



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1185113  
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: \_\_\_\_\_



1185113

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
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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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Ann 3404 2-21H
Doc ID	1185113

All Electric Logs Run

Boresight
Prizm
Mud
Induction
Nuclear

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Well Name	Ann 3404 2-21H
Doc ID	1185113

#### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	10570-10572	1500 gals 15% HCL, 3758 bbls slickwater, TLTR 3794 bbls	
5	10431-10433	1500 gals 15% HCL, 3909 bbls slickwater, TLTR 7703 bbls	
5	10292-10294	1500 gals 15% HCL, 3845 bbls slickwater, TLTR 11548 bbls	
5	10152-10154	1500 gals 15% HCL, 3777 bbls slickwater, TLTR 15325 bbls	
5	10014-10016	1500 gals 15% HCL, 3754 bbls slickwater, TLTR 19079 bbls	
5	9919-9921	1500 gals 15% HCL, 3787 bbls slickwater, TLTR 22866 bbls	
5	9735-9737	1500 gals 15% HCL, 3743 bbls slickwater, TLTR 26645 bbls	
5	9551-9553	1500 gals 15% HCL, 3781 bbls slickwater, TLTR 30492 bbls	
5	9457-9459	1500 gals 15% HCL, 3762 bbls slickwater, TLTR 34254 bbls	
5	9042-9306	1500 gals 15% HCL, 6481 bbls slickwater, TLTR 40691 bbls	

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#### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8654-8946	1500 gals 15% HCL, 6653 bbls slickwater, TLTR 47284 bbls	
5	8272-8556	1500 gals 15% HCL, 6464 bbls slickwater, TLTR 53565 bbls	
5	7861-8180	1500 gals 15% HCL, 6476 bbls slickwater, TLTR 60029 bbls	
5	7451-7745	1500 gals 15% HCL, 6356 bbls slickwater, TLTR 66447 bbls	
5	5833-6131	1500 gals 15% HCL, 6382 bbls slickwater, TLTR 79550 bbls	
5	7019-7349	1500 gals 15% HCL, 305 bbls slickwater, TLTR 66862 bbls	
5	6628-6926	1500 gals 15% HCL, 300 bbls slickwater, TLTR 67271 bbls	
5	6277-6508	1500 gals 15% HCL, 6338 bbls slickwater, TLTR 73460 bbls	
5	5442-5734	1500 gals 15% HCL, 6405 bbls slickwater, TLTR 85499 bbls	
5	4802-5230	1500 gals 15% HCL, 4142 bbls slickwater, TLTR 89641 bbls	





# **Sandridge Energy, INC.(mid-con.)**

**Sumner County (KS27S)**

**Sec 21-T34S-04W**

**Ann 3404 2-21H/Job #04501-431-22/Horizon 15**

**Wellbore #1**

**Design: Wellbore #1**

## **Standard Survey Report**

**04 December, 2013**

<b>Company:</b>	Sandridge Energy, INC.(mid-con.)	<b>Local Co-ordinate Reference:</b>	Well Ann 3404 2-21H/Job #04501-431-22/Horizon 15
<b>Project:</b>	Sumner County (KS27S)	<b>TVD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Site:</b>	Sec 21-T34S-04W	<b>MD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Well:</b>	Ann 3404 2-21H/Job #04501-431-22/Horizon 15	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

<b>Project</b>	Sumner County (KS27S)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Kansas South 1502		

<b>Site</b>	Sec 21-T34S-04W		
<b>Site Position:</b>		<b>Northing:</b>	146,760.00 usft
<b>From:</b>	Map	<b>Easting:</b>	2,214,325.00 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	37° 4' 2.646 N
		<b>Longitude:</b>	97° 45' 55.751 W
		<b>Grid Convergence:</b>	0.45 °

<b>Well</b>	Ann 3404 2-21H/Job #04501-431-22/Horizon 15		
<b>Well Position</b>	<b>+N-S</b>	0.0 usft	<b>Northing:</b> 146,972.00 usft
	<b>+E-W</b>	0.0 usft	<b>Easting:</b> 2,215,026.00 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	37° 4' 4.687 N
		<b>Longitude:</b>	97° 45' 47.082 W
		<b>Ground Level:</b>	1,201.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2013/10/21	4.25	65.19	51,698

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N-S (usft)</b>	<b>+E-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	15.15	

<b>Survey Program</b>	Date 2013/12/04				
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
250.0	10,633.0	Archer MWD Surveys (Wellbore #1)	MWD	MWD - Standard	

