



KANSAS CORPORATION COMMISSION 1096357  
OIL & GAS CONSERVATION DIVISION

Form AGO-1  
June 2009

**CONFIDENTIAL**

**WELL COMPLETION FORM**

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

**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # 34192  
Name: SandRidge Exploration and Production LLC  
Address 1: 123 ROBERT S. KERR AVE  
Address 2: \_\_\_\_\_  
City: OKLAHOMA CITY State: OK Zip: 73102 + 6406  
Contact Person: Tiffany Golay  
Phone: (405) 429-6543  
CONTRACTOR: License # 34464  
Name: Lariat Services, Inc.  
Wellsite Geologist: Oscar Esparza

API No. 15 - 15-055-22177-01-00  
Spot Description: \_\_\_\_\_  
S2 S2 SE SW Sec. 13 Twp. 23 S. R. 31  East  West  
200 Feet from  North /  South Line of Section  
1980 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Finney  
Lease Name: Sonderegger 2331 Well #: 1-13H  
Field Name: \_\_\_\_\_

Producing Formation: Mississippian  
Elevation: Ground: 2884 Kelly Bushing: 2904  
Total Depth: 9230 Plug Back Total Depth: \_\_\_\_\_  
Amount of Surface Pipe Set and Cemented at: 1798 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: 10000 ppm Fluid volume: 1680 bbls  
Dewatering method used: Hauled to Disposal  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name: Chaosland Disposal  
Lease Name: (Reclamation Yard) License #: 99999  
Quarter SE Sec. 33 Twp. 29 S. R. 37  East  West  
County: Grant, KS Permit #: KDH# 890

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  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_  
 Commingled Permit #: \_\_\_\_\_  
 Dual Completion Permit #: \_\_\_\_\_  
 SWD Permit #: \_\_\_\_\_  
 ENHR Permit #: \_\_\_\_\_  
 GSW Permit #: \_\_\_\_\_  
9/1/2012 10/4/2012 10/8/2012  
Spud Date or Date Reached TD Completion Date or Recompletion Date

**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**

Letter of Confidentiality Received  
Date: 12/26/2012

Confidential Release Date: \_\_\_\_\_

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT  I  II  III Approved by: NAOMI JAMES Date: 12/26/2012

