

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1258893
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: _____

1258893



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 <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
-----------------------------------	-----------	---------	-------------	---------------	---------

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> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

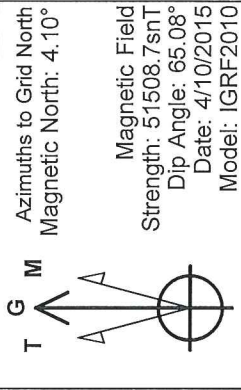
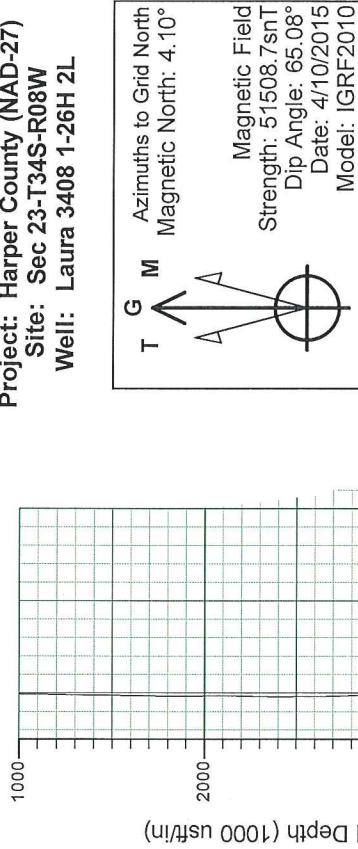
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
8366.0	92.60	154.00	4756.5	-3354.5	2407.5	0.00	0.00	4121.6	Start DLS 2.00 TFO 169.38
8659.0	86.84	155.08	4757.9	-3618.9	2533.4	2.00	169.38	4412.4	Start DLS 0.00 TFO 90.00
8859.0	86.84	155.09	4768.9	-3800.0	2617.5	0.00	90.00	4610.5	Start DLS 2.00 TFO 0.00
9012.0	89.90	155.09	4773.3	-3938.7	2681.9	2.00	0.00	4762.2	Start DLS 0.00 TFO -126.50
10315.6	89.90	155.09	4775.6	-5121.0	3231.0	0.00	-126.50	6055.1	TD at 10315.6

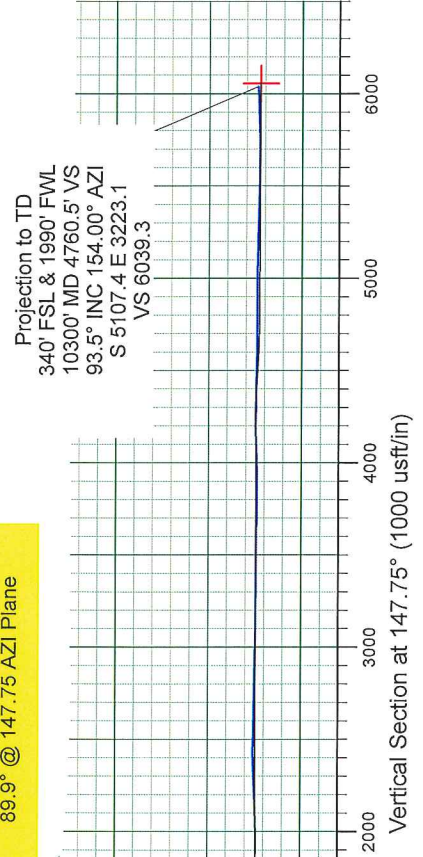
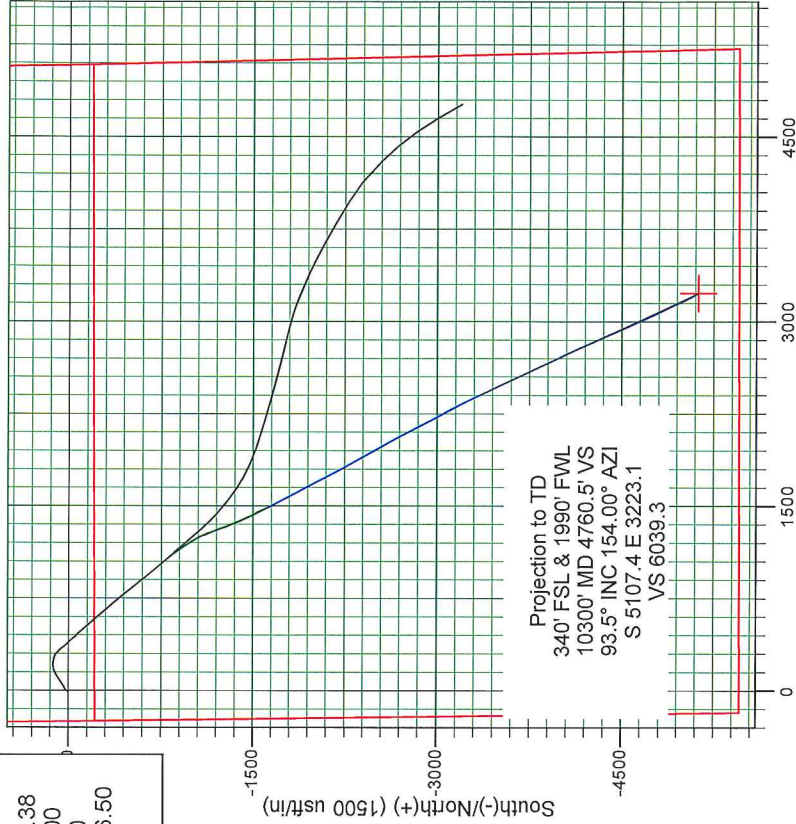
WELL DETAILS: Laura 3408 1-26H 2L

