Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1204018

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 # 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: Wanda Ledbetter
Phone: (405) 429-5500
CONTRACTOR: License # 34464
Name: Lariat Services, Inc. dba Chaparral Supply, Hondo Heavy Haul
Wellsite Geologist: Tammy Alcorn
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 #:

1/12/2014	2/25/2014	4/17/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-077-22008-01-00
Spot Description:
NW NW NE NW Sec. 34 Twp. 33 S. R. 6 ☐ East ☑ West
230 Feet from ☑ North / ☐ South Line of Section
1340 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Harper
Lease Name: Matthew 3306 Well #: 1-27H
Field Name:
Producing Formation: Mississippi
Elevation: Ground: 1307 Kelly Bushing: 1326
Total Vertical Depth: 6720 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 690 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: 12500 ppm Fluid volume: 5056 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: DFD Sisposal LLC
Lease Name: unknown License #: 60374
Quarter NE Sec. 30 Twp. 27 S. R. 6 ☐ East ☑ West
County: Grant OK Permit #: 603749

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: 05/12/2014
☑ **Confidential Release Date:** 05/11/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 05/19/2014

[redacted] 1204018

Operator Name: SandRidge Exploration and Production LLC Lease Name: Matthew 3306 Well #: 1-27H

Sec. 34 Twp. 33 S. R. 6 ☐ East ☑ West County: Harper

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 ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Resistivity
Spectral Density Neutron

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Base Heebner	3213	-1887
Lansing	3561	-2235
Cottage Grove	3828	-2500
Osewego	4175	-2831
Cherokee	4307	-2947
Verdigris	4335	-2970
Miss Unconformity	4697	-3160

CASING RECORD ☑ New ☐ 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
conductor	30	20	75	90	grout	10	see report
surface	12.25	9.625	36	690	Class A 65/35 POZ Blend	360	see report
intermediate	8.75	7	26	5119	Class A 50/50 POZ blend	350	see report

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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 *(Amount and Kind of Material Used)*	Depth
Attached	Attached	Attached	Attached

TUBING RECORD: Size: 4.5 Set At: 6720 Packer At:

Liner Run: ☑ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 5/1/2014

Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☑ Other *(Explain)* ESP

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	200	525	1415		

DISPOSITION OF GAS:
☐ Vented ☑ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Matthew 3306 1-27H
Doc ID	1204018

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	4863-4866	Fresh slickwater Frac	4863-5000
5	4931-4934		
5	4997-5000		
5	5147-5150	Kiel Slickwater Frac	5147-5330
5	5232-5235		
5	5237-5330		
5	5500-5503	Kiel Slickwater Frac	5500-5621
5	5559-5562		
5	5638-5641		
5	5684-5687	Kiel Slickwater Frac	5684-5850
5	5684-5850		
5	5757-5760		
5	5909-5912	Kiel Slickwater Frac	5909-6070
5	5975-5978		
5	6067-6070		
5	6127-6130	Kiel Slickwater Frac	6127-6282
5	6221-6224		
5	6220-6625		
5	6279-6282		
5	6411-6414	Kiel Slickwater Frac	6411-6527
5	6479-6482		
5	6524-6527		
5	6584-6587	Kiel Slickwater Frac	6584-6675
5	6672-6675		

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Matthew 3306 1-27H
Doc ID	1204018

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
conductor	30	20	75	90	grout	10	see report
surface	12.25	9.625	36	690	Class A 65/35 POZ Blend	360	see report
intermediate	8.75	7	26	5119	Class A 50/50 POZ blend	350	see report

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/7/2014
Job End Date:	4/8/2014
State:	Kansas
County:	Harper
API Number:	15-077-22008-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Matthew 3306 1-27H
Longitude:	-97.96154000
Latitude:	37.14574000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,515
Total Base Water Volume (gal):	1,726,830
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	Operator	Carrier					
			Water	7732-18-5	100.00000	95.73476	
Sand, Brown (40/70)	Baker Hughes	Proppant					
			Crystalline Silica: Quartz (SiO2)	14808-60-7	100.00000	2.94142	
HCl, 10.1 - 15%	Baker Hughes	Acidizing					
			Water	7732-18-5	85.00000	0.68298	SmartCare Product
			Hydrochloric Acid	7647-01-0	15.00000	0.12053	SmartCare Product
Preferred Garnet RC 40/70	Baker Hughes	Proppant					
			Crystalline Silica (Quartz)	14808-60-7	100.00000	0.38926	
			Castor Oil	8001-79-4	5.00000	0.01946	
FRW-15DX	Baker Hughes	Friction Reducer					
			Anionic Water-Soluble Polymer	Trade Secret	100.00000	0.02321	
NE-900, tote	Baker Hughes	Non-emulsifier					
			Methanol	67-56-1	30.00000	0.01370	SmartCare Product
			Nonyl phenyl polyethylene glycol ether	9016-45-9	10.00000	0.00457	SmartCare Product
Scaletrol 7208, 330 gl tote	Baker Hughes	Scale Inhibitor					
			Ethylene Glycol	107-21-1	30.00000	0.00766	
Ferrotrol 300L (Totes)	Baker Hughes	Iron Control					

