



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1195768
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

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

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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

1195768

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Lillian 3206 3-31H
Doc ID	1195768

All Electric Logs Run

Nuclear
Resistivity
Boresight
Prizm
Mud

Mid-Continent Conductor, LLC

Invoice

Date	Invoice #
11/26/2013	2274

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
Parker Waldrige	Net 30	11/26/2013	Lillian 3206 3-31H, Harper Cnty, KS	Unit 337

Item	Quantity	Description
Conductor Hole	90	Drilled 90 ft. conductor hole
20" Pipe	90	Furnished 90 ft. of 20 inch conductor pipe
Mouse Hole	80	Drilled 80 ft. mouse hole
16" Pipe	80	Furnished 80 ft. of 16 inch mouse hole pipe
Cellar Hole	1	Drilled 6' X 6' cellar hole
6' X 6' Tinhorn	1	Furnished and set 6' X 6' tinhorn
Mud and Water	1	Furnished mud and water
Transport Truck - Conductor	1	Transport mud and water to location
Grout & Trucking	10	Furnished grout and trucking to location
Grout Pump	1	Furnished grout pump
Fence Panels	1	Furnished safety netting around conductor holes
Welder & Materials	1	Furnished welder and materials
Dirt Removal	1	Furnished labor and equipment for dirt removal
Cover Plate	1	Furnished cover plates
Permits	1	Permits

AP# Number: DC 13385
 Well Name: Lillian 3206 3-31H
 Code: 850-010
 Amount: 17,350.00
 Co. Man: Scott Baker
 Co. Man Sig: Scott Baker
 Note: Conductor

Subtotal	\$17,350.00
Sales Tax (0.0%)	\$0.00
Total	\$17,350.00

				Customer SandRidge		Job Number CNTV-00091	
Well Lillian 3206 3-31H		Location (legal) SEC 31-32S-6W		Schlumberger Location EL RENO		Job Start Dec/06/2013	
Field HARPER KS		Formation Name/Type		Deviation 0 deg	Bit Size 12.3 in	Well MD 735.0 ft	Well TVD 735.0 ft
County Harper		State/Province Anthony		BHP psi	BHST 89 degF	BHCT 80 degF	Pore Press. Gradient lb/gal
Well Master SEC 31-32S-6W		API/UWI 15077219900100					
Rig Name	Drilled For Oil & Gas	Service Via Land	Casing/Liner				
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Offshore Zone	Well Class New	Well Type Development	735.0	9.6	36.0	J-55	
			0.0	0.0	0.0		
Drilling Fluid Type		Max. Density lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe			
				T/D	Depth, ft	Size, in	Weight, lb/ft
Service Line Cementing	Job Type 9 5/8" SURFACE						
Max. Allowed Tub. Press 5000 psi	Max. Allowed Ann. Press psi	WH Connection Single Cement head	Perforations/Open Hole				
			Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft
			ft	ft			
			ft	ft			Diameter in
			ft	ft			
		Treat Down	Displacement bbl		Packer Type	Packer Depth ft	
		Tubing Vol. bbl	Casing Vol. bbl		Annular Vol. bbl	Openhole Vol. bbl	
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job	
Lift Pressure psi		Shoe Type		Guide		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 735.0 ft		Tool Type	
No. Centralizers 4		Top Plugs 1	Bottom Plugs	Stage Tool Type		Tool Depth ft	
Cement Head Type Single		Stage Tool Depth ft		Tail Pipe Size in			
Job Scheduled For Dec/05/2013 12:00		Arrived on Location Dec/05/2013 02:00	Leave Location Dec/06/2013 02:30	Collar Type Float		Tail Pipe Depth ft	
				Collar Depth 689.1 ft		Sqz. Total Vol. bbl	
Date	Time 24-hr clock	DENSITY LB/G	RATE B/M	CMT_TREAT_PRES PSI	Volume BBL	Message	
12/06/2013	00:03:08	8.50	0.0	233	0.0	Started Acquisition	
12/06/2013	00:04:28	8.50	0.0	233	0.0		
12/06/2013	00:05:48	8.50	4.2	369	3.7		
12/06/2013	00:07:08	8.50	0.1	2342	4.1		
12/06/2013	00:07:56	8.50	0.0	2233	4.1	Remark	
12/06/2013	00:08:28	8.50	0.0	2377	4.1		
12/06/2013	00:09:48	8.50	0.0	5546	4.1		
12/06/2013	00:09:51	8.50	0.0	5544	4.1	Remark	
12/06/2013	00:11:08	8.50	0.0	260	4.1		
12/06/2013	00:12:28	8.50	0.0	247	4.1		
12/06/2013	00:13:48	8.50	1.3	266	5.5		
12/06/2013	00:15:08	8.51	2.6	316	8.0		
12/06/2013	00:16:10	8.51	2.6	310	10.6	Reset Total, Vol = 10.60 bbl	
12/06/2013	00:16:13	8.51	2.5	306	10.7	Remark	
12/06/2013	00:16:21	8.89	2.6	310	11.1	Start Mixing Lead Slurry	
12/06/2013	00:16:28	9.61	4.4	352	11.5		
12/06/2013	00:17:48	12.40	4.3	379	17.4		
12/06/2013	00:19:08	12.59	4.4	372	23.3		
12/06/2013	00:20:28	12.60	4.4	374	30.1		
12/06/2013	00:21:48	12.58	4.5	369	36.0		
12/06/2013	00:23:08	12.60	4.5	367	42.0		