Ground Level:	1319.0
Northing	2097970.00
Easting	37° 3' 56.603 N
Latitude	98° 9' 51.326 W
Longitude	

Project: Harper County (NAD-27)
 Site: Sec 23-T34S-R08W
 Well: Laura 3408 1-26H 2L



Azimuths to Grid North
 Magnetic North: 4.10°
 Strength: 51508.7snT
 Dip Angle: 65.08°
 Date: 4/10/2015
 Model: IGRF2010



DrillRight

Survey Report

Company: Sandridge Energy	Local Co-ordinate Reference: Well Laura 3408 1-26H 2L
Project: Harper County (NAD-27)	TVD Reference: KB @ 1336.0usft
Site: Sec 23-T34S-R08W	MD Reference: KB @ 1336.0usft
Well: Laura 3408 1-26H 2L	North Reference: Grid
Wellbore: Laura 1-26H 2L	Survey Calculation Method: Minimum Curvature
Design: Laura 1-26H 2L	Database: EDM 5000.1 Single User Db

Project Harper County (NAD-27)	
Map System: US State Plane 1927 (Exact solution)	System Datum: Mean Sea Level
Geo Datum: NAD 1927 (NADCON CONUS)	
Map Zone: Kansas South 1502	

Site Sec 23-T34S-R08W		
Site Position:	Northing: 145,269.00 usft	Latitude: 37° 3' 54.516 N
From: Map	Easting: 2,097,723.00 usft	Longitude: 98° 9' 54.382 W
Position Uncertainty: 0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.21 °

Well Laura 3408 1-26H 2L			
Well Position	+N-S 0.0 usft	Northing: 145,481.00 usft	Latitude: 37° 3' 56.603 N
	+E-W 0.0 usft	Easting: 2,097,970.00 usft	Longitude: 98° 9' 51.326 W
Position Uncertainty	0.0 usft	Wellhead Elevation: 0.0 usft	Ground Level: 1,319.0 usft

Wellbore Laura 1-26H 2L					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/10/2015	4.31	65.08	51,509

Design Laura 1-26H 2L					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 5,500.0			
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.0	0.0	0.0	147.75	

Survey Program		Date 4/27/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
375.0	5,500.0	Weatherford MWD Surveys (Laura 1-26H)	MWD	MWD - Standard
5,576.0	6,396.0	Drillright MWD Surveys (Laura 1-26H 2L)	MWD	MWD - Standard
6,576.0	10,300.0	Archer MWD Surveys (Laura 1-26H 2L)	MWD	MWD - Standard

