1-7H

Rig: Horizon 15

API or UWI:

Job Number: 04076-431-22

State: KS

Operator: Sandridge Energy

County: Harper

Magnetic Declination: 0.00

Comment

Proposed Azimuth: 179.59

North Reference: GRID

#### Tiein Survey Data:

MD	Inclination	Azimuth	TVD	NS	EW
0.00	0.00	0.00	0.00	0.00	0.00

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
232.00	0.80	277.20	231.99	0.20	-1.61	277.20	1.62	-0.21	0.34
478.00	0.50	277.20	477.98	0.55	-4.38	277.20	4.41	-0.58	0.12
721.00	0.50	277.20	720.97	0.82	-6.48	277.20	6.53	-0.86	0.00
853.00	0.40	277.20	852.96	0.95	-7.51	277.20	7.57	-1.00	0.08
1311.00	0.50	230.20	1310.95	-0.13	-10.63	269.30	10.63	0.05	0.08
1784.00	0.20	260.40	1783.94	-1.59	-13.03	263.05	13.13	1.50	0.07
2259.00	0.10	139.40	2258.94	-2.04	-13.58	261.45	13.73	1.94	0.06
2733.00	0.40	160.60	2732.94	-3.92	-12.76	252.93	13.35	3.83	0.07
3209.00	0.20	147.90	3208.93	-6.19	-11.76	242.26	13.29	6.10	0.04
3682.00	0.40	15.20	3681.93	-5.29	-10.89	244.08	12.11	5.22	0.12
3871.00	0.10	124.00	3870.92	-4.75	-10.58	245.83	11.60	4.67	0.23
3935.00	0.20	200.20	3934.92	-4.89	-10.58	245.21	11.65	4.81	0.31
3966.00	0.60	188.70	3965.92	-5.10	-10.62	244.36	11.78	5.02	1.31
3998.00	3.10	171.70	3997.90	-6.12	-10.52	239.81	12.17	6.04	7.91
4029.00	5.40	166.40	4028.82	-8.37	-10.06	230.24	13.08	8.29	7.52
4060.00	7.70	166.80	4059.61	-11.81	-9.24	218.04	14.99	11.74	7.42
4093.00	9.50	166.50	4092.24	-16.61	-8.10	205.99	18.48	16.55	5.46
4124.00	10.50	162.50	4122.77	-21.79	-6.65	196.97	22.78	21.74	3.93
4156.00	11.80	162.50	4154.16	-27.69	-4.79	189.81	28.10	27.66	4.06
4187.00	13.00	166.50	4184.44	-34.10	-3.02	185.06	34.24	34.08	4.76
4219.00	15.00	167.30	4215.49	-41.64	-1.27	181.75	41.66	41.63	6.28
4250.00	17.60	167.20	4245.24	-50.13	0.65	179.26	50.13	50.13	8.39
4282.00	20.40	166.10	4275.49	-60.26	3.06	177.09	60.34	60.28	8.82
4314.00	22.70	165.70	4305.26	-71.66	5.93	175.27	71.91	71.70	7.20
4345.00	25.20	166.10	4333.58	-83.87	8.99	173.88	84.35	83.93	8.08
4377.00	28.30	166.80	4362.16	-97.87	12.36	172.80	98.64	97.95	9.74
4408.00	30.90	168.20	4389.11	-112.82	15.67	172.09	113.90	112.93	8.68
4440.00	33.10	170.10	4416.25	-129.47	18.85	171.72	130.83	129.60	7.56
4472.00	35.10	171.60	4442.74	-147.18	21.70	171.61	148.77	147.33	6.78
4503.00	37.10	173.00	4467.79	-165.28	24.14	171.69	167.03	165.45	6.98
4535.00	38.60	173.50	4493.06	-184.78	26.44	171.86	186.66	184.96	4.78
4567.00	40.50	174.10	4517.73	-205.03	28.64	172.05	207.02	205.23	6.06
4598.00	43.00	174.90	4540.86	-225.58	30.62	172.27	227.65	225.79	8.25
4630.00	45.40	175.60	4563.79	-247.81	32.46	172.54	249.93	248.04	7.65
4662.00	47.50	175.70	4585.84	-270.94	34.22	172.80	273.09	271.17	6.57