Well		Field	Job Start	Customer	Job Number	
Lillian 3206 3-31H		HARPER KS	Dec/06/2013	SandRidge	CNTV-00091	
Date	Time 24-hr clock	DENSITY LB/G	RATE B/M	CMT_TREAT_PRES PSI	Volume BBL	Message
12/06/2013	00:25:48	12.60	4.5	374	54.7	
12/06/2013	00:27:08	12.61	6.2	422	60.8	
12/06/2013	00:28:28	12.62	4.4	379	67.7	
12/06/2013	00:29:48	12.66	4.6	392	74.3	
12/06/2013	00:31:08	12.63	4.4	381	80.3	
12/06/2013	00:32:28	12.64	4.4	378	86.2	
12/06/2013	00:32:42	12.45	4.4	381	87.3	Reset Total, Vol = 76.66 bbl
12/06/2013	00:32:44	12.38	4.4	380	87.4	End Lead Slurry
12/06/2013	00:32:46	12.35	4.4	380	87.6	Start Mixing Tail Slurry
12/06/2013	00:32:50	12.23	4.4	381	87.9	Remark
12/06/2013	00:33:48	14.72	6.1	455	92.4	
12/06/2013	00:35:08	14.82	5.4	493	100.4	
12/06/2013	00:36:28	14.95	5.2	505	107.6	
12/06/2013	00:37:48	14.54	5.2	468	114.5	
12/06/2013	00:38:30	14.02	3.3	408	117.9	Reset Total, Vol = 30.66 bbl
12/06/2013	00:38:32	14.00	3.3	406	118.0	End Tail Slurry
12/06/2013	00:38:33	13.98	3.2	406	118.1	Drop Top Plug
12/06/2013	00:38:35	13.96	3.3	404	118.2	Start Displacement
12/06/2013	00:39:08	14.39	3.3	393	120.0	
12/06/2013	00:40:28	10.91	0.0	314	121.0	
12/06/2013	00:41:48	9.81	0.0	310	121.0	
12/06/2013	00:43:08	9.62	0.0	312	121.0	
12/06/2013	00:44:28	6.75	5.1	362	127.4	
12/06/2013	00:45:48	8.06	3.2	351	132.4	
12/06/2013	00:47:08	7.57	3.2	344	136.7	
12/06/2013	00:48:03	8.06	3.2	340	139.7	Cement to surface
12/06/2013	00:48:28	8.07	3.2	339	141.0	
12/06/2013	00:49:48	8.50	3.2	339	145.4	
12/06/2013	00:51:08	8.49	8.2	509	153.5	
12/06/2013	00:52:28	8.50	2.5	391	160.7	
12/06/2013	00:53:48	8.50	2.4	392	163.9	
12/06/2013	00:55:08	8.50	2.4	395	167.1	
12/06/2013	00:56:28	8.50	2.4	407	170.3	
12/06/2013	00:57:48	8.50	2.4	401	173.5	
12/06/2013	00:59:08	8.50	2.3	420	176.6	
12/06/2013	01:00:28	8.50	0.0	1129	178.2	
12/06/2013	01:01:08	8.50	0.0	1078	178.2	Remark
12/06/2013	01:01:33	8.50	0.0	1046	178.2	Check floats, floats held
12/06/2013	01:01:48	8.50	0.0	1027	178.2	
12/06/2013	01:03:08	8.50	0.0	924	178.2	
12/06/2013	01:04:28	8.50	0.0	817	178.2	
12/06/2013	01:05:48	8.50	0.0	723	178.2	
12/06/2013	01:07:08	8.50	0.0	644	178.2	
12/06/2013	01:08:28	8.50	0.0	575	178.2	
12/06/2013	01:09:48	8.50	0.0	450	178.2	
12/06/2013	01:11:08	8.50	0.0	393	178.2	
12/06/2013	01:12:28	8.50	0.0	412	178.2	
12/06/2013	01:13:48	8.50	0.0	413	178.2	

