



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1137538  
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
-----------------------------------	-----------------	---

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: \_\_\_\_\_



1137538

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](mailto: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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  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: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Lori 3510 4-2H
Doc ID	1137538

All Electric Logs Run

Mud Log
Boresight
Porosity
Resistiity
Prizm

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Lori 3510 4-2H
Doc ID	1137538

Tops

Name	Top	Datum
Base Heebner	3623	
Tonkawa	3950	
Cottage Grove	4220	
Oswego Limestone	4518	
Cherokee Group	4612	
Verdigris Limestone	4638	
Mississippi Unconformity	4730	
Mississippi Limestone	4735	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Lori 3510 4-2H
Doc ID	1137538

#### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9150-9453	4228 bbls water, 36 bbls acid, 75M lbs sd, 4453 TLTR	
5	8742-9078	4222 bbls water, 36 bbls acid, 75M lbs sd, 8851 TLTR	
5	8350-8682	4216 bbls water, 36 bbls acid, 75M lbs sd, 13289 TLTR	
5	7523-7834	4209 bbls water, 36 bbls acid, 75M lbs sd, 17627 TLTR	
5	7523-7834	4203 bbls water, 36 bbls acid, 75M lbs sd, 21861 TLTR	
5	7163-7465	4197 bbls water, 36 bbls acid, 75M lbs sd, 26067 TLTR	
5	6801-7116	4192 bbls water, 36 bbls acid, 75M lbs sd, 30312 TLTR	
5	6394-6752	4185 bbls water, 36 bbls acid, 75M lbs sd, 34504 TLTR	
5	6012-6340	4179 bbls water, 36 bbls acid, 75M lbs sd, 39669 TLTR	
5	5582-5898	4173 bbls water, 36 bbls acid, 75M lbs sd, 42748 TLTR	

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

May 02, 2013

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

Re: ACO1  
API 15-007-24005-01-00  
Lori 3510 4-2H  
NE/4 Sec.11-35S-10W  
Barber 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, LLC

# Invoice

Date	Invoice #
4/13/2013	1831

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	Net 45	4/13/2013	Lori 3510 4-2H, Barber Cnty, KS	Unit 9

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	4	Furnished safety netting around conductor holes						
Transport Truck - Conductor	1	Transport truck and water to displace cement down center of conductor pipe						
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: _____ Well Name: <u>Lori 3510 4-2H</u> Code: <u>850.010</u> Amount: <u>19,340</u> Co. Man: <u>JOBias</u> Co. Man Sig.: <u>JOB</u> Notes: _____						
		<table border="1"> <tr> <td><b>Subtotal</b></td> <td>\$19,340.00</td> </tr> <tr> <td><b>Sales Tax (0.0%)</b></td> <td>\$0.00</td> </tr> <tr> <td><b>Total</b></td> <td><b>\$19,340.00</b></td> </tr> </table>	<b>Subtotal</b>	\$19,340.00	<b>Sales Tax (0.0%)</b>	\$0.00	<b>Total</b>	<b>\$19,340.00</b>
<b>Subtotal</b>	\$19,340.00							
<b>Sales Tax (0.0%)</b>	\$0.00							
<b>Total</b>	<b>\$19,340.00</b>							

JOB SUMMARY			PROJECT NUMBER	TICKET DATE
COUNTY	State	COMPANY	SOK 2607	04/20/13
Barber	Kansas	Bridge Exploration & Produc	CUSTOMER REP	Jerry Bias
LEASE NAME	Well No.	JOB TYPE	EMPLOYEE NAME	
Lori 3510	4-2H	Surface	John Hall	

EMP NAME	John Hall	0						
	Bryan Douglas							
	Rocky Anthis							
	Joseph Klemm							

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_  
Packer Type \_\_\_\_\_ Set At 0  
Bottom Hole Temp. 80 Pressure \_\_\_\_\_  
Retainer Depth \_\_\_\_\_ Total Depth 950

Date	Called Out	On Location	Job Started	Job Completed
	4/19/2013	4/19/2013	4/20/2013	4/20/2013
Time	2000	2200	200	430

