



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1098890
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: _____



1098890

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 1-31H
Doc ID	1098890

All Electric Logs Run

Induction
Porosity
Boresight
Mud Log

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Lillian 3206 1-31H
Doc ID	1098890

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8045-8425	2241 bbls of water, 213 bbls acid, 23M lbs sand, 2241 TLTR	
5	7595-7946	2290 bbls of water, 194 bbls acid, 23M lbs sand, 4650 TLTR	
5	6934-7518	1938 bbls of water, 192 bbls acid, 23M lbs sand, 7067 TLTR	
5	6104-6613	1827 bbls of water, 192 bbls acid, 25M lbs sand, 9399 TLTR	
5	5670-5998	1856 bbls of water, 192 bbls acid, 23M lbs sand, 11622 TLTR	
5	4986-5451	1918 bbls of water, 192 bbls acid, 20M lbs sand, 13953 TLTR	

Form	ACO1 - Well Completion
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Doc ID	1098890

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	100	Mid-Continent Conductor grout	10	none
Surface	12.25	9.63	36	700	O-Tex Lite premium Plus/ Premium Plus (Class C)	480	(6% gel) 2% Calcium Chloride, 1/4 pps Cello-Flake, .5% C-41P
Intermediate	8.75	7	26	4930	50/50 Poz Premium/ Premium	300	4% gel, .4% C-12, .1% C-37, .5% C-41P, 2 lb/sk Phenoseal
Production Liner	6.12	4.5	11.6	8722	50/50 Premium Poz	450	(4% Gel) .4% C12, .1% C37, .5% C-41P, 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/>

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

Sam Brownback, Governor

January 07, 2013

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

Re: ACO1
API 15-077-21882-01-00
Lillian 3206 1-31H
SE/4 Sec.31-32S-06W
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



Invoice

P.O. Box 1570
Woodward, OK 73802

Phone: (580)254-5400

Fax: (580)254-3242

Date	Invoice #
10/1/2012	1506

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
Joe Turner	Net 45	10/1/2012	Lillian 1-31H, Harper Cnty, KS	Lariat 39

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
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

AFE Number: DC12463

Well Name: Lillian 3206 F-31 H

Code: 850-010

Amount: 17,800.00

Co. Man: David Montoya

Co. Man Sig.: [Signature]

Notes: 10-30-12

Subtotal	\$17,800.00
Sales Tax (0.0%)	\$0.00
Total	\$17,800.00

JOB SUMMARY			PROJECT NUMBER SOK 1990	TICKET DATE 10/16/12
COUNTY Harper	State Kansas	COMPANY Bridge Exploration & Produc	CUSTOMER REP Harold Roller	
LEASE NAME Lillian	Well No. 1206 1-31	JOB TYPE Surface	EMPLOYEE NAME Billy Taff	

EMP NAME	Billy Taff	Eric Parsons			
	John Hall				
	Wallace Berry				
	Steve Chapman				

Form. Name _____ Type: _____

Packer Type _____ Set At 0

Bottom Hole Temp. 80 Pressure _____

Retainer Depth _____ Total Depth 703

Date	Called Out	On Location	Job Started	Job Completed
	10/16/2012	10/16/2012	10/16/2012	10/16/2012
Time	10:00pm	4:00am	11:00am	12:45pm

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

Well Data						
New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing	36#	9 5/8"		Surface	703	1,500
Liner						
Liner						
Tubing		0				
Drill Pipe						
Open Hole		12 1/4"		Surface	700	Shots/Ft.
Perforations						
Perforations						
Perforations						

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

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
10/16	7.0	10/16	1.5	Surface
Total	7.0	Total	1.5	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

Pressures		
MAX	1,500 PSI	AVG. 180
Average Rates in BPM		
MAX	6 BPM	AVG 4
Cement Left in Pipe		
Feet	44	Reason SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	260	EX Lite Premium Plus 65	(6% Gel) 2% Calcium Chloride - 1/4pps Cello-Flake - .5% C-41P	10.88	1.84	12.70
2	120	Premium Plus (Class C)	1% Calcium Chloride - 1/4pps Cello-Flake	6.32	1.32	14.80
3	*100	Premium Plus (Class C)	*2% Calcium Chloride on side to use if necessary	*6.32	*1.32	*14.8