Well Lillian 3206 3-31H	Field HARPER KS	Job Start Dec/06/2013	Customer SandRidge	Job Number CNTV-00091
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Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry 3.9	N2	Mud	Maximum Rate 8.4	Total Slurry 120.2	Mud 0.0	Spacer 10.0	N2
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum 5773	Final 1150	Average 583	Bump Plug to	Breakdown	Type	Volume bbl	Density lb/gal
Avg. N2 Percent %	Designed Slurry Volume 0.0 bbl	Displacement 53.7 bbl	Mix Water Temp degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 34.0 bbl	Washed Thru Perfs <input type="checkbox"/>	To ft
Customer or Authorized Representative SandRidge		Schlumberger Supervisor Nina Thurber			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
					-	-	



Cementing Service Report

Customer SANDRIDGE ENERGY INC				Job Number 1885475			
Well LILLIAN 3206 3-31H		Location (legal)		Schlumberger Location EL RENO		Job Start Dec/18/2013	
Field		Formation Name/Type		Deviation deg	Bit Size 8.8 in	Well MD 5642.0 ft	Well TVD 5642.0 ft
County HARPER		State/Province Kansas		BHP psi	BHST 133 degF	BHCT 127 degF	Pore Press. Gradient lb/gal
Well Master		API/UWI		Casing/Liner			
Rig Name	Drilled For Oil & Gas	Service Via Land		Depth, ft	Size, in	Weight, lb/ft	Grade
Offshore Zone	Well Class New	Well Type Development		5632.0	7.0	26.0	P110
Drilling Fluid Type	Max. Density lb/gal	Plastic Viscosity cP		0.0	0.0	0.0	
Service Line Cementing				Job Type INTERMEDIATE			
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection Single Cement head		Perforations/Open Hole			
				Top, ft	Bottom, ft	shot/ft	No. of Shots
				ft	ft		Total Interval ft
				ft	ft		Diameter in
				ft	ft		
Service Instructions		Treat Down Casing	Displacement 212.0 bbl	Packer Type		Packer Depth ft	
		Tubing Vol. bbl	Casing Vol. bbl	Annular Vol. bbl	Openhole Vol. bbl		
Casing/Tubing Secured <input type="checkbox"/>				1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>			
Lift Pressure 650 psi				Shoe Type Guide			
Pipe Rotated <input type="checkbox"/>				Pipe Reciprocated <input type="checkbox"/>			
Shoe Depth 5632.0 ft				Tool Type			
No. Centralizers		Top Plugs 1	Bottom Plugs		Stage Tool Type		
Cement Head Type Single		Leave Location Dec/18/2013		Stage Tool Depth ft			Tail Pipe Size in
Job Scheduled For Dec/18/2013		Arrived on Location Dec/18/2013	Collar Type Float		Tail Pipe Depth ft		
			Collar Depth 5545.0 ft		Sqz. Total Vol. bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
12/18/2013	18:43:45	5	0.0	8.39	0.0	Started Acquisition	
12/18/2013	18:46:45	233	4.2	8.37	0.0		
12/18/2013	18:49:45	3693	0.0	8.38	0.0		
12/18/2013	18:52:06	320	4.4	8.38	0.0	Start Job	
12/18/2013	18:52:10	303	4.5	8.38	0.0	Pressure Test Lines	
12/18/2013	18:52:12	280	4.5	8.38	0.0	Start Pumping Spacer	
12/18/2013	18:52:45	253	4.5	8.39	0.0		
12/18/2013	18:55:45	265	4.5	8.39	0.0		
12/18/2013	18:58:02	284	4.5	8.27	0.0	Reset Total, Vol = 30.10 bbl	
12/18/2013	18:58:04	290	4.5	8.28	0.0	End Spacer	
12/18/2013	18:58:06	290	4.5	8.28	0.0	Start Mixing Lead Slurry	
12/18/2013	18:58:45	297	4.1	11.59	0.0		
12/18/2013	19:01:45	325	4.0	13.51	0.0		
12/18/2013	19:04:45	298	4.0	13.61	0.0		
12/18/2013	19:07:45	185	4.0	13.57	0.0		
12/18/2013	19:10:45	214	3.8	13.59	0.0		
12/18/2013	19:13:25	244	4.1	13.73	0.0	Reset Total, Vol = 61.81 bbl	
12/18/2013	19:13:30	257	4.0	13.66	0.0	End Lead Slurry	
12/18/2013	19:13:45	167	4.0	13.28	0.0		
12/18/2013	19:16:45	185	4.1	15.83	0.0		
12/18/2013	19:18:44	114	3.3	15.72	0.0	Reset Total, Vol = 21.54 bbl	