			Citric Acid	77-92-9	60.00000	0.00277	SmartCare Product
CI-27 (260 gal tote)	Baker Hughes	Corrosion Inhibitor					
			Methanol	67-56-1	60.00000	0.00047	
			Fatty Acids	Trade Secret	30.00000	0.00024	
			Thiourea Polymer	68527-49-1	30.00000	0.00024	
			Polyoxyalkylenes	Trade Secret	30.00000	0.00024	
			Propargyl Alcohol	107-19-7	10.00000	0.00008	
			Olefin	Trade Secret	5.00000	0.00004	
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.							
		Other Chemicals					
			Water	7732-18-5		0.03885	
			Copolymer	Trade Secret		0.01827	
			Diethylene Glycol	111-46-6		0.00128	
			Sodium Chloride	7647-14-5		0.00000	
			Formaldehyde	50-00-0		0.00000	
			Calcium Chloride	10043-52-4			
			Polyacrylate	Trade Secret			
			Potassium Chloride	7447-40-7			
			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9			

* 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)

DrillRight TECHNOLOGY, INC.

Survey Report

DRT Job # : DR1402022

Company:	Sandridge
Well Name:	Mathew 3306 1-27H
Legals:	Sec: 34 Township: 33S Range: 6W
County/State:	Harper County KS
Rig Name:	Lariat 20

Customer Rep	Position	Directional Driller	MWD Operator
		Scott Graham Mike Foster	George Hunt