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
375.0	0.10	309.29	375.0	0.2	-0.3	-0.3	0.03	0.03	0.00	0.00
718.0	0.40	309.29	718.0	1.2	-1.4	-1.7	0.09	0.09	0.00	0.00
824.0	0.70	309.29	824.0	1.8	-2.2	-2.7	0.28	0.28	0.00	0.00
920.0	0.88	332.72	920.0	2.8	-3.0	-4.0	0.38	0.19	24.41	
1,015.0	0.91	341.13	1,015.0	4.2	-3.6	-5.4	0.14	0.03	8.85	
1,110.0	0.91	346.46	1,110.0	5.6	-4.0	-6.9	0.09	0.00	5.61	
1,204.0	0.99	346.14	1,203.9	7.1	-4.4	-8.4	0.09	0.09	-0.34	
1,299.0	0.98	336.97	1,298.9	8.7	-4.9	-10.0	0.17	-0.01	-9.65	

DrillRight

Survey Report

Company:	Sandridge Energy	Local Co-ordinate Reference:	Well Laura 3408 1-26H 2L
Project:	Harper County (NAD-27)	TVD Reference:	KB @ 1336.0usft
Site:	Sec 23-T34S-R08W	MD Reference:	KB @ 1336.0usft
Well:	Laura 3408 1-26H 2L	North Reference:	Grid
Wellbore:	Laura 1-26H 2L	Survey Calculation Method:	Minimum Curvature
Design:	Laura 1-26H 2L	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,394.0	0.84	319.08	1,393.9	10.0	-5.6	-11.4	0.33	-0.15	-18.83	
1,490.0	1.22	49.24	1,489.9	11.2	-5.3	-12.3	1.54	0.40	93.92	
1,585.0	3.69	48.37	1,584.8	13.9	-2.3	-12.9	2.60	2.60	-0.92	
1,680.0	5.83	37.95	1,679.5	19.7	3.0	-15.1	2.42	2.25	-10.97	
1,774.0	6.78	52.27	1,772.9	26.9	10.3	-17.2	1.95	1.01	15.23	
1,870.0	8.40	61.71	1,868.1	33.6	21.0	-17.3	2.12	1.69	9.83	
1,965.0	8.04	63.40	1,962.1	39.9	33.0	-16.1	0.46	-0.38	1.78	
2,060.0	9.54	61.40	2,056.0	46.7	45.9	-15.0	1.61	1.58	-2.11	
2,155.0	11.68	53.07	2,149.4	56.2	60.5	-15.3	2.77	2.25	-8.77	
2,250.0	11.45	52.56	2,242.4	67.7	75.6	-16.9	0.26	-0.24	-0.54	
2,345.0	10.55	52.57	2,335.7	78.7	90.0	-18.5	0.95	-0.95	0.01	
2,440.0	11.19	58.76	2,429.0	88.8	104.8	-19.2	1.40	0.67	6.52	
2,535.0	10.17	60.14	2,522.3	97.8	120.0	-18.7	1.11	-1.07	1.45	
2,631.0	10.98	56.12	2,616.7	107.1	134.9	-18.6	1.14	0.84	-4.19	