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	
250.0	0.80	321.80	250.0	1.4	-1.1	1.0	0.32	0.32	0.00	
<b>First Single Shot MWD Survey</b>										
500.0	0.30	321.80	500.0	3.3	-2.6	2.5	0.20	-0.20	0.00	
<b>Last Single Shot MWD Survey</b>										
599.0	0.60	321.80	599.0	3.9	-3.0	2.9	0.30	0.30	0.00	
<b>First Archer MWD Survey</b>										
875.0	0.40	183.00	875.0	4.0	-4.0	2.9	0.34	-0.07	-50.29	
967.0	2.60	98.40	966.9	3.4	-1.9	2.8	2.82	2.39	-91.96	
1,058.0	9.20	93.10	1,057.4	2.7	7.4	4.6	7.27	7.25	-5.82	



<b>Company:</b>	Sandridge Energy, INC.(mid-con.)	<b>Local Co-ordinate Reference:</b>	Well Ann 3404 2-21H/Job #04501-431-22/Horizon 15
<b>Project:</b>	Sumner County (KS27S)	<b>TVD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Site:</b>	Sec 21-T34S-04W	<b>MD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Well:</b>	Ann 3404 2-21H/Job #04501-431-22/Horizon 15	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)	
1,150.0	13.10	93.40	1,147.7	1.7	25.1	8.2	4.24	4.24	0.33	
1,241.0	15.30	86.30	1,235.9	1.9	47.4	14.2	3.08	2.42	-7.80	
1,332.0	16.50	85.50	1,323.4	3.7	72.3	22.4	1.34	1.32	-0.88	
1,424.0	16.40	83.70	1,411.6	6.1	98.2	31.6	0.56	-0.11	-1.96	
1,519.0	16.70	79.50	1,502.7	10.1	125.0	42.4	1.30	0.32	-4.42	
1,613.0	16.00	77.10	1,592.9	15.4	150.9	54.3	1.03	-0.74	-2.55	
1,709.0	16.20	79.60	1,685.1	20.8	176.9	66.3	0.75	0.21	2.60	
1,804.0	16.70	79.60	1,776.2	25.6	203.4	77.9	0.53	0.53	0.00	
1,899.0	16.40	78.80	1,867.3	30.7	230.0	89.8	0.40	-0.32	-0.84	
1,994.0	17.50	85.00	1,958.2	34.6	257.4	100.6	2.23	1.16	6.53	
2,089.0	20.60	86.00	2,048.0	37.0	288.3	111.0	3.28	3.26	1.05	
2,184.0	21.30	81.90	2,136.7	40.6	322.0	123.3	1.71	0.74	-4.32	
2,278.0	21.20	84.20	2,224.3	44.7	355.8	136.1	0.89	-0.11	2.45	
2,373.0	20.70	82.60	2,313.0	48.6	389.6	148.7	0.80	-0.53	-1.68	
2,467.0	19.80	83.80	2,401.2	52.5	421.9	160.9	1.05	-0.96	1.28	
2,562.0	21.30	81.90	2,490.2	56.6	455.0	173.6	1.73	1.58	-2.00	
2,656.0	23.00	82.80	2,577.2	61.3	490.1	187.3	1.84	1.81	0.96	
2,752.0	23.70	82.50	2,665.4	66.2	527.8	201.8	0.74	0.73	-0.31	
2,846.0	23.20	81.20	2,751.6	71.5	564.9	216.6	0.77	-0.53	-1.38	
2,941.0	23.10	81.40	2,839.0	77.1	601.8	231.7	0.13	-0.11	0.21	
3,036.0	21.80	82.00	2,926.7	82.4	637.7	246.2	1.39	-1.37	0.63	
3,130.0	22.40	85.80	3,013.8	86.1	672.8	259.0	1.65	0.64	4.04	
3,225.0	23.60	87.00	3,101.3	88.5	709.9	270.9	1.36	1.26	1.26	
3,319.0	21.00	84.60	3,188.3	91.0	745.4	282.7	2.93	-2.77	-2.55	
3,414.0	21.20	83.60	3,276.9	94.5	779.5	295.0	0.43	0.21	-1.05	
3,508.0	20.70	82.90	3,364.7	98.5	812.8	307.5	0.59	-0.53	-0.74	
3,602.0	21.40	84.60	3,452.4	102.2	846.4	319.8	0.99	0.74	1.81	
3,697.0	24.50	89.70	3,539.9	103.9	883.4	331.1	3.87	3.26	5.37	
3,792.0	21.70	86.90	3,627.3	104.9	920.6	341.9	3.17	-2.95	-2.95	
3,886.0	20.00	83.30	3,715.1	107.8	953.9	353.3	2.26	-1.81	-3.83	
3,981.0	22.00	83.20	3,803.8	111.8	987.7	366.0	2.11	2.11	-0.11	
4,013.0	22.50	84.50	3,833.4	113.1	999.8	370.4	2.19	1.56	4.06	
4,044.0	23.60	85.30	3,861.9	114.1	1,011.9	374.6	3.69	3.55	2.58	
4,076.0	25.10	82.90	3,891.1	115.5	1,025.0	379.4	5.61	4.69	-7.50	
4,107.0	24.30	77.20	3,919.3	117.7	1,037.7	384.8	8.10	-2.58	-18.39	
4,139.0	23.90	70.60	3,948.5	121.3	1,050.3	391.6	8.51	-1.25	-20.63	
4,170.0	24.70	65.60	3,976.7	126.1	1,062.1	399.3	7.12	2.58	-16.13	
4,202.0	25.50	60.90	4,005.7	132.2	1,074.2	408.4	6.71	2.50	-14.69	
4,233.0	26.50	56.70	4,033.6	139.3	1,085.8	418.2	6.76	3.23	-13.55	
4,265.0	26.90	54.30	4,062.2	147.4	1,097.7	429.1	3.59	1.25	-7.50	
4,297.0	27.20	51.30	4,090.7	156.2	1,109.2	440.7	4.36	0.94	-9.38	
4,328.0	27.80	48.20	4,118.2	165.4	1,120.2	452.4	5.01	1.94	-10.00	
4,360.0	28.10	45.20	4,146.4	175.7	1,131.1	465.2	4.49	0.94	-9.38	