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	950	1,500
Liner						
Liner						
Tubing		0				
Drill Pipe						
Open Hole		12 1/4"		Surface	950	Shots/Ft.
Perforations						
Perforations						
Perforations						

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	8.33	
Spacer type	resh Water BBL.	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	

Perfpac Balls \_\_\_\_\_ Qty. \_\_\_\_\_  
Other \_\_\_\_\_  
Other \_\_\_\_\_  
Other \_\_\_\_\_  
Other \_\_\_\_\_

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
4/19	2.0	4/20	2.5	Surface
4/20	4.5			
Total	6.5	Total	2.5	

Pressures	
MAX	1,500 PSI
AVG.	
Average Rates in BPM	
MAX	6 BPM
AVG	
Cement Left in Pipe	
Feet	46
Reason	SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	340	TEX Lite Premium Plus 65	(6% Gel) 2% Calcium Chloride - 1/2pps Cello-Flake - .5% C-41P	10.88	1.84	12.70
2	170	Premium Plus (Class C)	2% Calcium Chloride - 1/2pps Cello-Flake	6.32	1.32	14.80
3	0	0		0	0.00	0.00

Summary			
Preflush	10	Type:	Water
Breakdown		MAXIMUM	1,500 PSI
		Lost Returns-N	NO/FULL
		Actual TOC	SURFACE
Average		Bump Plug PSI:	400
ISIP	5 Min.	10 Min.	15 Min.
		Preflush:	BBI
		Load & Bkdn:	Gal - BBI
		Excess /Return	BBI
		Calc. TOC:	SURFACE
		Final Circ.	PSI:
		Cement Slurry:	BBI
		Total Volume	BBI
			10.00
		Type:	Fresh Water
		Pad:Bbl -Gal	N/A
		Calc. Disp Bbl	67
		Actual Disp.	67.00
		Disp:Bbl	67.00
			151.4
			228.39

CUSTOMER REPRESENTATIVE JOB SIGNATURE



<b>JOB SUMMARY</b>			PROJECT NUMBER	TICKET DATE
COUNTY		State	SOK 2617	04/26/13
Barber	Kansas	COMPANY	CUSTOMER REP	
		Sandridge Exploration & Production	Dewayne Burt	
LEASE NAME	Well No.	JOB TYPE	EMPLOYEE NAME	
Lori 3510	4-2H	Intermediate	Daniel Wells	

EMP NAME				
Daniel Wells				
Berry Wallace				
Scott Woods				

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_

Packer Type \_\_\_\_\_ Set At 4,004'

Bottom Hole Temp. 155 Pressure \_\_\_\_\_

Retainer Depth \_\_\_\_\_ Total Depth 5,545'

Date	Called Out	On Location	Job Started	Job Completed
	4/26/2013	4/26/2013	4/26/2013	4/26/2013
Time	1000	1400	1700	1845

**Tools and Accessories**

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

**Well Data**

	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing		26#	7"		Surface	5550'	5,000
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			8 1/2"		Surface	5,565'	Shots/Ft.
Perforations							
Perforations							
Perforations							

**Materials**

Mud Type	WBM	Density	9	Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33	Lb/Gal
Spacer type	resh Wate	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	
4/26	4.0	4/26	1.8	Intermediate
Total		Total		
4.0		1.8		

**Pressures**

MAX	5,000 PSI	AVG.	400
Average Rates in BPM			
MAX	8 BPM	AVG	5
Cement Left in Pipe			
Feet	90.80'	Reason	SHOE JOINT

**Cement Data**

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	200	50/50 POZ PREMIUM	4% Gel - 0.4% FL-17 - 0.1% C-51 - 0.1% C-20 - 0.5% C-41P - 1 lb/sk Phenos	6.77	1.44	13.60
2	100	Premium	0.4% FL-17 - 0.1% C-51 - 0.1% C-20 - 0.1% C-37 - 0.4% C-41P	5.20	1.18	15.60
3	0	0		0	0.00	0.00