2,726.0	12.21	64.62	2,709.8	116.4	151.5	-17.6	2.21	1.29	8.95	
2,821.0	12.25	75.93	2,802.6	123.2	170.4	-13.3	2.52	0.04	11.91	
2,917.0	12.07	85.48	2,896.5	126.4	190.2	-5.4	2.10	-0.19	9.95	
3,009.0	11.03	86.89	2,986.6	127.7	208.6	3.3	1.17	-1.13	1.53	
3,102.0	10.00	86.34	3,078.1	128.7	225.6	11.5	1.11	-1.11	-0.59	
3,194.0	10.22	95.74	3,168.6	128.4	241.7	20.4	1.81	0.24	10.22	
3,284.0	10.25	105.98	3,257.2	125.4	257.3	31.3	2.02	0.03	11.38	
3,377.0	9.40	107.90	3,348.8	120.8	272.5	43.3	0.98	-0.91	2.06	
3,472.0	8.67	119.35	3,442.7	114.9	286.1	55.5	2.04	-0.77	12.05	
3,567.0	10.58	128.81	3,536.3	105.9	299.1	70.1	2.60	2.01	9.96	
3,663.0	10.92	132.99	3,630.7	94.2	312.7	87.2	0.89	0.35	4.35	
3,758.0	8.75	132.94	3,724.3	83.1	324.5	102.9	2.28	-2.28	-0.05	
3,853.0	9.03	141.39	3,818.1	72.4	334.5	117.3	1.40	0.29	8.89	
3,948.0	9.68	147.23	3,911.9	59.8	343.5	132.7	1.21	0.68	6.15	
4,011.0	8.95	142.67	3,974.0	51.5	349.3	142.9	1.65	-1.16	-7.24	
4,043.0	11.09	143.45	4,005.5	47.0	352.6	148.4	6.70	6.69	2.44	
4,074.0	14.17	137.68	4,035.8	41.8	357.0	155.1	10.72	9.94	-18.61	
4,106.0	16.86	136.51	4,066.6	35.5	362.8	163.5	8.46	8.41	-3.66	
4,138.0	19.09	137.59	4,097.1	28.3	369.5	173.2	7.05	6.97	3.38	
4,170.0	21.90	138.25	4,127.0	20.0	377.0	184.3	8.81	8.78	2.06	
4,202.0	25.06	138.06	4,156.4	10.5	385.5	196.8	9.88	9.88	-0.59	
4,234.0	28.78	137.37	4,184.9	-0.2	395.3	211.1	11.67	11.63	-2.16	
4,266.0	32.73	137.10	4,212.4	-12.2	406.4	227.2	12.35	12.34	-0.84	
4,297.0	35.76	136.79	4,238.0	-25.0	418.3	244.3	9.79	9.77	-1.00	
4,329.0	37.74	136.46	4,263.7	-38.9	431.5	263.1	6.22	6.19	-1.03	
4,361.0	39.36	136.43	4,288.7	-53.3	445.2	282.7	5.06	5.06	-0.09	
4,392.0	41.04	136.35	4,312.4	-67.8	459.0	302.3	5.42	5.42	-0.26	
4,424.0	42.66	136.25	4,336.2	-83.3	473.7	323.2	5.07	5.06	-0.31	
4,456.0	43.77	136.98	4,359.5	-99.2	488.8	344.7	3.80	3.47	2.28	