4694.00	49.20	176.30	4607.11	-294.79	35.89	173.06	296.96	295.04	5.49
4726.00	50.10	176.30	4627.83	-319.12	37.46	173.31	321.31	319.38	2.81
4757.00	49.90	175.60	4647.75	-342.81	39.14	173.49	345.04	343.08	1.85
4789.00	49.60	174.80	4668.43	-367.15	41.18	173.60	369.45	367.43	2.13
4821.00	49.20	174.70	4689.25	-391.34	43.40	173.67	393.74	391.64	1.27
4851.00	49.50	174.80	4708.80	-414.01	45.49	173.73	416.50	414.32	1.03
4883.00	49.80	175.50	4729.51	-438.31	47.55	173.81	440.88	438.64	1.91
4915.00	51.20	175.60	4749.87	-462.93	49.46	173.90	465.56	463.27	4.38
4947.00	53.30	176.10	4769.46	-488.16	51.29	174.00	490.85	488.51	6.68
4979.00	56.30	176.30	4787.90	-514.25	53.02	174.11	516.97	514.61	9.39
5011.00	59.80	176.20	4804.83	-541.34	54.80	174.22	544.10	541.72	10.94
5042.00	64.00	177.10	4819.43	-568.63	56.39	174.34	571.42	569.02	13.79
5074.00	68.00	177.70	4832.44	-597.83	57.72	174.49	600.61	598.23	12.62
5105.00	71.60	178.50	4843.15	-626.90	58.68	174.65	629.64	627.30	11.86
5137.00	74.10	178.70	4852.58	-657.47	59.43	174.84	660.15	657.87	7.84
5169.00	77.00	179.10	4860.57	-688.44	60.02	175.02	691.06	688.86	9.14
5201.00	79.90	179.70	4866.97	-719.79	60.35	175.21	722.32	720.20	9.25
5232.00	83.10	179.80	4871.56	-750.45	60.48	175.39	752.88	750.86	10.33
5263.00	86.50	180.10	4874.36	-781.31	60.51	175.57	783.65	781.73	11.01
5358.00	90.50	181.60	4876.85	-876.25	59.10	176.14	878.24	876.65	4.50
5390.00	90.70	181.50	4876.52	-908.24	58.23	176.33	910.10	908.63	0.70
5422.00	90.50	182.50	4876.18	-940.21	57.12	176.52	941.95	940.60	3.19
5453.00	90.20	182.90	4875.99	-971.18	55.66	176.72	972.77	971.55	1.61
5485.00	90.40	182.90	4875.82	-1003.14	54.04	176.92	1004.59	1003.50	0.63
5580.00	89.80	184.20	4875.66	-1097.95	48.15	177.49	1099.01	1098.27	1.51
5674.00	89.30	183.90	4876.40	-1191.71	41.52	178.00	1192.44	1191.98	0.62
5769.00	90.20	185.00	4876.81	-1286.43	34.14	178.48	1286.88	1286.64	1.50
5863.00	88.60	184.20	4877.79	-1380.11	26.61	178.90	1380.37	1380.27	1.90
5958.00	88.20	184.50	4880.45	-1474.80	19.40	179.25	1474.93	1474.90	0.53
6052.00	88.30	183.20	4883.32	-1568.54	13.10	179.52	1568.60	1568.60	1.39
6147.00	88.70	181.90	4885.80	-1663.42	8.87	179.69	1663.44	1663.44	1.43
6242.00	88.70	181.60	4887.96	-1758.35	5.97	179.81	1758.36	1758.34	0.32
6337.00	88.80	181.50	4890.03	-1853.29	3.40	179.89	1853.29	1853.27	0.15
6432.00	89.30	180.60	4891.61	-1948.26	1.66	179.95	1948.26	1948.22	1.08
6527.00	88.50	180.60	4893.43	-2043.24	0.67	179.98	2043.24	2043.19	0.84
6622.00	88.50	179.30	4895.92	-2138.20	0.75	179.98	2138.20	2138.15	1.37
6716.00	91.00	179.30	4896.33	-2232.19	1.90	179.95	2232.19	2232.14	2.66
6810.00	92.20	179.30	4893.70	-2326.14	3.04	179.93	2326.14	2326.10	1.28
6904.00	90.50	179.20	4891.49	-2420.10	4.27	179.90	2420.11	2420.07	1.81
6999.00	89.80	178.90	4891.24	-2515.09	5.85	179.87	2515.10	2515.07	0.80
7094.00	91.50	179.20	4890.16	-2610.07	7.42	179.84	2610.08	2610.05	1.82
7188.00	91.60	179.30	4887.62	-2704.02	8.65	179.82	2704.04	2704.02	0.15
7283.00	91.40	178.60	4885.13	-2798.97	10.39	179.79	2798.99	2798.98	0.77
7378.00	90.50	178.40	4883.56	-2893.93	12.88	179.74	2893.96	2893.95	0.97
7472.00	89.60	177.30	4883.48	-2987.86	16.41	179.69	2987.90	2987.90	1.51
7567.00	91.60	177.60	4882.48	-3082.76	20.63	179.62	3082.82	3082.82	2.13
7688.00	94.90	179.20	4875.62	-3203.49	24.01	179.57	3203.58	3203.58	3.03
7783.00	92.70	180.50	4869.33	-3298.28	24.26	179.58	3298.36	3298.36	2.69
7877.00	91.30	181.60	4866.05	-3392.20	22.53	179.62	3392.27	3392.27	1.89
7972.00	88.80	182.10	4865.96	-3487.14	19.47	179.68	3487.20	3487.19	2.68
8067.00	88.20	182.90	4868.45	-3582.02	15.33	179.75	3582.05	3582.04	1.05
8161.00	87.40	184.30	4872.06	-3675.76	9.43	179.85	3675.77	3675.73	1.71
8255.00	86.70	184.40	4876.90	-3769.36	2.31	179.96	3769.36	3769.28	0.75
8350.00	85.50	184.30	4883.36	-3863.87	-4.88	180.07	3863.87	3863.74	1.27
8444.00	86.00	181.40	4890.32	-3957.48	-9.54	180.14	3957.50	3957.31	3.12
8539.00	89.10	180.20	4894.39	-4052.38	-10.86	180.15	4052.39	4052.19	3.50
8634.00	90.70	180.20	4894.55	-4147.37	-11.20	180.15	4147.39	4147.19	1.68