Matthew 3306 1-27H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
TieInPoint	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
Survey	706.00	7.40	326.90	704.04	38.14	-24.86	38.50	1.05	1.05	4.69	326.90	45.53
Survey	800.00	7.10	328.80	797.29	48.18	-31.18	48.63	0.41	0.32	2.02	327.09	57.39
Survey	895.00	5.10	338.00	891.75	57.12	-35.80	57.63	2.34	2.11	9.68	327.92	67.41
Survey	990.00	3.50	343.40	986.48	63.81	-38.21	64.36	1.74	1.68	5.68	329.09	74.38
Survey	1085.00	2.30	332.30	1081.36	68.28	-39.93	68.85	1.39	1.26	11.68	329.68	79.10
Survey	1180.00	1.90	328.00	1176.29	71.30	-41.65	71.90	0.45	0.42	4.53	329.71	82.57
Survey	1275.00	0.50	313.40	1271.27	72.93	-42.78	73.54	1.50	1.47	15.37	329.60	84.55
Survey	1369.00	0.60	322.10	1365.27	73.60	-43.38	74.22	0.14	0.11	9.26	329.48	85.43
Survey	1464.00	1.30	158.40	1460.26	72.99	-43.29	73.61	1.98	0.74	172.32	329.33	84.86
Survey	1560.00	1.30	155.80	1556.23	70.98	-42.44	71.59	0.06	0.00	2.71	329.12	82.70
Survey	1655.00	1.20	146.80	1651.21	69.16	-41.45	69.75	0.23	0.11	9.47	329.06	80.63
Survey	1745.00	1.30	153.30	1741.19	67.46	-40.48	68.04	0.19	0.11	7.22	329.03	78.67
Survey	1837.00	1.20	149.40	1833.17	65.70	-39.52	66.27	0.14	0.11	4.24	328.97	76.67
Survey	1928.00	2.50	160.60	1924.12	63.01	-38.38	63.56	1.48	1.43	12.31	328.65	73.78
Survey	2019.00	2.80	161.00	2015.02	59.03	-36.99	59.56	0.33	0.33	0.44	327.93	69.66
Survey	2110.00	2.80	154.80	2105.91	54.92	-35.32	55.43	0.33	0.00	6.81	327.25	65.30
Survey	2202.00	2.70	154.90	2197.81	50.92	-33.44	51.40	0.11	0.11	0.11	326.71	60.92
Survey	2293.00	2.60	151.30	2288.71	47.17	-31.54	47.62	0.21	0.11	3.96	326.23	56.74
Survey	2384.00	2.60	147.80	2379.62	43.62	-29.45	44.04	0.17	0.00	3.85	325.97	52.63
Survey	2475.00	2.70	152.10	2470.52	39.98	-27.35	40.37	0.24	0.11	4.73	325.62	48.44
Survey	2566.00	2.60	148.20	2561.42	36.33	-25.26	36.69	0.23	0.11	4.29	325.19	44.25
Survey	2657.00	2.50	146.60	2652.33	32.92	-23.08	33.25	0.13	0.11	1.76	324.97	40.20
Survey	2751.00	2.70	150.30	2746.23	29.28	-20.85	29.58	0.28	0.21	3.94	324.55	35.94
Survey	2844.00	2.50	153.10	2839.13	25.57	-18.85	25.84	0.25	0.22	3.01	323.60	31.77
Survey	2938.00	2.40	154.30	2933.05	21.97	-17.07	22.21	0.12	0.11	1.28	322.15	27.82
Survey	3031.00	2.30	149.20	3025.97	18.61	-15.27	18.83	0.25	0.11	5.48	320.63	24.07
Survey	3126.00	2.20	147.20	3120.90	15.44	-13.31	15.63	0.13	0.11	2.11	319.24	20.39
Survey	3220.00	2.30	147.10	3214.83	12.34	-11.31	12.50	0.11	0.11	0.11	317.49	16.74
Survey	3315.00	2.30	136.60	3309.75	9.35	-8.96	9.48	0.44	0.00	11.05	316.22	12.95
Survey	3410.00	2.20	133.90	3404.68	6.70	-6.34	6.79	0.15	0.11	2.84	316.58	9.22
Survey	3504.00	0.30	41.90	3498.66	5.63	-4.88	5.70	2.37	2.02	97.87	319.08	7.45
Survey	3599.00	0.90	315.40	3593.65	6.35	-5.23	6.43	0.98	0.63	91.05	320.52	8.23
Survey	3630.00	2.50	353.30	3624.64	7.19	-5.48	7.27	6.04	5.16	122.26	322.69	9.04
Survey	3661.00	4.50	349.10	3655.58	9.06	-5.79	9.14	6.50	6.45	13.55	327.42	10.75
Survey	3693.00	6.70	350.10	3687.43	12.13	-6.35	12.22	6.88	6.88	3.13	332.37	13.69
Survey	3724.00	9.40	353.60	3718.12	16.43	-6.94	16.53	8.85	8.71	11.29	337.10	17.84
Survey	3756.00	10.20	353.20	3749.65	21.84	-7.57	21.95	2.51	2.50	1.25	340.88	23.11
Survey	3788.00	9.70	351.40	3781.17	27.32	-8.31	27.44	1.84	1.56	5.62	343.08	28.56
Survey	3819.00	9.30	350.70	3811.75	32.37	-9.10	32.50	1.34	1.29	2.26	344.30	33.62
Survey	3851.00	9.20	349.00	3843.33	37.44	-10.01	37.58	0.91	0.31	5.31	345.03	38.76
Survey	3882.00	9.20	350.20	3873.93	42.31	-10.90	42.46	0.62	0.00	3.87	345.55	43.69

DrillRight TECHNOLOGY, INC.

Survey Report

DRT Job # :