DrillRight

Survey Report

Company:	Sandridge Energy	Local Co-ordinate Reference:	Well Laura 3408 1-26H 2L
Project:	Harper County (NAD-27)	TVD Reference:	KB @ 1336.0usft
Site:	Sec 23-T34S-R08W	MD Reference:	KB @ 1336.0usft
Well:	Laura 3408 1-26H 2L	North Reference:	Grid
Wellbore:	Laura 1-26H 2L	Survey Calculation Method:	Minimum Curvature
Design:	Laura 1-26H 2L	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,487.0	44.76	137.86	4,381.7	-115.1	503.4	366.0	3.76	3.19	2.84
4,519.0	45.71	138.61	4,404.2	-132.1	518.6	388.4	3.40	2.97	2.34
4,550.0	47.18	139.16	4,425.6	-149.0	533.3	410.6	4.91	4.74	1.77
4,582.0	49.11	139.75	4,447.0	-167.1	548.8	434.2	6.19	6.03	1.84
4,614.0	51.92	140.22	4,467.3	-186.0	564.7	458.6	8.85	8.78	1.47
4,645.0	53.62	140.37	4,486.1	-205.0	580.5	483.1	5.50	5.48	0.48
4,677.0	54.83	140.17	4,504.8	-225.0	597.1	508.9	3.82	3.78	-0.63
4,709.0	56.39	140.13	4,522.8	-245.2	614.0	535.0	4.88	4.88	-0.13
4,741.0	57.64	139.67	4,540.3	-265.8	631.3	561.6	4.09	3.91	-1.44
4,772.0	58.06	139.50	4,556.8	-285.8	648.3	587.6	1.43	1.35	-0.55
4,804.0	58.12	139.86	4,573.7	-306.5	665.9	614.5	0.97	0.19	1.13
4,835.0	58.14	139.91	4,590.0	-326.6	682.8	640.6	0.15	0.06	0.16
4,867.0	58.02	139.84	4,607.0	-347.4	700.3	667.5	0.42	-0.38	-0.22
4,899.0	58.11	139.87	4,623.9	-368.1	717.8	694.4	0.29	0.28	0.09
4,930.0	61.52	139.88	4,639.5	-388.6	735.1	720.9	11.00	11.00	0.03
4,962.0	65.39	140.40	4,653.8	-410.6	753.5	749.3	12.18	12.09	1.63
4,993.0	67.01	141.51	4,666.3	-432.6	771.3	777.5	6.17	5.23	3.58
5,025.0	68.77	141.79	4,678.3	-455.9	789.7	806.9	5.56	5.50	0.88
5,057.0	70.25	141.94	4,689.5	-479.4	808.2	836.7	4.65	4.63	0.47
5,089.0	73.11	141.40	4,699.6	-503.3	827.1	867.0	9.08	8.94	-1.69
5,121.0	76.25	140.69	4,708.0	-527.3	846.5	897.6	10.04	9.81	-2.22
5,152.0	78.10	140.35	4,714.9	-550.6	865.7	927.6	6.06	5.97	-1.10
5,184.0	81.73	140.43	4,720.5	-574.9	885.8	958.8	11.35	11.34	0.25
5,215.0	84.05	140.96	4,724.4	-598.7	905.2	989.4	7.67	7.48	1.71
5,247.0	86.02	140.81	4,727.1	-623.4	925.4	1,021.0	6.17	6.16	-0.47
5,278.0	86.57	140.37	4,729.1	-647.3	945.0	1,051.7	2.27	1.77	-1.42
5,310.0	86.78	140.18	4,731.0	-671.9	965.4	1,083.4	0.88	0.66	-0.59
5,342.0	87.13	140.01	4,732.7	-696.4	985.9	1,115.0	1.22	1.09	-0.53
5,373.0	87.34	139.36	4,734.2	-720.0	1,005.9	1,145.7	2.20	0.68	-2.10
5,405.0	87.48	139.21	4,735.6	-744.2	1,026.8	1,177.3	0.64	0.44	-0.47
5,436.0	87.76	138.86	4,736.9	-767.6	1,047.1	1,207.9	1.45	0.90	-1.13
5,468.0	87.48	138.80	4,738.2	-791.7	1,068.2	1,239.5	0.89	-0.88	-0.19
5,500.0	87.90	139.02	4,739.5	-815.8	1,089.2	1,271.1	1.48	1.31	0.69
5,576.0	87.10	146.40	4,742.8	-876.1	1,135.1	1,346.7	9.76	-1.05	9.71
First Drillright MWD Survey									
5,640.0	86.50	146.70	4,746.4	-929.5	1,170.4	1,410.6	1.05	-0.94	0.47
5,735.0	85.90	148.10	4,752.7	-1,009.3	1,221.4	1,505.4	1.60	-0.63	1.47
5,766.0	87.40	150.50	4,754.5	-1,035.9	1,237.2	1,536.3	9.12	4.84	7.74
5,829.0	90.50	159.20	4,755.7	-1,092.9	1,264.0	1,598.7	14.66	4.92	13.81
5,924.0	89.50	159.30	4,755.7	-1,181.7	1,297.6	1,691.8	1.06	-1.05	0.11
6,019.0	88.60	158.50	4,757.3	-1,270.3	1,331.8	1,785.0	1.27	-0.95	-0.84
6,113.0	89.50	157.30	4,758.8	-1,357.4	1,367.2	1,877.5	1.60	0.96	-1.28
6,209.0	89.90	155.90	4,759.3	-1,445.5	1,405.3	1,972.4	1.52	0.42	-1.46
6,302.0	91.30	153.20	4,758.3	-1,529.5	1,445.3	2,064.7	3.27	1.51	-2.90