Well		Field		Job Start		Customer		Job Number	
LILLIAN 3206 3-31H				Dec/18/2013		SANDRIDGE ENERGY INC		1885475	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
12/18/2013	19:18:48	116	3.3	15.73	0.0	Drop Top Plug			
12/18/2013	19:18:49	116	3.3	15.73	0.0	Start Displacement			
12/18/2013	19:19:45	4	0.0	15.84	0.0				
12/18/2013	19:22:45	10	0.0	15.80	0.0				
12/18/2013	19:25:45	73	4.0	8.86	0.0				
12/18/2013	19:28:45	106	6.6	8.35	0.0				
12/18/2013	19:31:45	117	6.5	8.39	0.0				
12/18/2013	19:34:45	130	6.5	8.39	0.0				
12/18/2013	19:37:45	134	6.5	8.39	0.0				
12/18/2013	19:40:45	134	6.5	8.39	0.0				
12/18/2013	19:43:45	176	6.5	8.39	0.0				
12/18/2013	19:46:45	200	6.4	8.39	0.0				
12/18/2013	19:49:45	433	6.4	8.39	0.0				
12/18/2013	19:52:45	582	6.3	8.39	0.0				
12/18/2013	19:55:45	786	6.3	8.39	0.0				
12/18/2013	19:58:45	581	2.2	8.39	0.0				
12/18/2013	20:01:45	597	2.2	8.39	0.0				
12/18/2013	20:04:45	1059	0.0	8.39	0.0				
12/18/2013	20:07:45	11	0.0	8.39	0.0				
12/18/2013	20:10:45	1015	0.0	8.39	0.0				
12/18/2013	20:11:54	1021	0.0	8.39	0.0	Bump Top Plug			
12/18/2013	20:12:06	1022	0.0	8.39	0.0	CASING TEST			
12/18/2013	20:13:45	1030	0.0	8.39	0.0				
12/18/2013	20:16:45	1043	0.0	8.39	0.0				
12/18/2013	20:19:45	1055	0.0	8.39	0.0				
12/18/2013	20:22:45	1067	0.0	8.39	0.0				
12/18/2013	20:25:45	1078	0.0	8.39	0.0				
12/18/2013	20:28:45	1087	0.0	8.39	0.0				
12/18/2013	20:31:45	1097	0.0	8.39	0.0				
12/18/2013	20:34:45	1107	0.0	8.39	0.0				
12/18/2013	20:37:45	8	0.0	8.39	0.0				

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
4.8			6.5	80.0	0.0	30.0	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
5263	181	519	1100			bbl	lb/gal
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?		Volume	
%	80.0 bbl	219.6 bbl	degF	<input type="checkbox"/>		bbl	
				Washed Thru Perfs		To	
				<input type="checkbox"/>		ft	
Customer or Authorized Representative				Circulation Lost		Job Completed	
STEVE HITSHEW				-		- <input checked="" type="checkbox"/>	
Schlumberger Supervisor							
NATHAN SMITH							



Company: SandRidge Energy
 Well: Lillian 3206 3-31H
 Location: Harper County
 Rig: Unit 337

Job Number: 5973053
 Magnetic Decl.: 4.51
 Grid Corr.: 0.30
 Total Grid Corr.: 4.21

Calculation Method: Minimum Curvature
 Proposed Azimuth: 19.330
 Depth Reference: 18
 Tie Into: Gyro Surveys