Summary					
Preflush Breakdown	_____	Type: _____	Preflush: BBI	<u>10.00</u>	Type: Fresh Water
	MAXIMUM	<u>1,500 PSI</u>	Load & Bkdn: Gal - BBI	N/A	Pad: Bbl - Gal N/A
	Lost Returns-N	NO/FULL	Excess /Return BBI	28	Calc. Disp Bbl 51
	Actual TOC	SURFACE	Calc. TOC:	SURFACE	Actual Disp. <u>51.00</u>
Average	Bump Plug PSI:	<u>720</u>	Final Circ. PSI:	<u>250</u>	Disp: Bbl _____
ISIP	5 Min. _____	10 Min. _____	Cement Slurry: BBI	<u>110.0</u>	
		15 Min. _____	Total Volume: BBI	<u>171.00</u>	

CUSTOMER REPRESENTATIVE Harold Roller SIGNATURE _____

JOB SUMMARY			PROJECT NUMBER SOK 2016	TICKET DATE 10/21/12
COUNTY HARPER	State OKLAHOMA	COMPANY Sandridge Exploration & Production	CUSTOMER REP DAVID MONTOYA	
LEASE NAME LILLAN	Well No. I206 1-31	JOB TYPE Intermediate	EMPLOYEE NAME Johnny Breeze	

EMP NAME	JOHNNY BREEZE	DAVID SETTLEMIER				
	SCOTT WOODS					
	GALE WOMACK					
	FLO HELKENA					

Form. Name _____ Type: _____
 Packer Type _____ Set At **0**
 Bottom Hole Temp. **155** Pressure _____
 Retainer Depth _____ Total Depth **0**

Date	Called Out 10/21/2012	On Location 10/21/2012	Job Started 10/21/2012	Job Completed 10/21/2012
Time	1200	1700	1855	2030

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

	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing		26#	7"		Surface	4,935	5,000
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			8 3/4"		Surface	0	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	9 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	Fresh Water	BBL.	20 8.33
Spacer type	Caustic	BBL.	10 8.40
Acid Type		Gal.	%
Acid Type		Gal.	%
Surfactant		Gal.	In
NE Agent		Gal.	In
Fluid Loss		Gal/Lb	In
Gelling Agent		Gal/Lb	In
Fric. Red.		Gal/Lb	In
MISC.		Gal/Lb	In
Perfpac Balls		Qty.	
Other			
Other			
Other			
Other			

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
10/21	4.0	10/21	4.0	Intermediate
Total	4.0	Total	4.0	

Pressures		
MAX	5,000 PSI	AVG. 300
Average Rates in BPM		
MAX	8 BPM	AVG 5
Cement Left in Pipe		
Feet	92	Reason SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	200	50/50 POZ PREMIUM	4% Gel - 0.4% C-12 - 0.1% C-37 - 0.5% C-41P - 2 lb/sk Phenoseal	6.77	1.44	13.60
2	100	Premium	0.4% C-12 - 0.1% C-37	5.20	1.18	15.60
3	0	0		0.00	0.00	0.00

Summary					
Preflush Breakdown	Type: _____	MAXIMUM _____	Lost Returns-N _____	Actual TOC _____	Bump Plug PSI: _____
Average	ISIP _____ 5 Min.	_____ 10 Min.	_____ 15 Min.	Final Circ. PSI: _____	Cement Slurry: BBI _____
				Total Volume BBI _____	

CUSTOMER REPRESENTATIVE *David Montoya* SIGNATURE

JOB SUMMARY			PROJECT NUMBER SOK2032	TICKET DATE 10/26/12
COUNTY Harper	State Kansas	COMPANY Bridge Exploration & Produc	CUSTOMER REP David Montoya	
LEASE NAME Lillian 3206	Well No. 1-31H	JOB TYPE Liner	EMPLOYEE NAME Larry Kirchner Jr.	

EMP NAME Larry Kirchner Jr.	Kevin Johnson				
John Hall					
Wallace Berry					
Vontray Watkins					

Form. Name _____ Type: _____
 Packer Type _____ Set At **0**
 Bottom Hole Temp. **150** Pressure _____
 Retainer Depth _____ Total Depth **8722**

Date	Called Out 10/25/2012	On Location 10/26/2012	Job Started 10/26/2012	Job Completed 10/26/2012
Time	8:30PM	1:30AM	6:27AM	8:30AM

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

Well Data						
	New/Used	Weight	Size	Grade	From	To
Casing		11.6	4	1/2	4,506'	8,722'
Liner Tool						3,500
HWDP						
Drill Pipe			3	1/2"	Surface	3,145'
Drill Collars					3,145	4,506'
Open Hole			6	1/8"	Surface	8,722
Perforations						Shots/Ft.
Perforations						
Perforations						

