



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1220285
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: _____

1220285

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: 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: _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Nulik 3404 1-29H
Doc ID	1220285

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
1	5750-5759	Frac - see report	
1	5987-5989		
1	6217-6219		
1	6402-6404		
1	6584-6586		
1	6770-6772		
1	6958-6960		
1	7143-7145		
1	7328-7330		
1	7514-7516		
1	7698-7700		
1	7886-7888		
1	8067-8069		
1	8255-8257		
1	8443-8445		
1	8632-8634		
1	8818-8820		
1	9002-9004		
1	9186-9188		
1	9369-9371		



SandRidge Energy
Nulik #3404 1-29
Sumner 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 Nulik #3404 1-29 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 3500 psi. After a successful test we began the job by pumping 30 bbls of preflush spacer. We then mixed and pumped the following cements:

69 Bbls (275 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 210.5 of fresh water. The plug bumped and pressured up to 1100 psi. Pressure was released and floats held.

Due to technical problems a chart could not be recorded.

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.



SandRidge Energy
Nulik #3404 1-29 H
Sumner 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 Nulik #3404 1-29 H Surface 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 1500 psi. After a successful test we began the job by pumping 10 bbls of preflush spacer. We then mixed and pumped the following cements:

50 Bbls (150 sacks) of 12.7 ppg Lead slurry:
65:35 Class A:Poz Blend - 1.87 Yield
6.0% Gel
2.0%cc
¼# Floseal

32Bbls (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 38 Bbls of fresh water. The plug bumped and pressured up to 800 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.

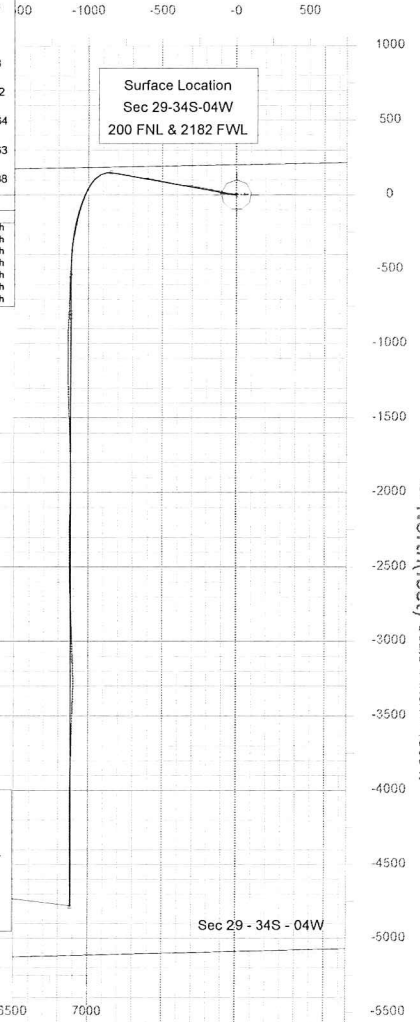
Sandridge

Location	Kansas		Slot	Nulik 3404 1-29H		
Field	Sec 29 - 34S - 04W		Well	Nulik 3404 1-29H		
Installation	Sumner County		Wellbore	Nulik 3404 1-29H (PWB)		
Installation Data						
Name	Latitude	Longitude	Northing	Easting		
Sumner County	N37 42 08	W97 47 130	146561.00	2209013.00		
Coordinate System						
Kansas State Planes, Southern Zone						
Slot Data						
Name	North [ft]	East [ft]	Latitude	Longitude	Northing	Easting
Nulik 3404 1-29H	-161.29 N	2181.01 E	N37 42 08	W97 47 34.40	146499.70	2211194.10
Elevation Data						
Slot - Mean Sea Level [ft]	Mean Sea Level - Mudline/Ground level [ft]		Slot - Mudline/Ground level [ft]			
1252.00	-1231.00		21.00			