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<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
4,391.0	28.70	43.00	4,173.7	186.3	1,141.3	478.1	3.89	1.94	-7.10
4,423.0	29.50	41.80	4,201.7	197.8	1,151.8	492.0	3.09	2.50	-3.75
4,454.0	30.80	40.40	4,228.5	209.5	1,162.1	506.0	4.77	4.19	-4.52
4,486.0	32.60	39.60	4,255.7	222.4	1,172.9	521.2	5.78	5.63	-2.50
4,518.0	34.50	39.20	4,282.4	236.1	1,184.1	537.3	5.98	5.94	-1.25
4,549.0	36.40	38.90	4,307.6	250.1	1,195.4	553.8	6.15	6.13	-0.97
4,581.0	39.30	38.00	4,332.9	265.4	1,207.6	571.8	9.23	9.06	-2.81
4,613.0	42.80	37.40	4,357.0	282.1	1,220.5	591.2	11.01	10.94	-1.88
4,645.0	46.30	37.10	4,379.8	299.9	1,234.0	612.0	10.96	10.94	-0.94
4,676.0	50.10	36.00	4,400.5	318.5	1,247.8	633.5	12.54	12.26	-3.55
4,708.0	53.60	34.60	4,420.2	339.0	1,262.3	657.2	11.47	10.94	-4.38
4,739.0	56.70	33.10	4,437.9	360.2	1,276.5	681.3	10.76	10.00	-4.84
4,770.0	58.60	31.40	4,454.5	382.3	1,290.5	706.3	7.68	6.13	-5.48
4,803.0	60.30	29.10	4,471.3	406.9	1,304.8	733.7	7.91	5.15	-6.97
4,835.0	63.10	27.90	4,486.5	431.6	1,318.2	761.1	9.35	8.75	-3.75
4,866.0	67.10	26.40	4,499.5	456.6	1,331.0	788.6	13.63	12.90	-4.84
4,898.0	71.50	24.40	4,510.8	483.7	1,343.9	818.1	14.94	13.75	-6.25
4,929.0	75.70	22.40	4,519.6	511.0	1,355.7	847.5	14.89	13.55	-6.45
4,962.0	79.40	19.80	4,526.7	541.0	1,367.3	879.5	13.60	11.21	-7.88
4,993.0	82.20	17.60	4,531.7	570.0	1,377.1	910.1	11.43	9.03	-7.10
5,025.0	84.70	15.50	4,535.3	600.5	1,386.1	941.9	10.18	7.81	-6.56
5,056.0	86.80	13.70	4,537.6	630.4	1,393.9	972.8	8.91	6.77	-5.81
5,088.0	88.20	11.30	4,539.0	661.6	1,400.8	1,004.7	8.68	4.38	-7.50
5,119.0	88.80	8.40	4,539.8	692.1	1,406.1	1,035.6	9.55	1.94	-9.35
5,151.0	89.40	7.00	4,540.3	723.8	1,410.4	1,067.3	4.76	1.88	-4.38
5,182.0	90.50	6.90	4,540.3	754.6	1,414.2	1,098.0	3.56	3.55	-0.32
5,214.0	91.30	6.70	4,539.8	786.4	1,418.0	1,129.6	2.58	2.50	-0.63
5,245.0	91.10	5.70	4,539.2	817.2	1,421.3	1,160.2	3.29	-0.65	-3.23
5,277.0	90.30	4.80	4,538.8	849.0	1,424.2	1,191.8	3.76	-2.50	-2.81
5,309.0	90.40	4.20	4,538.6	880.9	1,426.7	1,223.2	1.90	0.31	-1.88
5,341.0	91.20	3.60	4,538.2	912.9	1,428.9	1,254.6	3.12	2.50	-1.88
5,372.0	92.00	2.30	4,537.3	943.8	1,430.5	1,284.9	4.92	2.58	-4.19
5,403.0	90.70	0.60	4,536.6	974.8	1,431.3	1,315.0	6.90	-4.19	-5.48
5,495.0	87.60	357.50	4,537.9	1,066.7	1,429.8	1,403.3	4.76	-3.37	-3.37
5,590.0	87.70	357.80	4,541.8	1,161.6	1,425.9	1,493.9	0.33	0.11	0.32
5,685.0	88.20	357.70	4,545.2	1,256.5	1,422.2	1,584.5	0.54	0.53	-0.11
5,780.0	90.20	358.30	4,546.5	1,351.4	1,418.8	1,675.2	2.20	2.11	0.63
5,875.0	91.30	358.80	4,545.3	1,446.3	1,416.4	1,766.3	1.27	1.16	0.53
5,972.0	89.40	359.00	4,544.7	1,543.3	1,414.6	1,859.4	1.97	-1.96	0.21
6,067.0	90.20	359.30	4,545.0	1,638.3	1,413.2	1,950.7	0.90	0.84	0.32
6,162.0	91.20	359.20	4,543.9	1,733.3	1,411.9	2,042.0	1.06	1.05	-0.11
6,257.0	90.90	359.70	4,542.1	1,828.3	1,411.0	2,133.5	0.61	-0.32	0.53