Matthew 3306 1-27H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	3914.00	10.50	349.10	3905.46	47.69	-11.89	47.86	4.10	4.06	3.44	346.00	49.15
Survey	3946.00	13.10	350.50	3936.78	54.13	-13.04	54.31	8.17	8.13	4.38	346.46	55.68
Survey	3977.00	15.60	351.40	3966.81	61.72	-14.24	61.92	8.10	8.06	2.90	347.01	63.34
Survey	4009.00	17.40	350.60	3997.49	70.69	-15.67	70.91	5.67	5.63	2.50	347.50	72.41
Survey	4040.00	19.10	351.60	4026.93	80.28	-17.17	80.52	5.58	5.48	3.23	347.93	82.10
Survey	4071.00	21.50	352.20	4056.00	90.93	-18.68	91.19	7.77	7.74	1.94	348.39	92.83
Survey	4102.00	22.00	353.70	4084.79	102.33	-20.09	102.61	2.41	1.61	4.84	348.89	104.28
Survey	4134.00	22.40	357.10	4114.42	114.38	-21.05	114.67	4.20	1.25	10.63	349.57	116.30
Survey	4165.00	22.30	359.30	4143.09	126.16	-21.42	126.46	2.72	0.32	7.10	350.36	127.97
Survey	4197.00	24.30	0.20	4172.48	138.82	-21.47	139.12	6.35	6.25	2.81	351.21	140.47
Survey	4228.00	26.90	1.80	4200.43	152.21	-21.23	152.50	8.68	8.39	5.16	352.06	153.68
Survey	4260.00	29.50	1.90	4228.63	167.32	-20.74	167.60	8.13	8.12	0.31	352.93	168.60
Survey	4291.00	32.10	0.60	4255.25	183.19	-20.40	183.47	8.66	8.39	4.19	353.65	184.32
Survey	4322.00	35.30	359.20	4281.04	200.39	-20.44	200.67	10.62	10.32	4.52	354.18	201.43
Survey	4353.00	38.60	359.30	4305.81	219.02	-20.68	219.30	10.65	10.65	0.32	354.61	219.99
Survey	4385.00	42.30	359.60	4330.16	239.78	-20.88	240.06	11.58	11.56	0.94	355.02	240.69
Survey	4416.00	46.00	0.00	4352.40	261.37	-20.95	261.65	11.97	11.94	1.29	355.42	262.21
Survey	4448.00	49.60	0.30	4373.89	285.07	-20.89	285.34	11.27	11.25	0.94	355.81	285.83
Survey	4479.00	53.40	0.10	4393.18	309.33	-20.81	309.60	12.27	12.26	0.65	356.15	310.03
Survey	4510.00	57.20	0.00	4410.83	334.81	-20.78	335.08	12.26	12.26	0.32	356.45	335.45
Survey	4542.00	61.20	0.00	4427.21	362.29	-20.78	362.55	12.50	12.50	0.00	356.72	362.89
Survey	4574.00	65.20	359.70	4441.64	390.85	-20.86	391.11	12.53	12.50	0.94	356.94	391.41
Survey	4605.00	68.60	359.30	4453.80	419.36	-21.11	419.62	11.03	10.97	1.29	357.12	419.89
Survey	4636.00	71.40	358.80	4464.40	448.48	-21.59	448.75	9.16	9.03	1.61	357.24	449.00
Survey	4668.00	73.80	358.60	4473.97	479.01	-22.29	479.28	7.52	7.50	0.62	357.34	479.53
Survey	4700.00	76.00	358.10	4482.31	509.89	-23.18	510.17	7.04	6.87	1.56	357.40	510.42
Survey	4731.00	78.30	357.80	4489.20	540.09	-24.26	540.38	7.48	7.42	0.97	357.43	540.63
Survey	4763.00	80.80	358.00	4495.01	571.54	-25.41	571.85	7.84	7.81	0.62	357.45	572.10
Survey	4794.00	83.60	358.60	4499.22	602.24	-26.32	602.56	9.23	9.03	1.94	357.50	602.81
Survey	4826.00	86.40	358.90	4502.01	634.10	-27.02	634.42	8.80	8.75	0.94	357.56	634.68
Survey	4857.00	87.70	359.20	4503.61	665.06	-27.53	665.39	4.30	4.19	0.97	357.63	665.63
Survey	4888.00	87.80	358.80	4504.82	696.03	-28.07	696.36	1.33	0.32	1.29	357.69	696.60
Survey	4920.00	88.00	359.40	4506.00	728.00	-28.57	728.34	1.98	0.63	1.87	357.75	728.56
Survey	4951.00	88.30	359.00	4507.00	758.98	-29.01	759.32	1.61	0.97	1.29	357.81	759.53
Survey	4983.00	88.60	358.80	4507.87	790.96	-29.62	791.31	1.13	0.94	0.62	357.86	791.51
Survey	5014.00	88.80	358.40	4508.57	821.95	-30.38	822.30	1.44	0.65	1.29	357.88	822.51
Survey	5046.00	89.10	358.90	4509.16	853.94	-31.13	854.30	1.82	0.94	1.56	357.91	854.51
Survey	5077.00	86.90	358.50	4510.24	884.91	-31.83	885.28	7.21	7.10	1.29	357.94	885.48
Survey	5109.00	85.10	358.20	4512.47	916.81	-32.75	917.19	5.70	5.63	0.94	357.95	917.39
Survey	5139.00	84.90	358.10	4515.08	946.68	-33.72	947.07	0.74	0.67	0.33	357.96	947.28
Survey	5202.00	86.70	357.70	4519.70	1009.47	-36.02	1009.89	2.93	2.86	0.63	357.96	1010.11
Survey	5297.00	89.40	357.00	4522.93	1104.30	-40.41	1104.77	2.94	2.84	0.74	357.90	1105.04
Survey	5392.00	91.70	357.60	4522.02	1199.18	-44.88	1199.70	2.50	2.42	0.63	357.86	1200.02
Survey	5488.00	93.10	358.10	4518.00	1295.03	-48.48	1295.60	1.55	1.46	0.52	357.86	1295.94
Survey	5582.00	91.70	359.60	4514.06	1388.92	-50.37	1389.50	2.18	1.49	1.60	357.92	1389.83
Survey	5676.00	91.90	359.90	4511.11	1482.88	-50.78	1483.46	0.38	0.21	0.32	358.04	1483.75
Survey	5770.00	93.20	359.90	4506.93	1576.78	-50.94	1577.35	1.38	1.38	0.00	358.15	1577.60
Survey	5865.00	92.70	1.00	4502.04	1671.65	-50.20	1672.20	1.27	0.53	1.16	358.28	1672.40