DrillRight

Survey Report

Company:	Sandridge Energy	Local Co-ordinate Reference:	Well Laura 3408 1-26H 2L
Project:	Harper County (NAD-27)	TVD Reference:	KB @ 1336.0usft
Site:	Sec 23-T34S-R08W	MD Reference:	KB @ 1336.0usft
Well:	Laura 3408 1-26H 2L	North Reference:	Grid
Wellbore:	Laura 1-26H 2L	Survey Calculation Method:	Minimum Curvature
Design:	Laura 1-26H 2L	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,396.0	92.80	153.10	4,755.0	-1,613.3	1,487.7	2,158.2	1.60	1.60	-0.11
Last Drillright MWD Survey									
6,576.0	92.80	153.10	4,746.2	-1,773.6	1,569.0	2,337.2	0.00	0.00	0.00
First Archer MWD Survey									
6,669.0	90.80	152.30	4,743.3	-1,856.2	1,611.7	2,429.8	2.32	-2.15	-0.86
6,762.0	88.70	152.10	4,743.7	-1,938.5	1,655.0	2,522.6	2.27	-2.26	-0.22
6,855.0	88.60	152.50	4,745.9	-2,020.8	1,698.2	2,615.2	0.44	-0.11	0.43
6,949.0	89.80	153.30	4,747.2	-2,104.5	1,741.1	2,708.8	1.53	1.28	0.85
7,042.0	88.60	152.00	4,748.5	-2,187.0	1,783.8	2,801.5	1.90	-1.29	-1.40
7,136.0	88.80	151.10	4,750.6	-2,269.7	1,828.6	2,895.3	0.98	0.21	-0.96
7,230.0	88.00	150.40	4,753.2	-2,351.7	1,874.5	2,989.1	1.13	-0.85	-0.74
7,323.0	89.00	151.00	4,755.7	-2,432.7	1,920.0	3,081.9	1.25	1.08	0.65
7,418.0	89.90	150.70	4,756.6	-2,515.7	1,966.2	3,176.8	1.00	0.95	-0.32
7,513.0	89.60	151.10	4,757.0	-2,598.7	2,012.4	3,271.6	0.53	-0.32	0.42
7,608.0	90.30	153.20	4,757.1	-2,682.7	2,056.8	3,366.4	2.33	0.74	2.21
7,702.0	90.30	152.80	4,756.6	-2,766.4	2,099.5	3,460.0	0.43	0.00	-0.43
7,797.0	89.10	152.40	4,757.1	-2,850.8	2,143.2	3,554.6	1.33	-1.26	-0.42
7,892.0	88.70	151.30	4,758.9	-2,934.5	2,188.0	3,649.4	1.23	-0.42	-1.16
7,987.0	89.40	150.20	4,760.5	-3,017.4	2,234.4	3,744.2	1.37	0.74	-1.16
8,082.0	89.80	152.40	4,761.1	-3,100.7	2,280.0	3,839.0	2.35	0.42	2.32
8,176.0	90.50	153.40	4,760.9	-3,184.4	2,322.9	3,932.6	1.30	0.74	1.06
8,271.0	91.10	153.40	4,759.6	-3,269.3	2,365.4	4,027.2	0.63	0.63	0.00
8,366.0	92.60	154.00	4,756.5	-3,354.5	2,407.5	4,121.6	1.70	1.58	0.63
8,460.0	91.10	154.80	4,753.5	-3,439.2	2,448.1	4,214.9	1.81	-1.60	0.85
8,555.0	88.50	154.90	4,753.8	-3,525.2	2,488.4	4,309.2	2.74	-2.74	0.11
8,650.0	88.90	155.00	4,756.0	-3,611.2	2,528.6	4,403.4	0.43	0.42	0.11
8,745.0	89.80	154.40	4,757.0	-3,697.1	2,569.2	4,497.7	1.14	0.95	-0.63
8,840.0	88.80	155.20	4,758.2	-3,783.0	2,609.7	4,592.0	1.35	-1.05	0.84
8,935.0	89.80	154.40	4,759.4	-3,869.0	2,650.1	4,686.3	1.35	1.05	-0.84
9,030.0	89.00	154.70	4,760.4	-3,954.8	2,690.9	4,780.6	0.90	-0.84	0.32
9,125.0	90.30	154.70	4,760.9	-4,040.6	2,731.5	4,874.9	1.37	1.37	0.00
9,220.0	90.30	155.60	4,760.4	-4,126.9	2,771.5	4,969.1	0.95	0.00	0.95
9,315.0	89.20	155.70	4,760.9	-4,213.4	2,810.6	5,063.2	1.16	-1.16	0.11
9,410.0	89.90	155.90	4,761.6	-4,300.0	2,849.6	5,157.2	0.77	0.74	0.21
9,504.0	89.10	156.20	4,762.4	-4,385.9	2,887.7	5,250.3	0.91	-0.85	0.32
9,599.0	87.70	155.40	4,765.1	-4,472.6	2,926.7	5,344.3	1.70	-1.47	-0.84
9,694.0	88.40	156.40	4,768.3	-4,559.2	2,965.4	5,438.3	1.28	0.74	1.05
9,789.0	88.90	155.60	4,770.5	-4,646.0	3,004.1	5,532.3	0.99	0.53	-0.84
9,884.0	89.70	154.80	4,771.7	-4,732.2	3,043.9	5,626.4	1.19	0.84	-0.84
9,979.0	90.00	154.20	4,772.0	-4,818.0	3,084.8	5,720.8	0.71	0.32	-0.63
10,074.0	91.20	155.10	4,771.0	-4,903.8	3,125.5	5,815.1	1.58	1.26	0.95
10,169.0	92.50	154.40	4,767.9	-4,989.7	3,166.0	5,909.3	1.55	1.37	-0.74
10,241.0	93.50	154.00	4,764.1	-5,054.4	3,197.3	5,980.8	1.50	1.39	-0.56