<b>Company:</b>	Sandridge Energy, INC.(mid-con.)	<b>Local Co-ordinate Reference:</b>	Well Ann 3404 2-21H/Job #04501-431-22/Horizon 15
<b>Project:</b>	Sumner County (KS27S)	<b>TVD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Site:</b>	Sec 21-T34S-04W	<b>MD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Well:</b>	Ann 3404 2-21H/Job #04501-431-22/Horizon 15	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
6,352.0	92.00	0.80	4,539.7	1,923.2	1,411.4	2,225.3	1.64	1.16	1.16
6,447.0	87.40	359.80	4,540.2	2,018.2	1,411.9	2,317.1	4.96	-4.84	-1.05
6,542.0	87.20	359.70	4,544.7	2,113.1	1,411.5	2,408.5	0.24	-0.21	-0.11
6,638.0	88.30	359.30	4,548.5	2,209.0	1,410.7	2,500.9	1.22	1.15	-0.42
6,733.0	90.40	359.60	4,549.6	2,304.0	1,409.8	2,592.4	2.23	2.21	0.32
6,827.0	91.30	358.60	4,548.2	2,398.0	1,408.3	2,682.7	1.43	0.96	-1.06
6,922.0	91.90	358.30	4,545.5	2,492.9	1,405.7	2,773.6	0.71	0.63	-0.32
7,040.0	91.80	357.80	4,541.7	2,610.8	1,401.7	2,886.4	0.43	-0.08	-0.42
7,135.0	93.40	356.80	4,537.4	2,705.6	1,397.2	2,976.7	1.99	1.68	-1.05
7,229.0	91.70	356.80	4,533.2	2,799.3	1,392.0	3,065.8	1.81	-1.81	0.00
7,324.0	92.00	356.70	4,530.1	2,894.1	1,386.6	3,155.9	0.33	0.32	-0.11
7,419.0	91.20	356.80	4,527.5	2,988.9	1,381.2	3,246.0	0.85	-0.84	0.11
7,514.0	90.90	357.30	4,525.7	3,083.8	1,376.3	3,336.3	0.61	-0.32	0.53
7,609.0	90.90	357.60	4,524.3	3,178.7	1,372.1	3,426.8	0.32	0.00	0.32
7,704.0	91.70	357.50	4,522.1	3,273.6	1,368.0	3,517.3	0.85	0.84	-0.11
7,798.0	91.70	357.50	4,519.3	3,367.4	1,363.9	3,606.9	0.00	0.00	0.00
7,892.0	91.60	357.30	4,516.6	3,461.3	1,359.7	3,696.4	0.24	-0.11	-0.21
7,987.0	91.90	358.10	4,513.7	3,556.2	1,355.9	3,786.9	0.90	0.32	0.84
8,080.0	91.90	358.30	4,510.6	3,649.1	1,353.0	3,875.9	0.21	0.00	0.22
8,175.0	90.40	358.10	4,508.7	3,744.0	1,350.0	3,966.7	1.59	-1.58	-0.21
8,269.0	89.70	357.20	4,508.6	3,837.9	1,346.1	4,056.4	1.21	-0.74	-0.96
8,365.0	94.60	357.30	4,505.0	3,933.7	1,341.5	4,147.6	5.11	5.10	0.10
8,460.0	95.10	357.70	4,497.0	4,028.3	1,337.4	4,237.8	0.67	0.53	0.42
8,554.0	94.60	357.50	4,489.0	4,121.9	1,333.5	4,327.1	0.57	-0.53	-0.21
8,649.0	93.30	356.30	4,482.5	4,216.5	1,328.3	4,417.1	1.86	-1.37	-1.26
8,743.0	92.40	355.30	4,477.8	4,310.1	1,321.5	4,505.7	1.43	-0.96	-1.06
8,837.0	89.30	354.60	4,476.4	4,403.8	1,313.2	4,593.9	3.38	-3.30	-0.74
8,933.0	91.60	354.10	4,475.7	4,499.3	1,303.7	4,683.6	2.45	2.40	-0.52
9,027.0	90.50	353.50	4,474.0	4,592.7	1,293.6	4,771.2	1.33	-1.17	-0.64
9,122.0	91.10	353.80	4,472.6	4,687.1	1,283.1	4,859.5	0.71	0.63	0.32
9,217.0	91.40	354.20	4,470.6	4,781.6	1,273.2	4,948.1	0.53	0.32	0.42
9,311.0	91.60	358.30	4,468.1	4,875.3	1,267.0	5,037.0	4.37	0.21	4.36
9,406.0	90.00	359.30	4,466.8	4,970.3	1,265.0	5,128.2	1.99	-1.68	1.05
9,500.0	91.00	0.40	4,466.0	5,064.3	1,264.8	5,218.8	1.58	1.06	1.17
9,595.0	90.30	0.80	4,464.9	5,159.3	1,265.8	5,310.8	0.85	-0.74	0.42
9,690.0	88.30	1.00	4,466.0	5,254.2	1,267.3	5,402.8	2.12	-2.11	0.21
9,786.0	86.30	1.10	4,470.6	5,350.1	1,269.0	5,495.8	2.09	-2.08	0.10
9,881.0	87.30	1.30	4,475.9	5,444.9	1,271.0	5,587.9	1.07	1.05	0.21
9,975.0	88.00	1.80	4,479.7	5,538.8	1,273.5	5,679.2	0.91	0.74	0.53
10,069.0	91.20	2.50	4,480.4	5,632.8	1,277.1	5,770.7	3.48	3.40	0.74
10,164.0	90.30	2.50	4,479.1	5,727.7	1,281.2	5,863.4	0.95	-0.95	0.00
10,258.0	89.90	2.60	4,479.0	5,821.6	1,285.4	5,955.2	0.44	-0.43	0.11
10,354.0	90.50	1.90	4,478.6	5,917.5	1,289.2	6,048.7	0.96	0.63	-0.73