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
								N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
Tie In Coordinates														
Surface	18	0.00	0.00			18								
Gyro	250	0.25	216.41	S 36.4 W	232	250.00	-0.48	0.41 S	0.30 W	0.51	216.41	0.11	0.11	93.28
Gyro	500	1.47	216.41	S 36.4 W	250	499.97	-4.07	3.43 S	2.53 W	4.26	216.41	0.49	0.49	0.00
Gyro	735	1.79	216.41	S 36.4 W	235	734.87	-10.46	8.81 S	6.50 W	10.94	216.41	0.14	0.14	0.00
MWD	782	1.61	216.41	S 36.4 W	47	781.85	-11.79	9.93 S	7.32 W	12.34	216.41	0.38	-0.38	0.00
MWD	874	1.34	180.05	S 0.1 W	92	873.82	-14.04	12.04 S	8.09 W	14.51	213.89	1.04	-0.29	-39.52
MWD	965	1.94	151.96	S 28.0 E	91	964.78	-16.09	14.47 S	7.37 W	16.24	206.99	1.08	0.66	-30.87
MWD	1054	3.19	131.18	S 48.8 E	89	1053.70	-18.03	17.43 S	4.80 W	18.08	195.38	1.73	1.40	-23.35
MWD	1146	4.74	123.57	S 56.4 E	92	1145.47	-19.92	21.22 S	0.30 E	21.22	179.19	1.78	1.68	-8.27
MWD	1238	6.36	113.29	S 66.7 E	92	1237.04	-21.21	25.33 S	8.15 E	26.61	162.17	2.06	1.76	-11.17
MWD	1329	8.04	108.78	S 71.2 E	91	1327.32	-21.50	29.38 S	18.80 E	34.88	147.38	1.95	1.85	-4.96
MWD	1422	10.13	104.30	S 75.7 E	93	1419.15	-20.72	33.49 S	32.89 E	46.94	135.52	2.37	2.25	-4.82
MWD	1514	11.85	102.70	S 77.3 E	92	1509.46	-18.92	37.56 S	49.94 E	62.49	126.95	1.90	1.87	-1.74
MWD	1605	14.11	101.24	S 78.8 E	91	1598.13	-16.28	41.78 S	69.94 E	81.47	120.85	2.51	2.48	-1.60
MWD	1698	16.97	102.17	S 77.8 E	93	1687.72	-12.99	46.85 S	94.33 E	105.33	116.41	3.09	3.08	1.00
MWD	1790	18.51	103.45	S 76.6 E	92	1775.34	-9.82	53.08 S	121.66 E	132.74	113.57	1.73	1.67	1.39
MWD	1881	20.13	102.64	S 77.4 E	91	1861.22	-6.51	59.87 S	150.99 E	162.43	111.63	1.80	1.78	-0.89
MWD	1972	22.52	102.03	S 78.0 E	91	1945.98	-2.48	66.93 S	183.32 E	195.15	110.06	2.64	2.63	-0.67
MWD	2063	24.89	103.71	S 76.3 E	91	2029.30	1.62	75.10 S	218.97 E	231.49	108.93	2.71	2.60	1.85
MWD	2154	26.66	102.24	S 77.8 E	91	2111.24	6.01	83.97 S	257.53 E	270.87	108.06	2.07	1.95	-1.62
MWD	2244	28.64	101.85	S 78.2 E	90	2190.96	11.31	92.68 S	298.38 E	312.44	107.26	2.21	2.20	-0.43
MWD	2336	29.47	101.21	S 78.8 E	92	2271.38	17.38	101.61 S	342.15 E	356.92	106.54	0.96	0.90	-0.70
MWD	2427	29.55	101.77	S 78.2 E	91	2350.58	23.49	110.53 S	386.08 E	401.59	105.98	0.32	0.09	0.62
MWD	2518	31.41	102.02	S 78.0 E	91	2429.00	29.46	120.05 S	431.24 E	447.64	105.56	2.05	2.04	0.27
MWD	2612	33.63	101.91	S 78.1 E	94	2508.25	35.94	130.53 S	480.68 E	498.08	105.19	2.36	2.36	-0.12
MWD	2706	33.55	103.04	S 77.0 E	94	2586.56	42.15	141.76 S	531.45 E	550.03	104.94	0.67	-0.09	1.20
MWD	2801	34.82	102.08	S 77.9 E	95	2665.14	48.45	153.36 S	583.55 E	603.37	104.72	1.45	1.34	-1.01
MWD	2896	35.15	101.22	S 78.8 E	95	2742.98	55.73	164.36 S	636.90 E	657.76	104.47	0.62	0.35	-0.91
MWD	2991	34.26	100.04	S 80.0 E	95	2821.08	63.90	174.34 S	690.05 E	711.74	104.18	1.17	-0.94	-1.24