8729.00	90.00	179.10	4893.97	-4242.37	-10.62	180.14	4242.38	4242.18	1.37
8824.00	91.10	178.50	4893.06	-4337.34	-8.63	180.11	4337.35	4337.17	1.32
8920.00	87.70	178.20	4894.06	-4433.28	-5.86	180.08	4433.28	4433.12	3.56
9014.00	86.50	177.70	4898.82	-4527.10	-2.51	180.03	4527.10	4526.96	1.38
9109.00	88.60	178.20	4902.88	-4621.94	0.89	179.99	4621.94	4621.83	2.27
9204.00	92.50	178.20	4901.97	-4716.87	3.87	179.95	4716.88	4716.78	4.11
9299.00	89.30	179.20	4900.48	-4811.82	6.03	179.93	4811.83	4811.74	3.53
9394.00	89.80	179.70	4901.22	-4906.82	6.94	179.92	4906.82	4906.74	0.74
9489.00	89.30	179.10	4901.97	-5001.81	7.93	179.91	5001.81	5001.74	0.82
9584.00	89.00	179.20	4903.38	-5096.79	9.34	179.89	5096.79	5096.72	0.33
9679.00	88.40	180.60	4905.53	-5191.76	9.51	179.90	5191.77	5191.69	1.60
9774.00	89.50	179.70	4907.27	-5286.74	9.26	179.90	5286.75	5286.67	1.50
9868.00	91.50	179.20	4906.45	-5380.73	10.16	179.89	5380.74	5380.66	2.19
9962.00	90.50	177.10	4904.81	-5474.66	13.20	179.86	5474.67	5474.61	2.47
10058.00	89.30	176.90	4904.98	-5570.52	18.22	179.81	5570.55	5570.51	1.27
10099.00	89.30	176.90	4905.48	-5611.46	20.44	179.79	5611.50	5611.46	0.00

# **Hydraulic Fracturing Fluid Product Component Information Disclosure**

Job Start Date:	4/16/2013
Job End Date:	4/17/2013
State:	Kansas
County:	Harper
API Number:	15-077-21901-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	MICHAEL 3507 1-7H
Longitude:	-98.12560000
Latitude:	37.01510000
Datum:	NAD27
Federal/Tribal Well:	NO
Total Base Water Volume (gal):	1,829,953
Total Base Non Water Volume:	