<b>Company:</b>	Sandridge Energy, INC.(mid-con.)	<b>Local Co-ordinate Reference:</b>	Well Ann 3404 2-21H/Job #04501-431-22/Horizon 15
<b>Project:</b>	Sumner County (KS27S)	<b>TVD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Site:</b>	Sec 21-T34S-04W	<b>MD Reference:</b>	WELL @ 1219.0usft (Original Well Elev)
<b>Well:</b>	Ann 3404 2-21H/Job #04501-431-22/Horizon 15	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)	
10,448.0	90.60	0.80	4,477.7	6,011.5	1,291.4	6,140.0	1.17	0.11	-1.17	
10,543.0	90.20	0.60	4,477.1	6,106.4	1,292.5	6,232.0	0.47	-0.42	-0.21	
<b>Last Archer MWD Survey</b>										
10,633.0	90.20	0.60	4,476.7	6,196.4	1,293.5	6,319.1	0.00	0.00	0.00	
<b>Projection to TD - PBHL Ann 2-21H</b>										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
250.0	250.0	1.4	-1.1	First Single Shot MWD Survey	
500.0	500.0	3.3	-2.6	Last Single Shot MWD Survey	
599.0	599.0	3.9	-3.0	First Archer MWD Survey	
10,543.0	4,477.1	6,106.4	1,292.5	Last Archer MWD Survey	
10,633.0	4,476.7	6,196.4	1,293.5	Projection to TD	

Checked By: _____	Approved By: _____	Date: _____
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**BASIN SERVICES, LLC**  
 P O BOX 4268  
 ABILENE, TX 79608-4268  
 Phone # (325)690-0053  
 Fax # (325)698-0055

# TICKET

TICKET NUMBER: WY-138-1  
 TICKET DATE: 10/21/2013

**ELECTRONIC**

SANDRIDGE ENERGY  
 \*\*\*\*\* BILL IN ADP!! \*\*\*\*\*  
 123 ROBERT S KERR AVE  
 OKLAHOMA CITY, OK 73102-6406

YARD: WY WAYNOKA OK  
 LEASE: Ann 3404  
 WELL#: 2-21H  
 RIG #: Horizon 15  
 Co/St: HARPER, KS