DrillRight

Survey Report

Company: Sandridge Energy	Local Co-ordinate Reference: Well Laura 3408 1-26H 2L
Project: Harper County (NAD-27)	TVD Reference: KB @ 1336.0usft
Site: Sec 23-T34S-R08W	MD Reference: KB @ 1336.0usft
Well: Laura 3408 1-26H 2L	North Reference: Grid
Wellbore: Laura 1-26H 2L	Survey Calculation Method: Minimum Curvature
Design: Laura 1-26H 2L	Database: EDM 5000.1 Single User Db

Survey	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Last Archer MWD Survey										
	10,300.0	93.50	154.00	4,760.5	-5,107.4	3,223.1	6,039.3	0.00	0.00	0.00
Projection to TD - PBHL Laura 1-26H 2L										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
5,576.0	4,742.8	-876.1	1,135.1	First Drillright MWD Survey	
6,396.0	4,755.0	-1,613.3	1,487.7	Last Drillright MWD Survey	
6,576.0	4,746.2	-1,773.6	1,569.0	First Archer MWD Survey	
10,241.0	4,764.1	-5,054.4	3,197.3	Last Archer MWD Survey	
10,300.0	4,760.5	-5,107.4	3,223.1	Projection to TD	

Checked By: _____ Approved By: _____ Date: _____

Laura 3408 1-26H 2L Perforations

Stage Nbr	Date	Type	Top Depth	Top Depth (TVD)	Bottom Depth	Bottom Depth (TVD)	Zone	Shot Density	Status	String Perforated	Fluid Type
21	7/14/15	Perforated	5,955	4,756	5,930	4,756	Miss Lime - Upper, Leg 2	3	Active	Production Liner, 10,300ftKB	
20	7/10/15	Frac Sleeve	6,401	4,755	6,403	4,755	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
19	7/10/15	Frac Sleeve	6,597	4,745	6,599	4,745	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
18	7/10/15	Frac Sleeve	6,793	4,744	6,795	4,745	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
17	7/9/15	Frac Sleeve	6,987	4,748	6,989	4,748	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
16	7/9/15	Frac Sleeve	7,226	4,753	7,228	4,753	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
15	7/9/15	Frac Sleeve	7,413	4,757	7,415	4,757	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
14	7/9/15	Frac Sleeve	7,604	4,757	7,606	4,757	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
13	7/9/15	Frac Sleeve	7,800	4,757	7,802	4,757	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
12	7/9/15	Frac Sleeve	8,023	4,761	8,025	4,761	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
11	7/9/15	Frac Sleeve	8,206	4,761	8,208	4,761	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
10	7/9/15	Frac Sleeve	8,415	4,755	8,417	4,755	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
9	7/9/15	Frac Sleeve	8,610	4,755	8,612	4,755	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
8	7/9/15	Frac Sleeve	8,798	4,758	8,800	4,758	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
7	7/9/15	Frac Sleeve	8,991	4,760	8,993	4,760	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
6	7/9/15	Frac Sleeve	9,187	4,761	9,189	4,761	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