# DIRECTIONAL SURVEY CALCULATION

## MINIMUM CURVATURE METHOD

Well Name		Target Direction	Slot	N / S	E / W	Hole Size	Calculation by		Date	
Sonderegger 2331		1.19	Coordinate						12/20/12	
Job Number		Type of Survey	Tie-in Point				Directional Co.			
0										
Measured Depth	Hole Angle	Hole Direction	Course Length	True Vertical Depth	Vertical Section	Total Coordinate		Dogleg Severity	Build Up °/100 ft	Walk/ °/100 ft
						N + / S -	E + / W -			
0	0	0	0	0.00	0.00					
0	0	0		0.00	0.00	0.00	0.00			
1821	1	356	1821	1,820.98	7.91	7.92	-0.60	0.03	0.03	19.53
2044	1	21	223	2,043.97	9.98	9.98	-0.25	0.12	0.04	-150.04
2520	1	37	476	2,519.95	14.01	13.97	1.90	0.04	-0.02	3.32
2994	0	23	474	2,993.93	16.83	16.76	3.63	0.05	-0.04	-2.85
3470	1	34	476	3,469.92	20.08	19.97	5.52	0.07	0.06	2.25
3903	1	6	433	3,902.90	23.87	23.73	6.98	0.07	-0.02	-6.54
3915	1	16	12	3,914.90	23.97	23.83	7.00	0.74	0.00	85.00
3946	1	360	31	3,945.90	24.32	24.17	7.04	1.13	0.97	1,109.03
3978	3	356	32	3,977.88	25.26	25.12	6.99	5.63	5.63	-10.63
4009	5	355	31	4,008.81	27.25	27.12	6.84	7.10	7.10	-4.84
4042	7	353	33	4,041.63	30.67	30.54	6.45	7.31	7.27	-6.97
4073	9	355	31	4,072.31	35.08	34.97	5.99	6.90	6.77	9.03
4105	11	358	32	4,103.79	40.81	40.71	5.68	6.73	6.56	8.44
4136	14	359	31	4,134.04	47.54	47.44	5.52	7.45	7.42	3.23
4168	16	360	32	4,164.98	55.71	55.61	5.46	6.91	6.88	2.81
4199	18	360	31	4,194.64	64.72	64.62	5.46	6.45	6.45	0.00
4231	20	360	32	4,224.90	75.11	75.01	5.42	6.58	6.56	-1.56
4263	22	359	32	4,254.77	86.60	86.51	5.23	6.62	6.56	-2.50
4295	24	359	32	4,284.23	99.06	98.98	5.02	5.36	5.31	1.88
4327	25	360	32	4,313.43	112.15	112.07	4.91	2.28	2.19	1.56
4358	26	0	31	4,341.50	125.30	125.22	4.94	3.96	3.87	#####
4390	28	1	32	4,370.12	139.62	139.55	5.08	5.64	5.63	0.94
4421	29	1	31	4,397.47	154.20	154.13	5.24	3.55	3.55	-0.32
4453	31	359	32	4,425.28	170.02	169.95	5.15	7.13	6.56	1,119.38
4484	33	358	31	4,451.61	186.36	186.30	4.62	7.74	7.42	-4.19
4516	35	358	32	4,478.16	204.19	204.16	3.85	5.94	5.94	0.31
4548	37	357	32	4,504.11	222.87	222.85	3.00	5.67	5.63	-1.25
4580	39	357	32	4,529.34	242.50	242.51	2.08	7.82	7.81	0.62
4612	42	358	32	4,553.56	263.37	263.40	1.26	10.10	10.00	2.19
4643	46	358	31	4,575.84	284.89	284.94	0.60	10.67	10.65	0.97
4675	48	359	32	4,597.68	308.25	308.32	-0.01	7.83	7.81	0.63
4707	50	359	32	4,618.74	332.32	332.41	-0.49	4.23	4.06	1.56
4739	50	359	32	4,639.52	356.64	356.74	-0.89	0.24	0.00	-0.31
4771	49	358	32	4,660.35	380.91	381.02	-1.46	1.77	-0.63	-2.19
4803	49	358	32	4,681.38	404.99	405.13	-2.24	2.60	-2.50	-0.94
4835	49	358	32	4,702.59	428.93	429.08	-3.00	0.94	0.00	1.25
4867	49	358	32	4,723.77	452.88	453.06	-3.67	0.31	0.31	0.00
4899	49	358	32	4,744.91	476.88	477.07	-4.34	0.31	0.31	0.00
4931	50	359	32	4,765.74	501.15	501.36	-4.93	4.48	4.38	1.25
4960	53	360	29	4,783.77	523.84	524.06	-5.26	10.18	10.00	2.41
4994	56	359	34	4,803.48	551.52	551.76	-5.55	9.13	9.12	-0.59
5026	59	359	32	4,820.58	578.55	578.80	-5.96	10.03	10.00	-0.94
5058	63	359	32	4,836.00	606.57	606.83	-6.42	11.88	11.88	0.31
5090	67	360	32	4,849.54	635.54	635.81	-6.70	11.73	11.56	2.19
5121	68	360	31	4,861.38	664.18	664.46	-6.77	4.85	4.84	0.32
5153	71	1	32	4,872.51	694.18	694.46	-6.67	8.62	8.44	#####
5185	74	1	32	4,882.10	724.70	724.98	-6.24	9.85	9.69	1.88
5217	78	2	32	4,889.79	755.75	756.03	-5.53	12.56	12.50	1.25
5249	81	2	32	4,895.54	787.23	787.49	-4.54	9.86	9.69	1.88
5281	84	3	32	4,899.55	818.97	819.21	-3.27	10.08	10.00	1.25
5355	90	2	74	4,903.48	892.82	893.02	-0.30	6.91	6.89	-0.54
5386	90	2	31	4,903.75	923.82	924.00	0.72	1.29	0.00	-1.29
5449	89	2	63	4,904.47	986.81	986.97	2.70	0.57	-0.48	0.32
5511	90	2	62	4,905.17	1,048.80	1,048.94	4.54	0.81	0.48	-0.65
5574	90	1	63	4,905.45	1,111.80	1,111.92	6.08	0.85	0.79	-0.32
5636	91	1	62	4,905.18	1,173.80	1,173.90	7.49	0.81	0.81	0.00