DESCRIPTION	QUANTITY	RATE	AMOUNT
10/20-21/2013 DRILLED 30" CONDUCTOR HOLE			
10/20-21/2013 20" CONDUCTOR PIPE (.250 WALL)			
10/20-21/2013 6' X 6' CELLAR TINHORN WITH PROTECTIVE RING			
10/20-21/2013 DRILL & INSTALL 6' X 6' CELLAR TINHORN			
10/20-21/2013 DRILLED 20" MOUSE HOLE (PER FOOT)			
10/20-21/2013 16" CONDUCTOR PIPE (.250 WALL)			
10/20-21/2013 MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE			
10/20-21/2013 WELDING SERVICES FOR PIPE & LIDS			
10/20-21/2013 PROVIDED EQUIPMENT & LABOR TO ASSIST IN PUMPING CONCRETE			
10/20-21/2013 PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR MOUSEHOLE PIPE)			
10/20-21/2013 8 YDS OF 10 SACK GROUT			
10/20-21/2013 TAXABLE ITEMS			5,280.00
10/20-21/2013 BID - TAXABLE ITEMS			11,670.00
		Sub Total:	16,950.00
		Tax HARPER COUNTY (6.15 %):	324.72
		TICKET TOTAL:	<u>\$ 17,274.72</u>

I, the undersigned, acknowledge the acceptance of the above listed goods and/or services.

Approved Signature \_\_\_\_\_

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NOV 4 2013

Schlumberger

## Cementing Service Report

REGULATORY DEPT  
SANDRIDGE ENERGY

Customer Sandridge				Job Number 1868367						
Well Ann 3404 2-21h 3404 - 1-21H			Location (legal)			Schlumberger Location		Job Start Oct/31/2013		
Field		Formation Name/Type		Deviation deg	Bit Size 12.3 in	Well MD ft		Well TVD 525.0 ft		
County Sumner		State/Province Kansas		BHP psi	BHST degF	BHCT degF	Pore Press. Gradient lb/gal			
Well Master 0631505969		API/UWI 15191227100100			Casing/Liner					
Rig Name Horizon 15	Drilled For Oil & Gas	Service Via Land		Depth, ft	Size, in	Weight, lb/ft	Grade	Thread		
Offshore Zone	Well Class New	Well Type Exploration			518.0	9.6	36.0	8 rd		
Drilling Fluid Type	Max. Density lb/gal	Plastic Viscosity cP			0.0	0.0	0.0			
Service Line Cementing	Job Type 9 5/8 Surface			Tubing/Drill Pipe						
Max. Allowed Tub. Press psi	Max. Allowed Ann. Press psi	WH Connection			T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Service Instructions Provide services, equipment, materials and personnel to safely cement 9 5/8" surface casing per customer request. Pump 10 bbl water, 200 sks 35:65 Poz:C @ 12.40 ppg, 120 sks Class C @ 14.80 ppg, drop top plug and displace per client specifications.				Perforations/Open Hole						
				Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft		
				ft	ft			Diameter in		
				ft	ft					
Treat Down Casing		Displacement 37.0 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 210 psi		Shoe Type Guide		Squeeze Type						
Pipe Rotated <input type="checkbox"/> Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 518.0 ft		Tool Type						
No. Centralizers		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 Oct/31/2013		Arrived on Location Oct/31/2013	Leave Location Oct/31/2013	Collar Type Float		Tail Pipe Depth		ft		
				Collar Depth 473.0 ft		Sqz. Total Vol.		bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
10/31/2013	03:22:53	-2	0.2	8.45	0.0	Started Acquisition				
10/31/2013	03:22:59	-1	0.2	8.45	0.0	Start Job				
10/31/2013	03:23:00	-1	0.2	8.45	0.0	Start Pumping Wash				
10/31/2013	03:25:03	-1	0.1	8.46	0.3					
10/31/2013	03:27:13	-2	0.1	8.46	0.5					
10/31/2013	03:29:23	64	2.3	8.46	1.3					
10/31/2013	03:31:33	1379	0.1	8.45	3.1					
10/31/2013	03:33:43	9	0.0	8.46	3.3	Pressure Test Lines				
10/31/2013	03:35:53	98	4.4	8.45	8.5					
10/31/2013	03:37:10	130	4.4	10.91	14.2	Reset Total, Vol = 10.04 bbl				
10/31/2013	03:37:13	139	4.5	11.20	14.4	End Wash				
10/31/2013	03:37:15	126	4.3	11.37	14.6	Start Mixing Lead Slurry				
10/31/2013	03:38:03	140	4.4	12.25	18.1					
10/31/2013	03:40:13	132	4.3	12.41	27.6					
10/31/2013	03:42:23	116	4.4	12.40	37.2					
10/31/2013	03:44:33	124	4.3	12.33	1.7					
10/31/2013	03:46:43	126	4.5	12.22	11.3					
10/31/2013	03:48:53	133	4.5	12.49	20.8					
10/31/2013	03:51:03	144	4.4	12.59	30.4					
10/31/2013	03:53:13	174	4.4	14.59	38.9					
10/31/2013	03:53:23	176	4.4	14.77	39.6	Reset Total, Vol = 71.42 bbl				