5	7/9/15	Frac Sleeve	9,424	4,762	9,426	4,762	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
4	7/9/15	Frac Sleeve	9,424	4,762	9,426	4,762	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
3	7/9/15	Frac Sleeve	9,805	4,771	9,807	4,771	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
2	6/10/15	Frac Sleeve	9,996	4,772	9,998	4,772	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water
1	6/10/15	P-Sleeve	10,191	4,767	10,193	4,767	Miss Lime - Upper, Leg 2	1	Active	Production Liner, 10,300ftKB	Fresh Water

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/9/2015
Job End Date:	7/10/2015
State:	Kansas
County:	Harper
API Number:	15-077-22109-02-00
Operator Name:	SandRidge Energy
Well Name and Number:	Laura 3408 1-26H 2L
Longitude:	-98.16425502
Latitude:	37.06572157
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,751
Total Base Water Volume (gal):	2,347,338
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
Water	Archer	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	94.93166	None
Sand (Proppant)	Archer	Proppant					
			Silica Substrate	NA	100.00000	4.46614	None
AFR101	Archer	Friction Reducer					
			Water	7732-18-5	60.00000	0.03653	None
			Anionic Polymer	NA	30.00000	0.01827	None
			Aliphatic Hydrocarbon	64742-47-8	30.00000	0.01827	None
			Oxyalkylated Alcohol	68002-97-1	5.00000	0.00304	None
			Polyol Ester	NA	5.00000	0.00304	None
			Polyglycol Ester	NA	1.00000	0.00061	None
			Tetrasodium Ethylenediaminetetraacetate	64-02-8	0.10000	0.00006	None
Hydrochloric Acid (15%)	Archer	Acidizing					
			Hydrochloric Acid	7647-01-0	15.00000	0.07876	None
SCI-1	Archer	Liquid Scale Inhibitor					
			Water	7732-18-5	90.00000	0.00917	None
			Sodium Salt of Phosphate Ester	68131-72-6	15.00000	0.00153	None
			Acrylic Polymer	28205-96-1	15.00000	0.00153	None

AIC	Archer	Liquid Acid Iron Control					
			Acetic Acid	64-19-7	50.00000	0.00122	None
			Water	7732-18-5	35.00000	0.00085	None
			Citric Acid	77-92-9	30.00000	0.00073	None
Chemflush	Archer	Enviro-Friendly Chemical Flush					
			Hydrotreated Petroleum Distillate	64742-47-8	99.00000	0.00227	None
			Alcohol Ethoxylate Surfactants	NA	10.00000	0.00023	None
AHIB 160	Archer	Corrosion Inhibitor					
			Methyl Alcohol	67-56-1	80.00000	0.00067	None
			Alcohol Ethoxylate Surfactants	NA	15.00000	0.00013	None
			thiourea-formaldehyde copolymer	68527-49-1	15.00000	0.00013	None
			n-olefins	NA	8.00000	0.00007	None
			Propargyl Alcohol	107-19-7	6.00000	0.00005	None
Lodyne	Archer	Non-Emulsifying Surfactant					
			WATER	7732-18-5	60.00000	0.00029	None
			TRADE SECRET	NA	40.00000	0.00019	None
			ISOPROPANOL	67-63-0	10.00000	0.00005	None
			NONYL PHENOL, 4 MOL	104-40-5	10.00000	0.00005	None
			METHANOL	67-56-1	10.00000	0.00005	None

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.

* 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)