**Summary**

Preflush Breakdown	<u>10</u>	Type:	Caustic	Preflush:	BBI	<u>20.00</u>	Type:	Fresh Water
			MAXIMUM	Load & Bkdn:	Gal - BBI	N/A		Pad:Bbl -Gal
			Lost Returns-N	Excess /Return	BBI	N/A		Calc. Disp Bbl
			Actual TOC	Calc. TOC:		2.701		Actual Disp.
Average			Bump Plug PSI:	Final Circ.	PSI:	810		Disp:Bbl
ISIP	5 Min.		10 Min	Cement Slurry:	BBI	72.0		
			15 Min	Total Volume	BBI	300.60		

CUSTOMER REPRESENTATIVE Dewayne Burt SIGNATURE \_\_\_\_\_



Standard Wellpath Report  
Sandridge  
Sec 11 - 35S - 10W, Kansas  
Barber County  
Wellbore: Lori 3510 4-2H (Actual)

### Wellbore

Name	Created	Last Revised
Lori 3510 4-2H (Actual)	15-Apr-2013	30-Apr-2013

### Well

Name	Government ID	Last Revised
Lori 3510 4-2H		15-Apr-2013

### Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Lori 3510 4-2H	129011.0000	2037668.0000	N37 1 15.2495	W98 22 15.5623	162.99S	3708.80E

### Installation

Name	Easting	Northing	Coord System Name	North Alignment
Barber County	2033959.0000	129174.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

### Field

Name	Easting	Northing	Coord System Name	North Alignment
Sec 11 - 35S - 10W	2033959.0000	129174.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

### Created By

--

### Comments

FINAL surveys.  
MD 9573 is a projection to bit @ TD



Standard Wellpath Report  
Sandridge  
Sec 11 - 35S - 10W, Kansas  
Barber County  
Wellbore: Lori 3510 4-2H (Actual)