# DIRECTIONAL SURVEY CALCULATION

## MINIMUM CURVATURE METHOD

Well Name		Target Direction	Slot	N / S	E / W	Hole Size	Calculation by		Date	
Sonderegger 2331		1.19	Coordinate						12/20/12	
Job Number		Type of Survey	Tie-in Point				Directional Co.			
0										
Measured Depth	Hole Angle	Hole Direction	Course Length	True Vertical Depth	Vertical Section	Total Coordinate		Dogleg Severity	Build Up "/100 ft	Walk/ "/100 ft
						N + / S -	E + / W -			
0	0	0	0	0.00	0.00					<< TIE-IN POINT >>
5698	91	1	62	4,904.63	1,235.80	1,235.88	8.79	0.32	0.00	-0.32
5760	90	1	62	4,904.26	1,297.80	1,297.87	9.92	0.51	-0.48	-0.16
5854	90	1	94	4,903.93	1,391.80	1,391.86	11.48	0.11	0.00	-0.11
5916	90	1	62	4,903.82	1,453.80	1,453.85	12.67	0.72	-0.32	0.65
5977	90	1	61	4,903.98	1,514.80	1,514.83	14.11	0.52	-0.49	0.16
6008	90	1	31	4,904.17	1,545.80	1,545.82	14.84	0.46	-0.32	-0.32
6070	90	2	62	4,904.28	1,607.79	1,607.79	16.73	1.74	0.97	1.45
6132	92	2	62	4,903.19	1,669.77	1,669.73	19.22	2.60	2.58	0.32
6162	92	2	30	4,902.15	1,699.74	1,699.68	20.47	1.33	1.33	0.00
6224	93	2	62	4,899.50	1,761.68	1,761.58	22.85	1.03	0.81	-0.65
6287	93	2	63	4,896.36	1,824.59	1,824.47	25.05	0.48	0.48	0.00
6348	92	2	61	4,893.49	1,885.52	1,885.37	27.02	1.10	-0.98	-0.49
6410	93	2	62	4,890.84	1,947.46	1,947.28	28.80	0.23	0.16	-0.16
6472	92	1	62	4,888.30	2,009.41	2,009.21	30.42	0.58	-0.48	-0.32
6534	92	1	62	4,886.30	2,071.38	2,071.17	31.50	1.71	-1.13	-1.29
6597	91	1	63	4,884.92	2,134.36	2,134.15	32.33	0.93	-0.79	0.48
6689	91	0	92	4,883.08	2,226.33	2,226.12	33.21	0.83	0.33	-0.76
6782	90	1	93	4,881.70	2,319.31	2,319.11	33.78	1.02	-0.97	0.32
6878	91	360	96	4,880.61	2,415.28	2,415.10	33.78	1.16	0.52	373.96
6942	90	360	64	4,880.16	2,479.25	2,479.10	33.22	1.56	-1.56	0.00
6974	90	360	32	4,880.22	2,511.24	2,511.10	32.94	0.00	0.00	0.00
7038	90	0	64	4,880.50	2,575.22	2,575.10	32.77	1.19	-0.47	-561.41
7101	90	1	63	4,880.94	2,638.21	2,638.09	33.32	0.95	0.00	0.95
7165	90	1	64	4,881.27	2,702.21	2,702.08	34.55	0.99	0.31	0.94
7229	90	2	64	4,881.44	2,766.21	2,766.05	36.56	1.26	0.16	1.25
7292	90	3	63	4,881.38	2,829.20	2,828.99	39.14	0.67	0.48	0.48
7356	90	3	64	4,881.16	2,893.17	2,892.92	42.10	0.47	0.00	0.47
7420	89	2	64	4,881.44	2,957.16	2,956.86	44.84	1.78	-1.41	-1.09
7484	90	3	64	4,882.11	3,021.14	3,020.80	47.52	0.99	0.31	0.94
7548	90	3	64	4,882.44	3,085.11	3,084.72	50.70	0.78	0.63	0.47
7612	90	3	64	4,882.50	3,149.09	3,148.65	53.83	0.64	0.16	-0.63
7675	90	1	63	4,882.72	3,212.08	3,211.61	55.81	2.62	-0.63	-2.54
7739	90	1	64	4,883.17	3,276.08	3,275.60	57.03	0.31	0.00	0.31
7802	90	0	63	4,883.61	3,339.07	3,338.59	57.86	1.43	0.00	-1.43
7866	89	1	64	4,884.39	3,403.07	3,402.58	58.64	1.56	-0.94	1.25
7929	89	0	63	4,885.49	3,466.05	3,465.57	59.47	1.11	0.00	-1.11
7993	89	1	64	4,886.55	3,530.04	3,529.55	60.47	1.57	0.16	1.56
8057	90	1	64	4,887.16	3,594.04	3,593.53	61.87	1.19	1.09	-0.47
8121	91	0	64	4,886.77	3,658.04	3,657.52	62.70	2.04	1.72	-1.09
8184	91	1	63	4,885.56	3,721.02	3,720.50	63.58	1.42	0.63	1.27
8216	92	1	32	4,884.78	3,753.01	3,752.49	64.31	0.88	0.63	0.63
8280	91	2	64	4,883.16	3,816.99	3,816.44	66.04	0.49	-0.16	0.47
8344	90	2	64	4,882.32	3,880.98	3,880.41	67.94	2.03	-2.03	0.00
8408	90	1	64	4,882.49	3,944.98	3,944.38	69.67	0.91	-0.78	-0.47
8471	90	2	63	4,882.99	4,007.98	4,007.36	71.43	0.65	-0.16	0.63
8535	89	1	64	4,883.71	4,071.97	4,071.33	73.10	1.05	-0.47	-0.94
8599	89	1	64	4,884.77	4,135.96	4,135.31	74.28	0.66	-0.47	-0.47
8663	90	2	64	4,885.67	4,199.95	4,199.29	75.67	1.44	0.94	1.09
8726	90	1	63	4,885.94	4,262.95	4,262.27	76.99	1.50	0.79	-1.27
8790	90	1	64	4,886.00	4,326.95	4,326.26	78.05	0.49	-0.16	0.47
8853	90	2	63	4,886.22	4,389.95	4,389.24	79.70	1.31	-0.32	1.27
8917	90	1	64	4,886.50	4,453.95	4,453.22	81.10	2.04	0.16	-2.03
8981	89	360	64	4,887.11	4,517.94	4,517.22	81.38	1.55	-1.09	561.41
9045	91	1	64	4,887.11	4,581.93	4,581.21	81.88	3.30	2.81	-560.78
9077	92	1	32	4,886.39	4,613.92	4,613.20	82.35	2.67	2.50	-0.94
9173	93	360	96	4,882.62	4,709.83	4,709.13	82.77	1.48	1.15	374.06
9230	93	360	57	4,879.83	4,766.74	4,766.06	82.57	0.00	0.00	0.00