MWD	3085	33.89	100.39	S 79.6 E	94	2898.94	72.25	183.68 S	741.89 E	764.29	103.91	0.45	-0.39	0.37
MWD	3180	34.19	99.91	S 80.1 E	95	2977.66	80.73	193.05 S	794.23 E	817.36	103.66	0.42	0.32	-0.51
MWD	3274	31.43	97.69	S 82.3 E	94	3056.66	90.00	200.87 S	844.55 E	868.11	103.38	3.20	-2.94	-2.36
MWD	3369	29.64	99.42	S 80.6 E	95	3138.48	99.04	208.03 S	892.27 E	916.20	103.12	2.10	-1.88	1.82
MWD	3463	29.57	100.72	S 79.3 E	94	3220.21	106.52	216.15 S	937.99 E	962.58	102.98	0.69	-0.07	1.38
MWD	3558	29.22	103.01	S 77.0 E	95	3302.98	112.58	225.73 S	983.62 E	1009.19	102.93	1.24	-0.37	2.41
MWD	3652	30.15	104.42	S 75.6 E	94	3384.65	117.12	236.78 S	1028.84 E	1055.73	102.96	1.24	0.99	1.50
MWD	3747	30.80	103.99	S 76.0 E	95	3466.52	121.43	248.60 S	1075.55 E	1103.90	103.01	0.72	0.68	-0.45
MWD	3842	31.95	102.02	S 78.0 E	95	3547.63	126.89	259.71 S	1123.73 E	1153.36	103.01	1.62	1.21	-2.07
MWD	3936	33.60	100.59	S 79.4 E	94	3626.66	134.01	269.67 S	1173.63 E	1204.22	102.94	1.94	1.76	-1.52
MWD	4008	32.87	98.79	S 81.2 E	72	3686.89	140.61	276.32 S	1212.52 E	1243.61	102.84	1.70	-1.01	-2.50
MWD	4036	31.78	98.23	S 81.8 E	28	3710.55	143.42	278.54 S	1227.33 E	1258.54	102.79	4.04	-3.89	-2.00
MWD	4067	30.96	94.32	S 85.7 E	31	3737.02	147.06	280.31 S	1243.36 E	1274.57	102.70	7.08	-2.65	-12.61
MWD	4099	30.99	89.93	N 89.9 E	32	3764.46	151.93	280.92 S	1259.81 E	1290.75	102.57	7.06	0.09	-13.72
MWD	4130	31.43	84.56	N 84.6 E	31	3790.98	157.96	280.14 S	1275.84 E	1306.24	102.38	9.09	1.42	-17.32
MWD	4161	31.27	80.24	N 80.2 E	31	3817.46	165.26	278.01 S	1291.82 E	1321.40	102.15	7.27	-0.52	-13.94
MWD	4193	31.32	75.47	N 75.5 E	32	3844.81	173.94	274.52 S	1308.06 E	1336.55	101.85	7.74	0.16	-14.91
MWD	4224	32.03	71.81	N 71.8 E	31	3871.19	183.43	269.93 S	1323.67 E	1350.91	101.53	6.61	2.29	-11.81
MWD	4255	32.96	68.26	N 68.3 E	31	3897.34	193.98	264.24 S	1339.31 E	1365.13	101.16	6.84	3.00	-11.45
MWD	4286	34.31	64.63	N 64.6 E	31	3923.15	205.67	257.37 S	1355.04 E	1379.27	100.75	7.81	4.35	-11.71
MWD	4318	35.82	61.41	N 61.4 E	32	3949.34	218.96	249.02 S	1371.42 E	1393.84	100.29	7.46	4.72	-10.06
MWD	4349	37.04	59.12	N 59.1 E	31	3974.29	232.87	239.89 S	1387.40 E	1407.98	99.81	5.89	3.94	-7.39
MWD	4381	37.23	56.17	N 56.2 E	32	3999.80	248.03	229.55 S	1403.71 E	1422.36	99.29	5.60	0.59	-9.22
MWD	4412	37.51	53.05	N 53.1 E	31	4024.44	263.38	218.66 S	1419.04 E	1435.79	98.76	6.17	0.90	-10.06
MWD	4443	38.16	50.76	N 50.8 E	31	4048.92	279.41	206.93 S	1434.00 E	1448.86	98.21	4.99	2.10	-7.39
MWD	4475	38.47	47.98	N 48.0 E	32	4074.03	296.58	194.01 S	1449.06 E	1461.99	97.63	5.47	0.97	-8.69
MWD	4506	38.60	46.01	N 46.0 E	31	4098.28	313.68	180.84 S	1463.18 E	1474.31	97.05	3.98	0.42	-6.35
MWD	4538	38.17	43.25	N 43.3 E	32	4123.37	331.64	166.70 S	1477.14 E	1486.51	96.44	5.52	-1.34	-8.62
MWD	4569	38.44	41.09	N 41.1 E	31	4147.70	349.35	152.46 S	1490.03 E	1497.81	95.84	4.41	0.87	-6.97