**Wellpath (Grid) Report**

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	2037668.00	129011.00
930.00	1.70	140.800	929.86	10.69S	8.72E	0.18	-11.26	2037676.72	129000.31
961.00	1.60	134.500	960.85	11.35S	9.32E	0.67	-11.96	2037677.32	128999.65
1052.00	0.60	140.600	1051.83	12.61S	10.53E	1.10	-13.30	2037678.53	128998.39
1144.00	0.30	230.400	1143.83	13.14S	10.65E	0.73	-13.83	2037678.65	128997.86
1206.00	0.80	281.600	1205.83	13.15S	10.10E	1.06	-13.81	2037678.10	128997.85
1236.00	0.90	285.000	1235.82	13.05S	9.67E	0.37	-13.68	2037677.67	128997.95
1268.00	1.40	305.300	1267.82	12.76S	9.10E	1.99	-13.35	2037677.10	128998.24
1298.00	1.80	305.900	1297.81	12.27S	8.42E	1.33	-12.82	2037676.42	128998.73
1329.00	2.20	305.600	1328.79	11.64S	7.54E	1.29	-12.13	2037675.55	128999.36
1359.00	2.70	303.900	1358.76	10.91S	6.49E	1.68	-11.33	2037674.49	129000.09
1390.00	3.40	310.700	1389.72	9.90S	5.19E	2.54	-10.23	2037673.19	129001.10
1421.00	3.70	306.700	1420.66	8.70S	3.69E	1.25	-8.94	2037671.69	129002.30
1516.00	3.90	308.600	1515.45	4.86S	1.29W	0.25	-4.76	2037666.71	129006.14
1611.00	3.60	309.200	1610.24	0.96S	6.13W	0.32	-0.53	2037661.87	129010.04
1707.00	3.90	308.800	1706.04	2.99N	11.01W	0.31	3.74	2037656.99	129013.99
1801.00	3.80	309.200	1799.83	6.97N	15.92W	0.11	8.04	2037652.08	129017.97
1896.00	4.30	305.200	1894.59	11.01N	21.27W	0.60	12.44	2037646.73	129022.01
1991.00	4.30	308.100	1989.32	15.26N	26.98W	0.23	17.07	2037641.02	129026.26
2086.00	4.10	305.700	2084.07	19.44N	32.54W	0.28	21.62	2037635.46	129030.44
2181.00	3.80	305.600	2178.84	23.25N	37.86W	0.32	25.79	2037630.14	129034.25
2276.00	4.00	298.700	2273.62	26.68N	43.32W	0.24	29.58	2037624.68	129037.68
2370.00	4.00	299.300	2367.39	29.86N	49.06W	0.04	33.14	2037618.94	129040.86
2465.00	3.70	296.200	2462.18	32.83N	54.70W	0.38	36.50	2037613.30	129043.83
2560.00	4.00	294.300	2556.96	35.55N	60.47W	0.34	39.60	2037607.53	129046.55
2656.00	3.90	296.000	2652.74	38.36N	66.45W	0.16	42.82	2037601.54	129049.36
2751.00	4.00	297.500	2747.51	41.30N	72.30W	0.15	46.16	2037595.70	129052.30
2846.00	4.10	296.200	2842.27	44.33N	78.28W	0.14	49.59	2037589.71	129055.33
2941.00	4.10	296.100	2937.03	47.33N	84.38W	==>	52.99	2037583.62	129058.33
3036.00	4.30	298.200	3031.77	50.50N	90.57W	0.27	56.58	2037577.43	129061.51
3131.00	4.20	297.000	3126.51	53.76N	96.81W	0.14	60.27	2037571.19	129064.77
3225.00	3.90	297.600	3220.28	56.81N	102.71W	0.32	63.71	2037565.29	129067.81
3320.00	3.60	295.900	3315.07	59.61N	108.25W	0.34	66.88	2037559.74	129070.61
3414.00	3.00	292.400	3408.92	61.83N	113.18W	0.67	69.44	2037554.81	129072.84
3509.00	4.20	304.000	3503.73	64.73N	118.36W	1.47	72.68	2037549.63	129075.73
3604.00	3.60	303.100	3598.51	68.30N	123.75W	0.63	76.61	2037544.25	129079.31
3699.00	4.30	304.300	3693.28	71.94N	129.19W	0.74	80.61	2037538.81	129082.94
3794.00	4.10	306.400	3788.03	75.96N	134.86W	0.27	85.01	2037533.13	129086.96
3890.00	4.00	300.400	3883.79	79.69N	140.51W	0.45	89.12	2037527.48	129090.70
3945.00	4.30	298.500	3938.65	81.65N	143.98W	0.60	91.31	2037524.01	129092.65
3985.00	4.10	299.000	3978.54	83.05N	146.55W	0.51	92.89	2037521.44	129094.06
4017.00	6.40	296.000	4010.40	84.39N	149.15W	7.24	94.40	2037518.84	129095.40
4049.00	9.00	297.400	4042.11	86.32N	152.98W	8.15	96.60	2037515.01	129097.33
4080.00	10.70	300.300	4072.65	88.89N	157.62W	5.71	99.48	2037510.37	129099.90
4112.00	11.70	300.300	4104.04	92.03N	162.98W	3.12	102.97	2037505.01	129103.03
4143.00	13.40	301.000	4134.30	95.46N	168.78W	5.51	106.80	2037499.21	129106.47
4175.00	15.20	302.400	4165.31	99.62N	175.50W	5.73	111.40	2037492.49	129110.63
4206.00	16.80	303.000	4195.11	104.24N	182.69W	5.19	116.50	2037485.30	129115.25
4238.00	19.00	306.300	4225.56	109.84N	190.76W	7.57	122.65	2037477.23	129120.85
4269.00	21.80	311.700	4254.61	116.66N	199.13W	10.87	130.02	2037468.86	129127.67
4301.00	24.00	315.200	4284.09	125.23N	208.15W	8.08	139.19	2037459.83	129136.24
4332.00	25.00	317.900	4312.30	134.57N	216.99W	4.84	149.11	2037451.00	129145.58
4364.00	27.10	320.400	4341.05	145.20N	226.17W	7.40	160.35	2037441.82	129156.21
4395.00	29.30	323.600	4368.37	156.75N	235.17W	8.61	172.48	2037432.81	129167.76
4427.00	30.60	327.100	4396.10	169.89N	244.25W	6.80	186.22	2037423.74	129180.90
4458.00	32.60	330.000	4422.50	183.75N	252.71W	8.10	200.62	2037415.28	129194.76
4490.00	35.20	332.600	4449.06	199.41N	261.26W	9.30	216.83	2037406.72	129210.42
4522.00	36.50	335.500	4475.00	216.26N	269.46W	6.68	234.20	2037398.53	129227.27
4553.00	38.00	337.300	4499.67	233.46N	276.96W	5.98	251.87	2037391.02	129244.47
4585.00	40.00	339.600	4524.54	252.19N	284.35W	7.71	271.06	2037383.63	129263.20
4617.00	42.00	341.700	4548.69	271.99N	291.30W	7.59	291.30	2037376.69	129283.01
4648.00	42.80	343.600	4571.59	291.94N	297.53W	4.87	311.63	2037370.46	129302.96
4680.00	44.90	344.400	4594.66	313.25N	303.64W	6.79	333.31	2037364.35	129324.27
4712.00	47.50	345.000	4616.81	335.53N	309.73W	8.24	355.95	2037358.26	129346.55
4744.00	49.70	345.900	4637.97	358.76N	315.75W	7.19	379.54	2037352.23	129369.78
4775.00	51.80	346.900	4657.58	382.09N	321.39W	7.22	403.20	2037346.59	129393.11
4807.00	54.00	348.100	4676.88	407.01N	326.91W	7.50	428.44	2037341.07	129418.03
4839.00	56.10	349.300	4695.22	432.73N	332.05W	7.25	454.45	2037335.93	129443.75
4871.00	59.60	350.600	4712.24	459.40N	336.77W	11.47	481.38	2037331.21	129470.43
4902.00	63.10	351.800	4727.10	486.28N	340.93W	11.79	508.48	2037327.05	129497.31