Section 11  
23S 31W

Section 12  
23S 31W

Section 13  
23S 30W

1978' FEL

332' FNL

BHL: 9230'  
-100.67546 38.059769  
Bottom Perf: 8828'  
-100.67541 38.058734

Section 14  
23S 31W

Section 13  
23S 31W

Section 14  
23S 30W

Top Perf: 5050'  
-100.67541 38.048344

Miss Entry: 4799'  
-100.67537 38.047725

\* SONDEREGGER 2331 I-13H

Section 23  
23S 31W

Section 24  
23S 31W

Section 14  
23S 30W



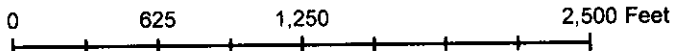
● Actual BH Location

\* SandRidge Wells

--- Perf

□ Sections

Actual Bottom-Hole Location of Sonderegger 2331 I-13H  
Finney County, Kansas  
T&R: 23S 31W  
Section: 13, 1978' FEL & 332' FNL  
-100.67546 38.059769  
1 in = 833 ft



Draftsman:

Aaron Birk

Draft Date: 12/21/2011

Drawing Name/Number:

Addendum\_Sonderegger\_1-13H.mxd

Coordinate System:

NAD 1927 State Plane  
Kansas South FIPS: 1502