Company: SandRidge Energy
 Well: Lillian 3206 3-31H
 Location: Harper County
 Rig: Unit 337

Job Number: 5973053
 Magnetic Decl.: 4.51
 Grid Corr.: 0.30
 Total Grid Corr.: 4.21

Calculation Method Minimum Curvature
 Proposed Azimuth 19.330
 Depth Reference 18
 Tie Into: Gyro Surveys

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
								N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
MWD	4600	38.85	39.44	N 39.4 E	31	4171.91	367.43	137.69 S	1502.54 E	1508.84	95.24	3.58	1.32	-5.32
MWD	4631	40.40	36.55	N 36.6 E	31	4195.79	386.16	122.11 S	1514.71 E	1519.62	94.61	7.77	5.00	-9.32
MWD	4663	41.85	34.27	N 34.3 E	32	4219.89	406.38	104.95 S	1526.89 E	1530.50	93.93	6.52	4.53	-7.12
MWD	4695	43.59	32.78	N 32.8 E	32	4243.40	427.42	86.85 S	1538.88 E	1541.33	93.23	6.29	5.44	-4.66
MWD	4726	45.71	30.72	N 30.7 E	31	4265.46	448.70	68.33 S	1550.33 E	1551.84	92.52	8.28	6.84	-6.65
MWD	4758	47.99	28.43	N 28.4 E	32	4287.34	471.67	48.02 S	1561.85 E	1562.59	91.76	8.83	7.13	-7.16
MWD	4789	50.23	27.12	N 27.1 E	31	4307.63	494.85	27.29 S	1572.76 E	1573.00	90.99	7.90	7.23	-4.23
MWD	4821	53.21	26.24	N 26.2 E	32	4327.45	519.76	4.84 S	1584.04 E	1584.04	90.18	9.56	9.31	-2.75
MWD	4852	56.26	25.55	N 25.6 E	31	4345.35	544.90	17.92 N	1595.09 E	1595.19	89.36	10.01	9.84	-2.23
MWD	4883	58.55	24.50	N 24.5 E	31	4362.05	570.89	41.59 N	1606.13 E	1606.67	88.52	7.92	7.39	-3.39
MWD	4915	60.14	21.25	N 21.3 E	32	4378.37	598.36	66.95 N	1616.82 E	1618.21	87.63	10.05	4.97	-10.16
MWD	4947	62.52	19.40	N 19.4 E	32	4393.72	626.43	93.28 N	1626.57 E	1629.24	86.72	9.00	7.44	-5.78
MWD	4978	64.62	17.76	N 17.8 E	31	4407.52	654.18	119.59 N	1635.41 E	1639.78	85.82	8.27	6.77	-5.29
MWD	5010	67.14	17.00	N 17.0 E	32	4420.59	683.37	147.46 N	1644.13 E	1650.73	84.88	8.17	7.87	-2.38
MWD	5042	69.89	15.34	N 15.3 E	32	4432.31	713.09	176.05 N	1652.42 E	1661.77	83.92	9.86	8.59	-5.19
MWD	5074	71.81	12.43	N 12.4 E	32	4442.81	743.18	205.39 N	1659.67 E	1672.33	82.95	10.48	6.00	-9.09
MWD	5105	73.40	9.13	N 9.1 E	31	4452.08	772.43	234.45 N	1665.20 E	1681.62	81.99	11.38	5.13	-10.65
MWD	5137	75.49	6.65	N 6.7 E	32	4460.66	802.64	264.98 N	1669.42 E	1690.32	80.98	9.92	6.53	-7.75
MWD	5169	78.11	4.41	N 4.4 E	32	4467.97	832.89	295.99 N	1672.42 E	1698.41	79.96	10.65	8.19	-7.00
MWD	5200	80.96	1.87	N 1.9 E	31	4473.60	862.16	326.42 N	1674.09 E	1705.61	78.97	12.22	9.19	-8.19
MWD	5231	83.94	0.41	N 0.4 E	31	4477.68	891.35	357.14 N	1674.70 E	1712.36	77.96	10.69	9.61	-4.71
MWD	5263	85.19	359.90	N 0.1 W	32	4480.71	921.44	389.00 N	1674.78 E	1719.37	76.92	4.22	3.91	-1.59
MWD	5293	86.00	359.85	N 0.1 W	30	4483.01	949.64	418.91 N	1674.72 E	1726.32	75.96	2.71	2.70	-0.17
MWD	5325	86.63	359.61	N 0.4 W	32	4485.07	979.72	450.84 N	1674.57 E	1734.20	74.93	2.11	1.97	-0.75
MWD	5357	87.20	359.49	N 0.5 W	32	4486.79	1009.79	482.79 N	1674.32 E	1742.54	73.91	1.82	1.78	-0.38
MWD	5388	85.46	359.42	N 0.6 W	31	4488.77	1038.88	513.73 N	1674.02 E	1751.08	72.94	5.62	-5.61	-0.23
MWD	5420	85.46	358.62	N 1.4 W	32	4491.31	1068.80	545.62 N	1673.48 E	1760.18	71.94	2.49	0.00	-2.50
MWD	5452	85.72	358.38	N 1.6 W	32	4493.77	1098.62	577.52 N	1672.64 E	1769.54	70.95	1.10	0.81	-0.75
MWD	5483	86.58	358.85	N 1.1 W	31	4495.85	1127.55	608.44 N	1671.90 E	1779.17	70.00	3.16	2.77	1.52
MWD	5515	87.14	358.67	N 1.3 W	32	4497.60	1157.46	640.38 N	1671.20 E	1789.70	69.03	1.84	1.75	-0.56
MWD	5547	88.15	358.09	N 1.9 W	32	4498.92	1187.32	672.34 N	1670.30 E	1800.54	68.07	3.64	3.16	-1.81
MWD	5578	88.83	357.99	N 2.0 W	31	4499.73	1216.20	703.31 N	1669.24 E	1811.36	67.15	2.22	2.19	-0.32