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Slot and TVD's are from Slot ( Lori 3510 4-2H 0.00ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 356.070 degrees  
Bottom hole distance is 5155.73 Feet on azimuth 356.12 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 30-Apr-2013



Standard Wellpath Report  
 Sandridge  
 Sec 11 - 35S - 10W, Kansas  
 Barber County  
 Wellbore: Lori 3510 4-2H (Actual)

**Wellpath (Grid) Report**

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
4935.00	66.50	353.100	4741.15	515.88N	344.85W	10.90	538.28	2037323.14	129526.91
4966.00	69.20	353.800	4752.84	544.40N	348.12W	8.96	566.96	2037319.86	129555.43
4998.00	72.10	354.900	4763.44	574.44N	351.09W	9.63	597.13	2037316.89	129585.47
5029.00	74.70	355.800	4772.30	604.05N	353.50W	8.84	626.83	2037314.49	129615.08
5061.00	76.80	357.100	4780.17	635.00N	355.41W	7.65	657.85	2037312.57	129646.04
5092.00	78.30	358.000	4786.86	665.25N	356.71W	5.61	688.11	2037311.27	129676.28
5124.00	80.40	358.700	4792.77	696.68N	357.61W	6.91	719.53	2037310.37	129707.72
5156.00	83.10	358.900	4797.36	728.34N	358.27W	8.46	751.16	2037309.71	129739.38
5187.00	85.30	359.000	4800.49	759.17N	358.84W	7.10	781.96	2037309.14	129770.21
5219.00	87.50	359.100	4802.50	791.10N	359.37W	6.88	813.85	2037308.61	129802.15
5251.00	87.80	359.300	4803.82	823.07N	359.82W	1.13	845.78	2037308.16	129834.12
5282.00	88.00	359.300	4804.95	854.05N	360.19W	0.65	876.71	2037307.79	129865.10
5314.00	88.10	359.000	4806.04	886.03N	360.67W	0.99	908.64	2037307.31	129897.08
5346.00	88.20	359.300	4807.07	918.01N	361.14W	0.99	940.58	2037306.84	129929.06
5377.00	88.20	358.900	4808.05	948.99N	361.63W	1.29	971.52	2037306.35	129960.04
5409.00	88.00	358.700	4809.11	980.96N	362.30W	0.88	1003.47	2037305.68	129992.02
5440.00	88.20	358.700	4810.14	1011.94N	363.00W	0.65	1034.42	2037304.98	130022.99
5472.00	88.20	358.800	4811.14	1043.92N	363.70W	0.31	1066.37	2037304.28	130054.97
5504.00	88.20	358.600	4812.15	1075.89N	364.43W	0.62	1098.32	2037303.55	130086.95
5513.00	88.80	359.100	4812.38	1084.89N	364.61W	8.68	1107.30	2037303.37	130095.95
5552.00	90.40	359.700	4812.65	1123.88N	365.01W	4.38	1146.23	2037302.96	130134.94
5643.00	91.00	0.300	4811.54	1214.87N	365.01W	0.93	1237.01	2037302.96	130225.94
5736.00	91.40	0.000	4809.60	1307.85N	364.77W	0.54	1329.76	2037303.21	130318.93
5829.00	91.10	1.000	4807.57	1400.83N	363.96W	1.12	1422.46	2037304.02	130411.90
5923.00	90.40	0.600	4806.34	1494.81N	362.65W	0.86	1516.13	2037305.33	130505.89
6015.00	89.90	0.200	4806.10	1586.81N	362.01W	0.70	1607.87	2037305.97	130597.89
6108.00	90.30	0.500	4805.93	1679.80N	361.44W	0.54	1700.61	2037306.54	130690.90
6198.00	90.40	0.700	4805.38	1769.80N	360.49W	0.25	1790.32	2037307.49	130780.89
6291.00	90.40	0.500	4804.73	1862.79N	359.52W	0.22	1883.03	2037308.46	130873.89