DrillRight. TECHNOLOGY, INC.

Survey Report

DRT Job # :

Matthew 3306 1-27H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	5959.00	91.10	2.30	4498.92	1765.55	-47.49	1766.05	2.19	1.70	1.38	358.46	1766.19
Survey	6053.00	89.60	3.90	4498.35	1859.41	-42.41	1859.83	2.33	1.60	1.70	358.69	1859.89
Survey	6148.00	89.40	3.30	4499.18	1954.22	-36.44	1954.54	0.67	0.21	0.63	358.93	1954.56
Survey	6243.00	89.70	3.10	4499.92	2049.07	-31.14	2049.31	0.38	0.32	0.21	359.13	2049.31
Survey	6337.00	90.00	2.80	4500.17	2142.94	-26.30	2143.10	0.45	0.32	0.32	359.30	2143.10
Survey	6431.00	89.90	2.70	4500.25	2236.83	-21.79	2236.91	0.15	0.11	0.11	359.44	2236.94
Survey	6526.00	88.00	2.40	4501.99	2331.72	-17.56	2331.73	2.02	2.00	0.32	359.57	2331.79
Survey	6621.00	84.40	2.00	4508.29	2426.43	-13.92	2426.38	3.81	3.79	0.42	359.67	2426.47
Survey	6670.00	84.10	1.50	4513.19	2475.16	-12.43	2475.08	1.19	0.61	1.02	359.71	2475.19
PrjCalcPnt	6720	84.1	1.5	4518.33	2524.88	-11.13	2524.77	0	0	0	359.75	2524.90

Sandridge

Location Kansas | Installation Harper County
Field Sec 34 - 33S - 6W | Well Matthew 3306 1-27H

Installation Data

Name	Latitude	Longitude	Northing	Easting
Harper County	N37 8 17.16	W97 57 57.18	172104.00	2155704.00

Coordinate System: Kansas State Planes, Southern Zone

Slot Data

Name	North [ft]	East [ft]	Latitude	Longitude	Northing	Easting
Matthew 3306 1-27H	-207.99 N	1342.97 E	N37 8 15.03	W97 57 40.61	171896.00	2157047.00

Elevation Data

Slot - Mean Sea Level [ft]	Mean Sea Level - Mudline/Ground level [ft]	Slot - Mudline/Ground level [ft]
0.00	0.00	0.00

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
KOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Target KOP @ 8°/100	3616.00	0.00	-14.96	3616.00	0.00	-0.00	0.00	0.00
Target HOLD 10°	3741.04	10.00	-14.96	3740.41	10.52	-2.81	8.00	10.56
Target Build/ turn @ 8	3910.88	10.00	345.02	3907.66	39.02	-10.43	0.00	39.17
Target End build/Hold	4890.15	88.00	0.00	4502.66	720.09	-36.61	8.00	720.54
Target Build to 90.3°	5090.15	88.00	360.00	4509.64	919.97	-36.61	0.00	920.40
Target Landing point	5189.20	90.31	0.00	4511.10	1019.00	-36.61	2.33	1019.42
T.D. & Target Proposed	6712.02	90.27	360.00	4503.36	2541.80	-36.61	0.00	2542.06