MWD	5597	89.48	358.60	N 1.4 W	19	4500.01	1233.93	722.30 N	1668.67 E	1818.29	66.59	4.69	3.42	3.21
MWD	5681	90.06	358.15	N 1.9 W	84	4500.35	1312.37	806.27 N	1666.29 E	1851.11	64.18	0.87	0.69	-0.54
MWD	5771	90.15	358.40	N 1.6 W	90	4500.19	1396.36	896.22 N	1663.58 E	1889.64	61.69	0.30	0.10	0.28
MWD	5862	90.12	358.09	N 1.9 W	91	4499.97	1481.27	987.18 N	1660.80 E	1932.04	59.27	0.34	-0.03	-0.34
MWD	5953	89.57	358.85	N 1.1 W	91	4500.22	1566.30	1078.15 N	1658.37 E	1978.03	56.97	1.03	-0.60	0.84
MWD	6044	90.43	359.39	N 0.6 W	91	4500.22	1651.70	1169.14 N	1656.97 E	2027.91	54.79	1.12	0.95	0.59
MWD	6135	90.80	359.47	N 0.5 W	91	4499.24	1737.26	1260.13 N	1656.06 E	2080.98	52.73	0.42	0.41	0.09
MWD	6227	90.52	358.90	N 1.1 W	92	4498.18	1823.63	1352.11 N	1654.76 E	2136.92	50.75	0.69	-0.30	-0.62
MWD	6318	91.35	359.84	N 0.2 W	91	4496.70	1909.15	1443.09 N	1653.75 E	2194.86	48.89	1.38	0.91	1.03
MWD	6409	90.03	358.29	N 1.7 W	91	4495.60	1994.50	1534.07 N	1652.27 E	2254.63	47.12	2.24	-1.45	-1.70
MWD	6503	91.02	359.54	N 0.5 W	94	4494.74	2082.59	1628.04 N	1650.49 E	2318.33	45.39	1.70	1.05	1.33
MWD	6598	91.33	359.64	N 0.4 W	95	4492.79	2171.99	1723.02 N	1649.81 E	2385.51	43.76	0.34	0.33	0.11
MWD	6692	91.08	359.15	N 0.9 W	94	4490.81	2260.34	1816.99 N	1648.82 E	2453.58	42.22	0.59	-0.27	-0.52
MWD	6787	91.08	359.08	N 0.9 W	95	4489.02	2349.47	1911.97 N	1647.35 E	2523.76	40.75	0.07	0.00	-0.07
MWD	6881	91.17	359.15	N 0.9 W	94	4487.18	2437.66	2005.94 N	1645.90 E	2594.76	39.37	0.12	0.10	0.07
MWD	6976	90.95	359.66	N 0.3 W	95	4485.42	2526.96	2100.92 N	1644.91 E	2668.25	38.06	0.58	-0.23	0.54
MWD	7071	87.19	356.40	N 3.6 W	95	4486.96	2615.43	2195.82 N	1641.65 E	2741.65	36.78	5.24	-3.96	-3.43
MWD	7167	90.55	358.78	N 1.2 W	96	4488.86	2704.57	2291.69 N	1637.62 E	2816.67	35.55	4.29	3.50	2.48
MWD	7261	91.66	359.86	N 0.1 W	94	4487.04	2792.88	2385.67 N	1636.50 E	2893.01	34.45	1.65	1.18	1.15
MWD	7355	91.30	359.74	N 0.3 W	94	4484.62	2881.44	2479.63 N	1636.17 E	2970.80	33.42	0.40	-0.38	-0.13
MWD	7449	91.39	359.64	N 0.4 W	94	4482.41	2969.94	2573.61 N	1635.66 E	3049.40	32.44	0.14	0.10	-0.11
MWD	7544	91.97	359.45	N 0.6 W	95	4479.62	3059.30	2668.56 N	1634.91 E	3129.56	31.49	0.64	0.61	-0.20
MWD	7639	91.85	359.72	N 0.3 W	95	4476.46	3148.66	2763.51 N	1634.22 E	3210.55	30.60	0.31	-0.13	0.28
MWD	7734	91.91	358.73	N 1.3 W	95	4473.34	3237.82	2858.45 N	1632.94 E	3291.99	29.74	1.04	0.06	-1.04
MWD	7828	89.54	358.35	N 1.6 W	94	4472.15	3325.69	2952.40 N	1630.54 E	3372.73	28.91	2.55	-2.52	-0.40
MWD	7922	90.86	1.85	N 1.9 E	94	4471.82	3414.43	3046.38 N	1630.71 E	3455.38	28.16	3.98	1.40	3.72
MWD	8017	91.45	1.46	N 1.5 E	95	4469.91	3504.93	3141.32 N	1633.45 E	3540.63	27.47	0.74	0.62	-0.41

Section 30
32S 6W

RICHARD 3206 1-30H



Section 29
32S 6W

BHL: 9520'
-98.005592 37.223956

332' FNL

789' FEL

Bottom Perf: 9400'
-98.005579 37.223728

Harper County

Section 31
32S 6W

Section 32
32S 6W

Top Perf: 5691'
-98.005093 37.213524

Miss Entry: 5053'
-98.005095 37.21181

LILLIAN 3206 3-31H



LILLIAN 3206 1-31H



LILLIAN 3206 1-32H



Section 6
33S 6W

Section 5
33S 6W

FERRIS 1-5H



Actual Bottom-Hole Location of Lillian 3206 3-31H
Harper County, Kansas
T&R: 32S 6W
Section: 31, 789' FEL & 332' FNL
-98.005592 37.223956

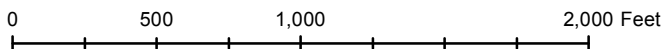
1 in = 667 ft

● Actual BH Location

* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Aaron Birk

Draft Date: 3/26/2014

Drawing Name/Number:

Addendum_Lillian 3206 3-31H.mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502