6382.00	91.00	359.900	4803.62	1953.78N	359.20W	0.93	1973.79	2037308.78	130964.89
6475.00	90.70	359.100	4802.24	2046.77N	360.01W	0.92	2066.61	2037307.97	131057.88
6566.00	90.90	0.100	4800.97	2137.75N	360.65W	1.12	2157.43	2037307.33	131148.87
6658.00	91.00	0.000	4799.45	2229.74N	360.57W	0.15	2249.19	2037307.41	131240.86
6750.00	91.00	359.400	4797.84	2321.73N	361.05W	0.65	2341.00	2037306.93	131332.85
6842.00	91.30	0.600	4795.99	2413.70N	361.05W	1.34	2432.76	2037306.93	131424.84
6934.00	91.70	0.400	4793.59	2505.67N	360.25W	0.49	2524.45	2037307.73	131516.81
7029.00	92.10	0.200	4790.44	2600.62N	359.75W	0.47	2619.14	2037308.23	131611.76
7123.00	91.80	1.300	4787.24	2694.55N	358.52W	1.21	2712.77	2037309.46	131705.70
7218.00	92.10	1.300	4784.01	2789.47N	356.37W	0.32	2807.33	2037311.61	131800.63
7314.00	91.50	1.100	4780.99	2885.40N	354.36W	0.66	2902.89	2037313.62	131896.56
7408.00	91.50	1.600	4778.53	2979.34N	352.14W	0.53	2996.46	2037315.84	131990.51
7503.00	90.70	1.300	4776.71	3074.30N	349.74W	0.90	3091.03	2037318.24	132085.47
7598.00	90.20	1.200	4775.96	3169.27N	347.67W	0.54	3185.64	2037320.31	132180.45
7693.00	90.80	1.200	4775.13	3264.25N	345.68W	0.63	3280.25	2037322.30	132275.43
7789.00	90.40	1.000	4774.12	3360.22N	343.84W	0.47	3375.88	2037324.14	132371.41
7883.00	90.40	1.100	4773.47	3454.20N	342.11W	0.11	3469.52	2037325.87	132465.40
7979.00	90.50	0.300	4772.71	3550.19N	340.94W	0.84	3565.20	2037327.04	132561.39
8074.00	90.60	0.100	4771.80	3645.19N	340.61W	0.24	3659.95	2037327.37	132656.39
8169.00	90.80	0.000	4770.64	3740.18N	340.53W	0.24	3754.72	2037327.45	132751.39
8263.00	91.30	0.300	4768.92	3834.16N	340.28W	0.62	3848.46	2037327.70	132845.38
8360.00	91.70	0.600	4766.38	3931.13N	339.52W	0.52	3945.15	2037328.46	132942.35
8454.00	90.70	0.100	4764.41	4025.10N	338.95W	1.19	4038.86	2037329.04	133036.33
8549.00	90.10	359.800	4763.75	4120.10N	339.03W	0.71	4133.64	2037328.95	133131.33
8644.00	90.80	0.300	4763.00	4215.10N	338.95W	0.91	4228.41	2037329.04	133226.33
8739.00	91.60	0.500	4761.01	4310.07N	338.28W	0.87	4323.12	2037329.70	133321.31
8834.00	90.80	359.600	4759.02	4405.05N	338.20W	1.27	4417.87	2037329.78	133416.29
8929.00	90.30	359.300	4758.11	4500.04N	339.11W	0.61	4512.70	2037328.87	133511.29
9024.00	89.70	359.600	4758.11	4595.04N	340.02W	0.71	4607.53	2037327.96	133606.29
9120.00	90.50	359.300	4757.94	4691.03N	340.94W	0.89	4703.37	2037327.04	133702.29
9216.00	91.00	359.400	4756.69	4787.02N	342.03W	0.53	4799.20	2037325.95	133798.28
9310.00	91.30	358.700	4754.80	4880.98N	343.59W	0.81	4893.05	2037324.39	133892.25
9405.00	91.20	359.000	4752.73	4975.94N	345.50W	0.33	4987.92	2037322.48	133987.22
9501.00	90.70	358.500	4751.14	5071.91N	347.59W	0.74	5083.80	2037320.39	134083.19
9526.00	90.40	358.700	4750.90	5096.90N	348.20W	1.44	5108.78	2037319.78	134108.18
9573.00	90.40	358.700	4750.57	5143.88N	349.27W	==>	5155.73	2037318.71	134155.17