Well		Field		Job Start		Customer		Job Number	
Ann 3404 2-21h 3404- - 1-21H				Oct/31/2013		Sandridge		1868367	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
10/31/2013	03:53:26	191	4.3	14.79	39.8	Start Mixing Tail Slurry			
10/31/2013	03:55:23	195	4.3	14.83	48.4				
10/31/2013	03:57:33	188	4.3	14.92	9.6				
10/31/2013	03:59:43	16	0.0	14.86	17.1				
10/31/2013	04:01:53	14	0.0	14.45	17.1				
10/31/2013	04:02:56	15	0.0	11.91	17.1	Reset Total, Vol = 27.14 bbl			
10/31/2013	04:03:01	15	0.0	11.75	0.0	End Tail Slurry			
10/31/2013	04:03:02	15	0.0	11.74	0.0	Drop Top Plug			
10/31/2013	04:04:03	15	0.0	11.30	0.0				
10/31/2013	04:06:13	105	4.4	8.88	5.8				
10/31/2013	04:08:23	130	4.4	8.46	15.4				
10/31/2013	04:10:33	123	2.3	8.45	23.9				
10/31/2013	04:12:43	148	2.2	8.45	28.7				
10/31/2013	04:14:23	169	2.2	8.45	32.3	Bump Top Plug			
10/31/2013	04:14:53	179	2.2	8.45	33.5				
10/31/2013	04:17:03	1110	0.0	8.45	37.4				
10/31/2013	04:19:13	7	0.0	8.45	37.4				
10/31/2013	04:19:21	7	0.0	8.46	37.4	Reset Total, Vol = 36.44 bbl			
10/31/2013	04:19:26	7	0.0	8.45	0.0	End Displacement			

### Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.1			4.5	100.0	0.0	10.0	
Treating Pressure Summary, psi				Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
5054	7	326	1114		FreshWater	bbl	8.34 lb/gal
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp	Cement Circulated to Surface?	<input checked="" type="checkbox"/>	Volume	20.0 bbl
%	0.0 bbl	37.0 bbl	degF	Washed Thru Perfs	<input type="checkbox"/>	To	ft
Customer or Authorized Representative	Schlumberger Supervisor			Circulation Lost	<input type="checkbox"/>	Job Completed	<input checked="" type="checkbox"/>
Cody Davis	John Beseda II			-		-	

Customer SANDRIDGE				Job Number 1868371			
Well ANN 3404 2-21H 3404 2-21H		Location (Legal) SUMNER, KS		Schlumberger Location ELK CITY		Job Start Nov/10/2013	
Field SUMNER		Formation Name/Type		Deviation 0 deg	Bit Size 8.8 in	Well MD 5457.0 ft	Well TVD 4675.8 ft
County SUMNER, KS		State/Province KS		BHP psi	BHST 135 degF	BHCT 127 degF	Pore Press. Gradient lb/gal
Well Master 0631505969		API/UWI 15191227100100					
Rig Name HORIZON 15	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	5430.0	7.0	26.0		
			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
							Grade
							Thread
Service Line Cementing		Job Type 7IN 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	Total Interval ft
			ft	ft			ft
			ft	ft			Diameter in
			ft	ft			in
Service Instructions		Treat Down Casing	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 450 psi		Shoe Type		Shoe Depth 88.8 ft		Squeeze Type	
Pipe Rotated <input checked="" type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Tool Type	
No. Centralizers		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 Nov/10/2013 19:00		Arrived on Location Nov/10/2013 20:45	Leave Location Nov/11/2013 01:30	Collar Type		Tail Pipe Depth ft	
				Collar Depth ft		Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message
11/10/2013	21:27:50	5	0.0	8.44	0.0	0	Started Acquisition
11/10/2013	21:29:50	4	0.0	8.44	0.0	0	
11/10/2013	21:31:50	64	1.2	8.44	1.1	0	
11/10/2013	21:33:50	1418	0.0	8.44	2.8	0	
11/10/2013	21:35:12	5230	0.0	8.44	2.8	0	Pressure Test Lines
11/10/2013	21:35:50	5167	0.0	8.44	2.8	0	
11/10/2013	21:37:50	238	6.4	8.44	6.5	0	
11/10/2013	21:38:42	233	6.4	8.45	12.0	0	Start Pumping Spacer
11/10/2013	21:39:50	247	6.4	8.45	19.3	0	
11/10/2013	21:41:50	257	6.4	8.44	32.1	0	
11/10/2013	21:42:31	481	6.0	13.20	36.4	7	Start Slurry
11/10/2013	21:43:50	442	6.1	13.42	44.3	19	
11/10/2013	21:45:50	369	6.1	13.27	56.5	31	
11/10/2013	21:47:50	334	6.1	13.42	68.6	36	
11/10/2013	21:49:50	300	6.1	13.50	80.9	38	
11/10/2013	21:51:50	349	6.1	13.40	93.2	39	
11/10/2013	21:53:50	97	3.0	14.40	101.3	34	
11/10/2013	21:55:50	189	4.4	15.55	109.7	43	
11/10/2013	21:57:50	177	4.5	15.40	118.6	34	
11/10/2013	21:59:34	7	0.0	15.54	125.1	0	Start Displacement
11/10/2013	21:59:50	7	0.0	15.54	125.1	0	