TARGET DATA

MD	Inc	Azi	TVD	North	East	Name	Position
3616.00	0.00	-14.96	3616.00	0.00	-0.00	KOP @ 8°/100	2157047.00 East : 171896.00 North
3741.04	10.00	-14.96	3740.41	10.52	-2.81	HOLD 10°	2157044.19 East : 171906.52 North
3910.88	10.00	345.02	3907.66	39.02	-10.43	Build/ turn @ 8°/100	2157036.57 East : 171935.02 North
4890.15	88.00	0.00	4502.66	720.09	-36.61	End build/Hold 88° for 200	2157010.39 East : 172616.11 North
6712.02	90.27	360.00	4503.36	2541.80	-36.61	Proposed BHL	2157010.39 East : 174437.87 North
5090.15	88.00	360.00	4509.64	919.97	-36.61	Build to 90.3° @ 2.3°/100	2157010.39 East : 172815.99 North
-	-	-	4510.00	1274.96	-36.61	Hold 90.3° to TD	2157010.39 East : 173170.99 North
5189.20	90.31	0.00	4511.10	1019.00	-36.61	Landing point	2157010.39 East : 172915.03 North

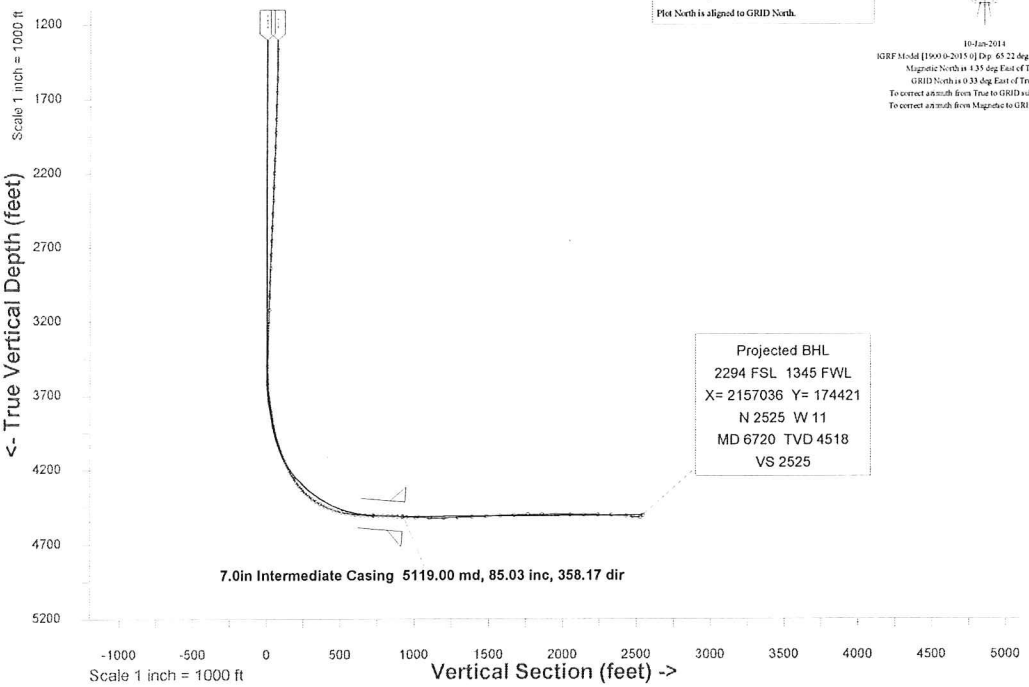
Target Line: 2-10-14
Target: 4515 KBTVD @ 0 VS
90.3° @ 359.17 Azimuth Plane