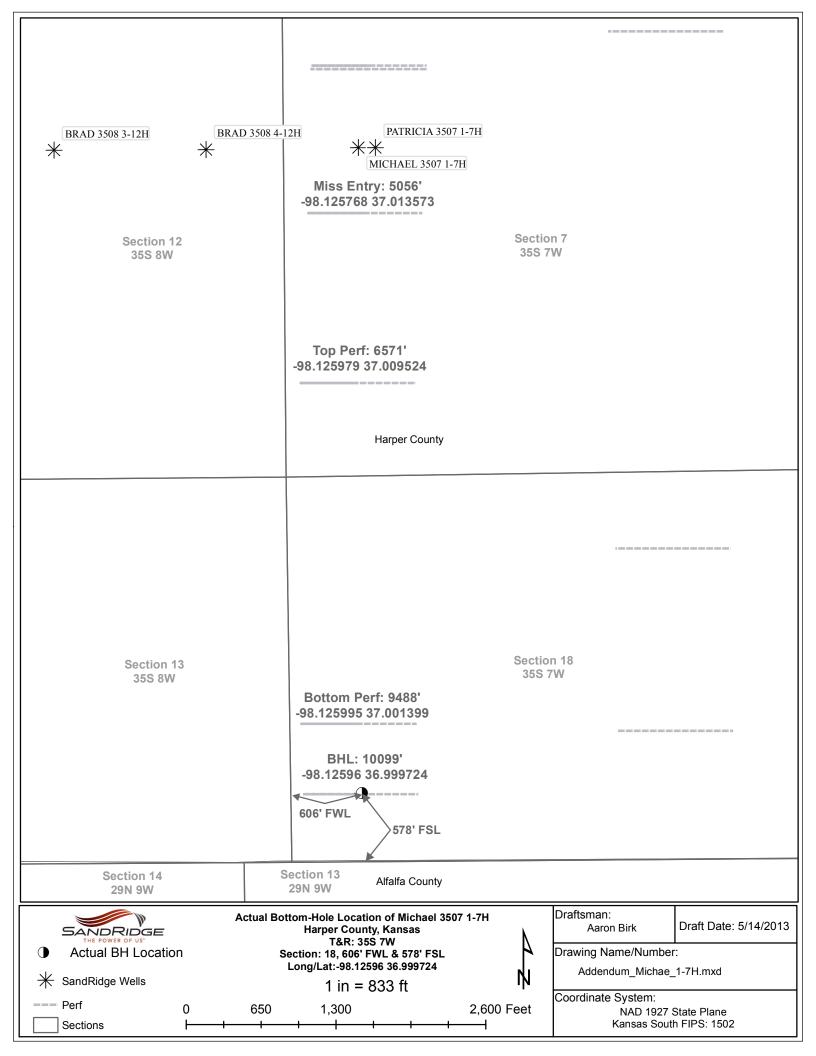
#### **Hydraulic Fracturing Fluid Composition:**

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Additive	Maximum Ingredient Concentration in HF Fluid	Comments
C102	Bosque Disposal Systems, LLC	Oxidizer		` ,	(% by mass)**	(% by mass)**	
	Cyclome, LLC		Chlorine Dioxide	10049-04-4	15.00000	100.00000	
Ingredients shown ab	ove are subject to 29 CF	R 1910.1200(i) a <u>nd ap</u> p	pear on Material Safety Data She	ets (MSDS). Ingredie	nts shown below are	Non-MSDS.	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant, Acid, Iron Control Agent, Propping Agent					
			Sodium erythorbate	6381-77-7	0.02201		
			Alkenes, C>10 a-	64743-02-8	0.00109		
			2-Propenoic acid, ammonium salt	10604-69-0	0.00595		
			Crystalline silica	14808-60-7	96.34923		
			C14 alpha olefin ethoxylate	84133-50-6	0.00654		
			Alkyl(c12-16) dimethylbenzyl ammonium chloride	68424-85-1	0.00206		
			Propan-2-ol	67-63-0	0.00093		
			Methanol	67-56-1	0.00881		
			Sorbitan monooleate	1338-43-8	0.02081		
				68551-12-2	0.01237		
			Glutaraldehyde	111-30-8	0.01154		

	Water (Including Mix Water Supplied by Client)*	-			
	Polyethylene glycol monohexyl ether	31726-34-8	0.10607		
	Ethane-1,2-diol	107-21-1	0.00635		
	Potassium hydroxide	1310-58-3	0.00021		
	Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00245		
	ammonium chloride	61789-77-3	0.00465		
	Ethoxylated oleic acid	9004-96-0	0.02378		
	Ethanol	64-17-5	0.00025		
	Prop-2-yn-1-ol	107-19-7	0.00163		
	Sorbitol Tetraoleate	61723-83-9	0.01486		
	Acrylamide/ammonium acrylate copolymer	26100-47-0	0.23783		
	· ' '	7601-54-9	0.02231		
	Alcohols, C10-C16, ethoxylated	68002-97-1	0.01225		
	hydrotreated light	64742-47-8	0.28540		
	Hydrogen chloride	7647-01-0	2.72786		
	Alcohols, C12-C14, ethoxylated	68439-50-9	0.01225	_	
	Ammonium chloride	12125-02-9	0.13675		
	Thiourea, polymer with formaldehyde and 1- phenylethanone	68527-49-1	0.00526		
	Fatty acids, tall-oil	61790-12-3	0.00639		

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)

<sup>\*</sup> 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%



#### Remarks

Tiffany Golay 05/01/013 11:03 am	Conductor weight= 106.5 lbs/ft
Tiffany Golay 03/04/013 11:15 am	TD= 10,099 TVD= 4,905