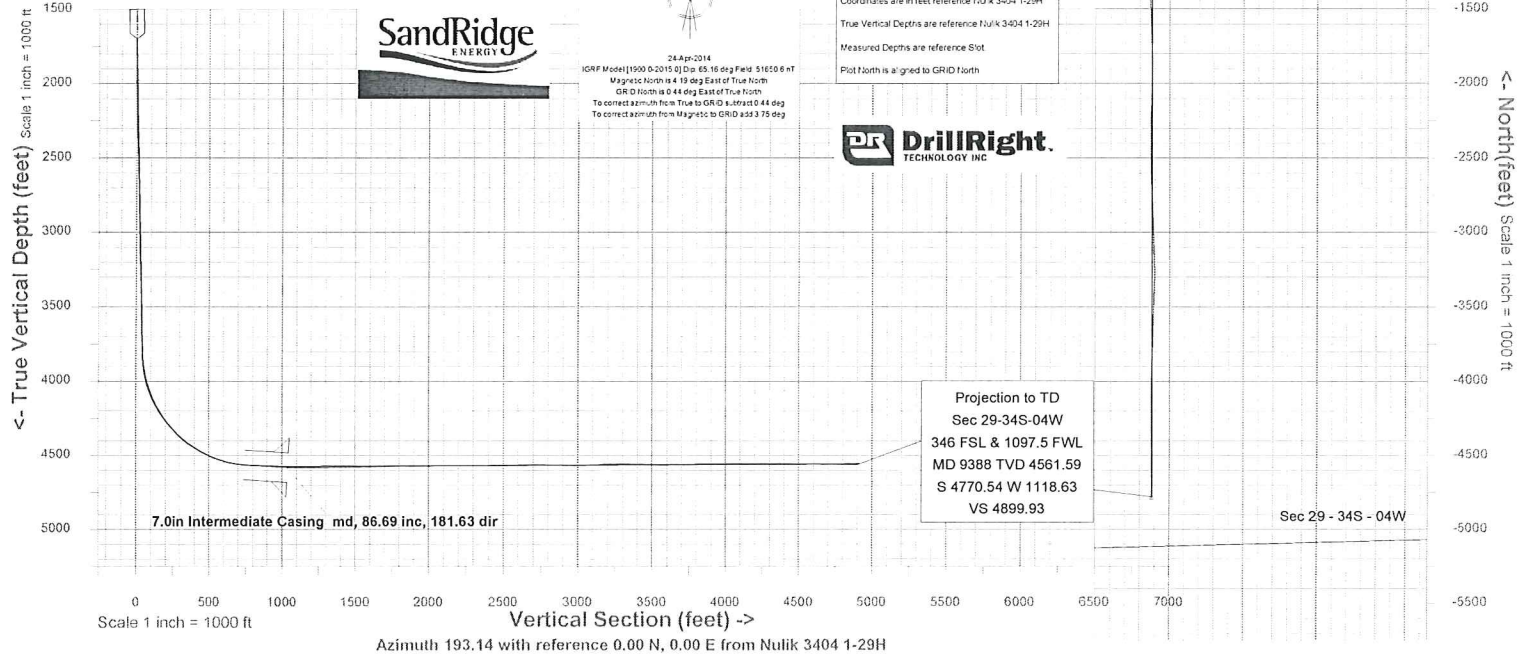
WELL PROFILE DATA

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 w/ 4" BRN	1450.00	0.00	-80.00	1450.00	0.00	0.00	0.00	-0.00
Target Hold Section	2000.00	22.00	-80.00	1986.58	18.11	-102.72	4.00	5.71
Target Build w/ 8" BRN	4014.10	22.00	280.00	3854.03	149.13	-845.75	0.00	46.98
Target 250' Tangent	5162.49	88.00	180.00	4565.94	-542.26	-1118.74	8.00	782.32
Target Build w/ 8" BRN	5412.50	88.00	180.00	4574.67	-792.12	-1118.74	0.00	1025.64
Target Landing Point	5441.25	90.30	179.97	4575.10	-820.87	-1118.73	8.00	1053.63
T.D. & Target PBHL Nulik	9406.23	90.30	179.98	4554.30	-4785.79	-1116.85	0.00	4914.38