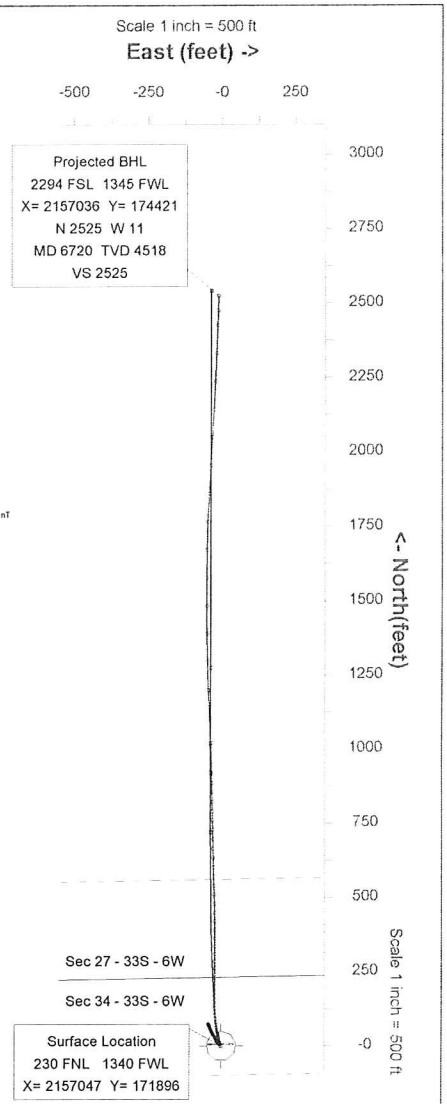
SandRidge ENERGY

Created by admin
Date plotted 3-Mar-2014
Plot reference is Matthew 3306 1-27H (Plan).
Ref wellpath is Matthew 3306 1-27H (PWP#1).
Coordinates are in feet reference Matthew 3306 1-27H.
True Vertical Depths are reference Matthew 3306 1-27H.
Measured Depths are reference Slot.
Plot North is aligned to GRID North.

N
GRID
T M
W E

10-Jan-2014
IGRF Model [1900.0-2015.0] Dip 65.22 deg Field 51711.1 nT
Magnetic North is 4.35 deg East of True North
GRID North is 0.33 deg East of True North
To correct azimuth from True to GRID subtract 0.33 deg
To correct azimuth from Magnetic to GRID add 4.02 deg





ALLIED
OIL & GAS SERVICES, LLC

SandRidge Energy
Mathews #3306 1-27H
Harper County, KS.

1.0 Executive Summary

Allied Oil & Gas Services would like to thank you for the award of the provision of cementing products and services on the well Mathews #3306 1-27 Casing.

A pre-job meeting was held to discuss job details, review the safety hazards, potential environmental impact and established emergency procedures.

Allied started the job testing lines to 2500 psi. After a successful test we began the job by pumping 10 bbls of preflush spacer. We then mixed and pumped the following cements:

70 Bbls (210 sacks) of 12.7 ppg Lead slurry:
65:35: Class A:Poz Blend - 1.87 Yield
6.0% Gel
2.0% cc
¼# Floseal

32 Bbls (150 sacks) of 15.6 ppg Tail slurry:
Class A - 1.20 Yield
2.0% cc
¼# Floseal

The top plug was then released and displaced with 50 of fresh water. The plug bumped and pressured up to 1100 psi. Pressure was released and floats held.

All real time data is shown on the graph in the attachment section.

Allied Oil & Gas Services remains committed to provide operational excellence and superior product performance. All comments and suggestions are greatly appreciated and help us to continue to provide this level of service.

Again we want to thank you for the opportunity to perform these and your future cementing & acidizing service needs.

1.0 Executive Summary

Allied Oil & Gas Services would like to thank you for the award of the provision of cementing products and services on the well Mathews #3306 1-27 Intermediate Casing.

A pre-job meeting was held to discuss job details, review the safety hazards, potential environmental impact and established emergency procedures.

Allied started the job testing lines to 3000 psi. After a successful test we began the job by pumping 30 bbls of preflush spacer. We then mixed and pumped the following cements:

62 Bbls (250 sacks) of 13.6 ppg Lead slurry:
50:50 Class A:Poz Blend - 1.4 Yield
2.0% Gel
0.4% FL-160
0.1% SA-51

21Bbls (100 sacks) of 15.6 ppg Tail slurry:
Class A - 1.18 Yield
0.8% FL-160
0.2% CD-31

The top plug was then released and displaced with 192.5 of fresh water. The plug bumped and pressured up to 1500 psi. Pressure was released and floats held.

All real time data is shown on the graph in the attachment section.

Allied Oil & Gas Services remains committed to provide operational excellence and superior product performance. All comments and suggestions are greatly appreciated and help us to continue to provide this level of service.

Again we want to thank you for the opportunity to perform these and your future cementing & acidizing service needs.