All data is in Feet unless otherwise stated  
 Coordinates are from Slot MD's are from Slot and TVD's are from Slot ( Lori 3510 4-2H 0.00ft above Mean Sea Level )  
 Vertical Section is from 0.00N 0.00E on azimuth 356.070 degrees  
 Bottom hole distance is 5155.73 Feet on azimuth 356.12 degrees from Wellhead  
 Calculation method uses Minimum Curvature method  
 Prepared by  
 Date Printed: 30-Apr-2013



Standard Wellpath Report  
Sandridge  
Sec 11 - 35S - 10W, Kansas  
Barber County  
Wellbore: Lori 3510 4-2H (Actual)

**Comments**

MD[ft]	TVD[ft]	North[ft]	East[ft]	Comment
9573.00	4750.57	5143.88N	349.27W	Projection to bit @ TD

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Slot and TVD's are from Slot ( Lori 3510 4-2H 0.00ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 356.070 degrees  
Bottom hole distance is 5155.73 Feet on azimuth 356.12 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 30-Apr-2013



# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/17/2013
Job End Date:	5/19/2013
State:	Kansas
County:	Barber
API Number:	15-007-24005-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Lori 3510 4-2H
Longitude:	-98.37090000
Latitude:	37.02090000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,751
Total Base Water Volume (gal):	1,740,604
Total Base Non Water Volume:	0



## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant, Acid, Iron Control Agent, Propping Agent					
			Water (Including Mix Water Supplied by Client)*	NA		94.89567	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant, Acid, Iron Control Agent, Propping Agent					
			Crystalline silica	14808-60-7	96.14266	4.90744	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant, Acid, Iron Control Agent, Propping Agent					
			Hydrogen chloride	7647-01-0	2.77699	0.14175	

HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Distillates (petroleum), hydrotreated light	64742-47-8	0.30195	0.01541	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Acrylamide/ammonium acrylate copolymer	26100-47-0	0.23006	0.01174	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Polyethylene glycol monohexyl ether	31726-34-8	0.14480	0.00739	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ammonium chloride	12125-02-9	0.14379	0.00734	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sorbitan monooleate	1338-43-8	0.02876	0.00147	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ethoxylated oleic acid	9004-96-0	0.02876	0.00147	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Trisodium ortho phosphate	7601-54-9	0.02399	0.00122	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					

			Sodium erythorbate	6381-77-7	0.02112	0.00108	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Methanol	67-56-1	0.01119	0.00057	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sorbitol Tetraoleate	61723-83-9	0.00863	0.00044	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Fatty acids, tall-oil	61790-12-3	0.00817	0.00042	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Sodium sulfocyanate	540-72-7	0.00748	0.00038	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			2-Propenoic acid, ammonium salt	10604-69-0	0.00705	0.00036	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Glutaraldehyde	111-30-8	0.00692	0.00035	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ethane-1,2-diol	107-21-1	0.00683	0.00035	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					



			Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	0.00672	0.00034	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00635	0.00032	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C10-C16, ethoxylated	68002-97-1	0.00575	0.00029	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C12-C16, ethoxylated	68551-12-2	0.00431	0.00022	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			C14 alpha olefin ethoxylate	84133-50-6	0.00431	0.00022	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C12-C14, ethoxylated	68439-50-9	0.00431	0.00022	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alcohols, C14-15, ethoxylated (7EO)	68951-67-7	0.00313	0.00016	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Prop-2-yn-1-ol	107-19-7	0.00209	0.00011	

HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			2-propenamid	79-06-1	0.00129	0.00007	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alkenes, C>10 a-	64743-02-8	0.00139	0.00007	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Alkyl(c12-16) dimethylbenzyl ammonium chloride	68424-85-1	0.00124	0.00006	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Propan-2-ol	67-63-0	0.00127	0.00006	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Ethanol	64-17-5	0.00015	0.00001	
HCL 15, Slickwater	Schlumberger	Corrosion Inhibitor, Friction Reducer, Scale Inhibitor, Biocide, Surfactant , Acid, Iron Control Agent, Propping Agent					
			Potassium hydroxide	1310-58-3	0.00029	0.00001	

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

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

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.  
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

Section 35  
34S 10W

Section 36  
34S 10W

319' FNL

1983' FEL

BHL: 9573'  
-98.372509 37.035055

Bottom Perf: 9150'  
-98.372483 37.033812

Section 2  
35S 10W

Section 1  
35S 10W

JOANN 1-1H

KATHLEEN 1-1H

Top Perf: 5582'  
-98.372582 37.024015

Miss Entry: 4909'  
-98.372503 37.022264

LORI 1-2H

LORI 2-2H

WILLIAM 3510 2-11H

WILLIAM 1-11H

LORI 3510 3-2H

WILLIAM 3510 4-11H

LORI 3510 4-2H

WILLIAM 3510 3-11H

Section 11  
35S 10W

Section 12  
35S 10W



Actual Bottom-Hole Location of Lori 3510 4-2H  
Barber County, Kansas

T&R: 35S 10W  
Section: 2, 1983' FEL & 319' FNL  
Long/Lat: -98.372509 37.035055

1 in = 833 ft

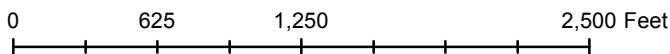


● Actual BH Location

\* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Aaron Birk

Draft Date: 7/24/2013

Drawing Name/Number:

Addendum\_Lori 3510 4-2H.mxd

Coordinate System:

NAD 1927 State Plane  
Kansas South FIPS: 1502

## Remarks

---

Tiffany Golay  
07/15/013 12:49 pm

Conductor weight= 94 lbs/ft

Tiffany Golay  
07/15/013 11:19 am

Well was completed using an open hole packer system