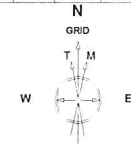
East (feet) ->
Scale 1 inch = 1000 ft



Target Line: 04-24-14
TGT: 4580' KBTVD @ 0' VS
90.3° @ 193.14 AZI Plane



Azimuth 193.14 with reference 0.00 N, 0.00 E from Nulik 3404 1-29H



Projection to TD
Sec 29-34S-04W
346 FSL & 1097.5 FWL
MD 9388 TVD 4561.59
S 4770.54 W 1118.63
VS 4899.93

24-Apr-2014
ICRF Model 1900 0-2015 0 [Dip 65.16 deg Field 51650 6 NT
Magnetic North is 4.19 deg East of True North
GR 0 North is 0.44 deg East of True North
To correct azimuth from True to GRID subtract 0.44 deg
To correct azimuth from Magnetic to GRID add 3.75 deg

Created by admin
Date plotted 4-Jun-2014
Plot reference is Nulik 3404 1-29H (PWB)
Ref well path is Nulik 3404 1-29H (PVP#1)
Coordinates are in feet reference Nulik 3404 1-29H
True Vertical Depths are reference Slot
Measured Depths are reference Slot
Plot North is aligned to GRID North

Company: Sandridge
Well Name: Nulik 3404 1-29H
Legals: Sec: 29 Township: 34S
 Range: 04W
County/State: Sumner KS
Rig Name: Lariat 20

Customer Rep	Position	Directional Driller	MWD Operator
		Phillip Bryant	
		Jason Minnick	
		Scott Graham	