Materials			
Mud Type	WBM	Density	9.1 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	resh Water	BBL.	20 8.33
Spacer type	Caustic	BBL.	10 8.40
Acid Type		Gal.	%
Acid Type		Gal.	%
Surfactant		Gal.	In
NE Agent		Gal.	In
Fluid Loss		Gal/Lb	In
Gelling Agent		Gal/Lb	In
Fric. Red.		Gal/Lb	In
MISC.		Gal/Lb	In
Perfpac Balls		Qty.	
Other			
Other			
Other			
Other			

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
10/26	7.0	10/26	2.0	Liner
Total	7.0	Total	2.0	

Pressures			
MAX	3,500 PSI	AVG	400
Average Rates in BPM			
MAX	6 BPM	AVG	4
Cement Left in Pipe			
Feet	88.05'	Reason	SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	450	50/50 Premium Poz	(4%Gel) - .4% C12 - .1% C37 - 0.5% C-41P - 2 Lb/Sk Phenoseal	6.77	1.44	13.60
2	0	0		0	0.00	0.00
3	0	0		0	0.00	0.00

Summary								
Preflush	10-	Type:	Caustic	Preflush:	BBI	30.00	Type:	8.59#/SPACER
Breakdown		MAXIMUM	3,500 PSI	Load & Bkdn:	Gal - BBI	N/A	Pad:Bbl -Gal	N/A
		Lost Returns-N	NO/FULL	Excess /Return	BBI	N/A	Calc. Disp Bbl	106
		Actual TOC	4,697'	Calc. TOC:		4,006'	Actual Disp.	104.50
Average		Bump Plug PSI:		Final Circ.	PSI:	900	Disp:Bbl	
ISIP	5 Min.	10 Min.	15 Min.	Cement Slurry:	BBI	135.0		
				Total Volume	BBI	249.50		

CUSTOMER REPRESENTATIVE  SIGNATURE

Directional Survey Calculations	Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
SHL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5103	200	3358	1881
BHL	8722	90.20	358.90	4453.07	4617.09	-38.88	4617.25	0.00	485	4818	3381	1878
Miss Entry	4810	78.07	22.75	4463.19	707.07	-6.41	707.10	9.87	4395	907	3361	1881
Top Perf	4986	90.87	357.93	4477.02	882.00	-10.25	882.05	5.96	4221	1082	3359	1883
Bottom Perf	8425	88.55	358.37	4451.21	4320.17	-32.96	4320.29	0.91	782	4521	3383	1875

Survey Points		X	Y	Surface XY	X	Y	North Line slope	m
NW Corner XY Coord		2139591	203571				0.0127352	
SW Corner XY Coord		2139663	198253		2143017	198512	East Line slope	-0.0088797
NE Corner XY Coord		2144852	203638				South Line slope	0.0175707
SE Corner XY Coord		2144899	198345				West Line slope	-0.0135389

Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
0	0.0	0	0	0	0	0	0	5103	200	3358	1881
250	0.40	213.30	250.00	-1	0	-0.73	0.16	5103	199	3357	1881
500	1.30	213.30	499.97	-4	-3	-3.81	0.36	5106	196	3355	1883
700	1.40	213.30	699.91	-8	-5	-7.72	0.05	5110	192	3352	1886
932	1.10	213.30	931.86	-12	-8	-11.93	0.13	5115	188	3349	1889
1392	1.20	188.70	1391.77	-20	-11	-20.35	0.11	5123	180	3346	1892
1867	0.40	167.80	1866.72	-27	-11	-26.89	0.18	5129	173	3346	1892
2342	0.40	86.60	2341.71	-29	-9	-28.43	0.11	5131	172	3348	1890
2816	0.30	26.10	2815.70	-27	-7	-27.23	0.08	5130	173	3350	1888
3291	0.10	279.10	3290.70	-26	-7	-26.05	0.07	5129	174	3350	1888
3538	0.50	227.40	3537.70	-27	-8	-26.74	0.18	5129	173	3349	1889
3575	0.50	299.10	3574.69	-27	-8	-26.77	1.58	5129	173	3349	1889
3607	2.20	342.30	3606.69	-26	-9	-26.11	5.83	5129	174	3348	1889
3638	4.50	358.70	3637.63	-24	-9	-24.33	7.96	5127	176	3348	1890
3670	5.80	11.40	3669.50	-22	-9	-21.49	5.38	5124	179	3349	1889
3702	7.00	9.70	3701.30	-18	-8	-17.99	3.80	5121	182	3349	1889
3733	9.60	6.70	3731.97	-14	-7	-13.56	8.50	5116	187	3350	1888
3765	12.30	5.00	3763.39	-8	-7	-7.52	8.50	5110	193	3351	1887
3797	13.80	8.30	3794.56	0	-6	-0.36	5.23	5103	200	3352	1886
3828	15.30	7.90	3824.57	7	-5	7.34	4.85	5095	207	3353	1885
3860	17.60	5.90	3855.26	16	-4	16.33	7.40	5086	216	3354	1884
3892	20.60	4.00	3885.49	27	-3	26.75	9.57	5076	227	3355	1883
3923	24.00	2.20	3914.17	38	-2	38.49	11.19	5064	239	3356	1882
3955	27.80	1.00	3942.95	52	-2	52.46	11.99	5050	253	3356	1882
3986	31.00	0.30	3969.95	68	-2	67.67	10.38	5035	268	3357	1882
4018	33.80	0.30	3996.97	85	-2	84.81	8.75	5018	285	3357	1881
4050	36.50	359.40	4023.13	103	-2	103.23	8.59	4999	303	3357	1881
4081	39.00	358.30	4047.64	122	-2	122.21	8.35	4980	322	3357	1881
4113	41.40	358.10	4072.08	143	-3	142.85	7.51	4960	343	3357	1882
4145	43.70	358.20	4095.65	164	-3	164.49	7.19	4938	365	3356	1882
4176	45.90	358.60	4117.65	186	-4	186.32	7.15	4916	386	3356	1883
4208	48.30	359.30	4139.43	210	-4	209.76	7.67	4893	410	3356	1883
4240	49.80	359.90	4160.40	234	-5	233.93	4.90	4869	434	3356	1883
4271	50.90	359.80	4180.18	258	-5	257.80	3.56	4845	458	3356	1883
4335	50.20	359.30	4220.85	307	-5	307.22	1.25	4795	507	3357	1883
4366	49.60	358.90	4240.82	331	-5	330.93	2.17	4772	531	3357	1883
4430	48.80	358.20	4282.64	379	-7	379.37	1.50	4723	580	3356	1884
4461	48.40	358.00	4303.14	403	-7	402.62	1.38	4700	603	3356	1884
4493	48.30	358.10	4324.40	426	-8	426.52	0.39	4676	627	3355	1885
4524	50.80	358.40	4344.51	450	-9	450.10	8.10	4652	650	3355	1885
4556	53.80	359.60	4364.08	475	-9	475.42	9.83	4627	676	3355	1886
4588	57.30	359.30	4382.18	502	-10	501.80	10.96	4601	702	3355	1886
4619	60.70	359.10	4398.14	528	-10	528.37	10.98	4574	729	3355	1886
4651	64.10	359.60	4412.97	557	-10	556.72	10.71	4546	757	3355	1886
4682	67.90	0.70	4425.57	585	-10	585.03	12.68	4518	785	3355	1886
4714	70.30	2.10	4436.99	615	-9	614.91	8.54	4488	815	3356	1885
4746	72.80	2.60	4447.12	645	-8	645.22	7.95	4457	845	3358	1883
4777	75.30	2.00	4455.63	675	-7	674.99	8.28	4428	875	3360	1882
4808	77.90	0.30	4462.82	705	-6	705.13	9.94	4397	905	3361	1881
4840	80.60	359.50	4468.79	737	-6	736.57	8.79	4366	937	3361	1880
4872	83.30	359.20	4473.27	768	-7	768.25	8.49	4334	968	3361	1881
4903	86.20	358.40	4476.10	799	-7	799.11	9.70	4303	999	3361	1881
4956	90.80	357.90	4477.49	852	-9	852.07	8.73	4250	1052	3360	1882
5048	91.00	358.00	4476.05	944	-12	944.02	0.24	4159	1144	3358	1885
5140	90.90	358.20	4474.52	1036	-16	1035.98	0.24	4067	1236	3356	1887
5232	90.70	359.50	4473.24	1128	-17	1127.96	1.43	3975	1328	3355	1888
5324	90.30	358.50	4472.43	1220	-19	1219.96	1.17	3883	1420	3355	1889
5416	90.50	359.70	4471.79	1312	-20	1311.95	1.32	3791	1512	3355	1889
5508	90.10	359.40	4471.31	1404	-21	1403.95	0.54	3699	1604	3355	1889
5599	89.60	359.60	4471.55	1495	-22	1494.95	0.59	3608	1695	3356	1889
5694	90.60	359.80	4471.38	1590	-22	1589.94	1.07	3513	1790	3357	1889
5789	89.50	359.90	4471.30	1685	-23	1684.94	1.16	3418	1885	3358	1888
5884	88.80	0.00	4472.71	1780	-23	1779.93	0.74	3323	1980	3359	1887
5979	90.50	0.50	4473.29	1875	-22	1874.91	1.87	3228	2075	3361	1886
6074	92.10	359.90	4471.13	1970	-22	1969.88	1.80	3133	2170	3362	1885

Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)				
								FNL	FSL	FWL	FEL
6169	91.60	359.40	4468.07	2065	-23	2064.83	0.74	3038	2265	3363	1885
6264	91.10	358.80	4465.83	2160	-24	2159.80	0.82	2943	2360	3363	1885
6359	91.00	359.00	4464.09	2255	-26	2254.78	0.24	2848	2455	3362	1886
6454	90.70	358.90	4462.68	2350	-28	2349.76	0.33	2753	2550	3362	1887
6549	90.10	359.20	4462.01	2445	-29	2444.76	0.71	2658	2645	3361	1888
6644	89.20	358.20	4462.59	2540	-31	2539.74	1.42	2563	2740	3361	1889
6739	89.90	0.20	4463.34	2635	-33	2634.73	2.23	2468	2835	3360	1890
6834	89.50	359.80	4463.84	2730	-33	2729.73	0.60	2373	2930	3362	1889
6929	90.30	359.70	4464.00	2825	-33	2824.73	0.85	2278	3025	3363	1889
7024	90.40	359.40	4463.42	2920	-34	2919.72	0.33	2183	3120	3363	1888
7119	91.70	0.30	4461.68	3015	-34	3014.70	1.66	2088	3215	3364	1888
7214	91.40	359.50	4459.11	3109	-34	3109.67	0.90	1993	3310	3365	1887
7308	91.30	359.50	4456.90	3203	-35	3203.64	0.11	1899	3404	3366	1887
7404	92.10	359.60	4454.05	3299	-36	3299.60	0.84	1803	3500	3366	1887
7499	91.70	1.30	4450.90	3394	-35	3394.53	1.84	1708	3595	3368	1885
7594	90.70	0.30	4448.91	3489	-34	3489.48	1.49	1613	3690	3371	1883
7688	89.70	0.60	4448.58	3583	-33	3583.47	1.11	1519	3784	3373	1882
7783	90.90	1.50	4448.09	3678	-31	3678.43	1.58	1424	3879	3376	1879
7878	89.90	1.00	4447.42	3773	-29	3773.38	1.18	1329	3974	3379	1876
7973	90.10	0.50	4447.42	3868	-28	3868.36	0.57	1234	4069	3382	1874
8068	90.20	359.80	4447.17	3963	-28	3963.35	0.74	1139	4164	3383	1873
8163	89.80	359.20	4447.17	4058	-29	4058.35	0.76	1044	4259	3384	1873
8258	89.60	359.40	4447.67	4153	-30	4153.35	0.30	949	4354	3384	1873
8353	88.40	358.90	4449.33	4248	-31	4248.33	1.37	854	4449	3384	1874
8448	88.60	358.20	4451.82	4343	-34	4343.28	0.77	759	4544	3383	1875
8543	89.80	359.00	4453.14	4438	-36	4438.26	1.52	664	4639	3382	1877
8638	90.00	359.20	4453.31	4533	-37	4533.26	0.30	569	4734	3382	1878
8672	90.20	358.90	4453.25	4567	-38	4567.26	1.06	535	4768	3381	1878
8722	90.20	358.90	4453.07	4617	-39	4617.25	0.00	485	4818	3381	1878

RICHARD 3206 2-30H

RICHARD 3206 1-30H

Section 29
32S 6W

Section 30
32S 6W

478' FNL

BHL: 8722'

-98.009315 37.22352

1879' FEL

Bottom Perf: 8045'
-98.00929 37.221724

Section 31
32S 6W

Section 32
32S 6W

Top Perf: 4986'
-98.009281 37.21318

Miss Entry: 4810'
-98.009273 37.212776

LILLIAN 3206 1-31H

LILLIAN 3206 1-32H

Section 6
33S 6W

FERRIS 1-5H
Section 5
33S 6W



Actual Bottom-Hole Location of Thyme 3419 1-5H
Harper County, Kansas

T&R: 32S 6W
Section: 31, 1879' FEL & 478' FNL
Long/Lat: -98.009315 37.22352

1 in = 667 ft

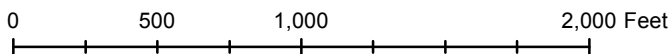


● Actual BH Location

* SandRidge Wells

▭ Sections

----- Perf



Draftsman:

Aaron Birk

Draft Date: 1/11/2013

Drawing Name/Number:

Addendum_Lillian_1-31H .mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502

Tiffany Golay
01/28/013 08:25 am

TVD= 4453

Tiffany Golay
01/07/013 10:29 am

Conductor weight= 94 lbs/ft