Well			Field		Job Start		Customer		Job Number	
ANN 3404 2-21H 3404 2-21H			SUMNER		Nov/10/2013		SANDRIDGE		1868371	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message			
11/10/2013	22:01:50	6	0.0	13.49	125.1	0				
11/10/2013	22:05:50	134	6.3	8.95	141.9	18				
11/10/2013	22:07:50	122	6.4	8.42	154.8	7				
11/10/2013	22:09:50	116	6.5	8.42	167.8	8				
11/10/2013	22:11:50	104	6.0	8.44	180.1	0				
11/10/2013	22:13:50	86	5.4	8.44	191.2	0				
11/10/2013	22:15:50	3	1.4	8.44	199.5	0				
11/10/2013	22:17:50	-7	0.0	8.44	201.3	0				
11/10/2013	22:19:50	120	6.5	8.44	211.4	0				
11/10/2013	22:21:50	121	6.5	8.44	224.4	0				
11/10/2013	22:23:50	110	6.5	8.44	237.4	0				
11/10/2013	22:25:50	125	6.5	8.44	250.4	0				
11/10/2013	22:27:50	121	6.5	8.44	263.3	0				
11/10/2013	22:29:50	218	6.4	8.44	276.2	0				
11/10/2013	22:31:50	367	6.4	8.44	289.0	0				
11/10/2013	22:33:50	422	6.4	8.44	301.7	0				
11/10/2013	22:35:50	504	6.4	8.44	314.5	0				
11/10/2013	22:37:50	434	3.1	8.44	324.0	0				
11/10/2013	22:39:50	425	3.1	8.44	330.2	0				
11/10/2013	22:40:47	857	0.0	8.45	331.2	0	Bump Top Plug			
11/10/2013	22:40:49	879	0.0	8.45	331.2	0	End Displacement			
11/10/2013	22:41:50	854	0.0	8.45	331.2	0				
11/10/2013	22:43:50	3	0.0	8.45	331.2	0				

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2	
5.2			6.9	331.2	0.0	293.8		
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density	
5264	5	318	900			bbl	lb/gal	
Avg. N2 Percent	Designed Slurry Volume		Displacement	Mix Water Temp	Cement Circulated to Surface?		Volume	
%	91.0 bbl		95.7 bbl	75 degF	<input type="checkbox"/>		bbl	
Customer or Authorized Representative			Schlumberger Supervisor		Washed Thru Perfs		To	
DOUG			WENDY YUN		<input type="checkbox"/>		ft	
					Circulation Lost		Job Completed	<input checked="" type="checkbox"/>
					-		-	

Section 17  
34S 4W

Section 16  
34S 4W

BHL: 10633'  
-97.75933 37.084909

Bottom Perf: 10570'  
-97.759328 37.084664

1845' FWL

1055' FSL

Sumner County

Section 20  
34S 4W

Section 21  
34S 4W

Top Perf: 4802'

-97.758917 37.069164

Miss Entry: 4764'

-97.758968 37.069096

JUNEBUG SWD 3404 1-20

PETER 3404 1-20H

ANN 3404 1-21H

ANN 3404 2-21H

Section 29  
34S 4W

Section 28  
34S 4W



Actual Bottom-Hole Location of Ann 3404 2-21H

T&R: 34S 4W

Section: 16, 1845' FWL & 1055' FSL

-97.75933 37.084909

1 in = 833 ft

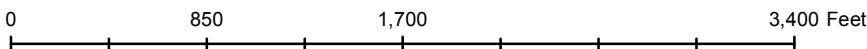


● Actual BH Location

\* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Aaron Birk

Draft Date: 2/7/2014

Drawing Name/Number:

Addendum\_Ann 3404 2-21H.mxd

Coordinate System:

NAD 1927 State Plane  
Kansas South FIPS: 1502