Nulik 3404 1-29H 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	609.00	0.10	247.80	609.00	-0.20	-0.49	0.31	0.02	0.02	18.42	247.80	0.53
Survey	892.00	0.70	49.80	891.99	0.82	0.60	-0.93	0.28	0.21	57.24	36.19	1.02
Survey	1176.00	0.30	107.80	1175.98	1.71	2.63	-2.26	0.21	0.14	20.42	56.97	3.14
Survey	1365.00	0.40	69.80	1364.98	1.79	3.72	-2.59	0.13	0.05	20.11	64.30	4.13
Survey	1459.00	2.20	283.30	1458.96	2.31	2.27	-2.77	2.71	1.91	155.85	44.50	3.24
Survey	1550.00	6.50	276.00	1549.68	3.25	-4.56	-2.13	4.75	4.73	8.02	305.48	5.60
Survey	1641.00	10.00	281.30	1639.72	5.34	-17.43	-1.24	3.93	3.85	5.82	287.03	18.23
Survey	1732.00	13.20	278.90	1728.85	8.50	-35.45	-0.22	3.56	3.52	2.64	283.48	36.45
Survey	1824.00	15.30	281.60	1818.02	12.56	-57.72	0.89	2.39	2.28	2.93	282.28	59.07
Survey	1915.00	19.40	283.00	1904.86	18.38	-84.22	1.25	4.53	4.51	1.54	282.31	86.20
Survey	2006.00	20.10	281.80	1990.51	24.97	-114.25	1.66	0.89	0.77	1.32	282.33	116.95
Survey	2097.00	21.30	281.10	2075.63	31.35	-145.78	2.61	1.35	1.32	0.77	282.14	149.11
Survey	2189.00	22.30	279.50	2161.05	37.45	-179.39	4.31	1.26	1.09	1.74	281.79	183.26
Survey	2282.00	22.70	281.40	2246.97	43.91	-214.39	5.98	0.89	0.43	2.04	281.57	218.84
Survey	2374.00	24.00	280.10	2331.44	50.70	-250.21	7.51	1.52	1.41	1.41	281.45	255.29
Survey	2464.00	23.10	279.00	2413.94	56.67	-285.67	9.76	1.11	1.00	1.22	281.22	291.24
Survey	2555.00	22.20	277.10	2497.93	61.59	-320.36	12.85	1.27	0.99	2.09	280.88	326.23
Survey	2646.00	22.70	275.90	2582.03	65.52	-354.89	16.87	0.75	0.55	1.32	280.46	360.89
Survey	2738.00	22.20	278.90	2667.06	70.03	-389.72	20.40	1.36	0.54	3.26	280.19	395.96
Survey	2830.00	22.80	283.10	2752.07	76.76	-424.25	21.70	1.86	0.65	4.57	280.26	431.14
Survey	2924.00	21.70	280.90	2839.07	84.17	-459.06	22.39	1.47	1.17	2.34	280.39	466.71
Survey	3019.00	21.20	278.90	2927.49	90.15	-493.27	24.35	0.93	0.53	2.11	280.36	501.44
Survey	3114.00	21.20	282.60	3016.06	96.55	-527.01	25.78	1.41	0.00	3.89	280.38	535.78
Survey	3209.00	22.00	281.50	3104.39	103.85	-561.21	26.45	0.94	0.84	1.16	280.48	570.74
Survey	3304.00	20.20	276.10	3193.03	109.14	-594.96	28.97	2.79	1.89	5.68	280.39	604.89
Survey	3398.00	19.50	277.30	3281.44	112.86	-626.66	32.55	0.86	0.74	1.28	280.21	636.74
Survey	3493.00	19.30	279.60	3371.05	117.49	-657.87	35.14	0.83	0.21	2.42	280.13	668.28
Survey	3588.00	20.70	281.60	3460.32	123.48	-689.80	36.57	1.64	1.47	2.11	280.15	700.76
Survey	3682.00	21.90	281.60	3547.90	130.35	-723.25	37.48	1.28	1.28	0.00	280.22	734.90
Survey	3777.00	22.80	279.10	3635.76	136.82	-758.78	39.26	1.38	0.95	2.63	280.22	771.02
Survey	3872.00	23.10	277.40	3723.24	142.13	-795.44	42.42	0.77	0.32	1.79	280.13	808.04
Survey	3935.00	22.40	276.40	3781.34	145.06	-819.62	45.06	1.27	1.11	1.59	280.04	832.36
Survey	3967.00	22.40	276.00	3810.92	146.38	-831.75	46.54	0.48	0.00	1.25	279.98	844.53
Survey	3998.00	22.20	274.80	3839.60	147.49	-843.46	48.12	1.60	0.65	3.87	279.92	856.26
Survey	4030.00	22.80	270.30	3869.17	148.03	-855.69	50.37	5.70	1.88	14.06	279.81	868.40
Survey	4061.00	22.60	263.30	3897.77	147.36	-867.61	53.73	8.73	0.65	22.58	279.64	880.04
Survey	4093.00	22.30	257.00	3927.35	145.28	-879.63	58.49	7.57	0.94	19.69	279.38	891.55
Survey	4124.00	22.20	251.40	3956.04	142.09	-890.92	64.16	6.85	0.32	18.06	279.06	902.18
Survey	4156.00	22.90	246.60	3985.60	137.68	-902.36	71.06	6.15	2.19	15.00	278.68	912.80
Survey	4188.00	23.80	244.30	4014.98	132.41	-913.89	78.81	4.00	2.81	7.19	278.24	923.43
Survey	4219.00	24.50	239.80	4043.27	126.46	-925.09	87.15	6.35	2.26	14.52	277.78	933.69

Nulik 3404 1-29H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	4251.00	25.70	235.10	4072.25	119.15	-936.51	96.87	7.27	3.75	14.69	277.25	944.06
Survey	4283.00	27.60	229.40	4100.85	110.36	-947.83	108.00	9.95	5.94	17.81	276.64	954.23
Survey	4314.00	29.30	224.60	4128.11	100.28	-958.61	120.27	9.19	5.48	15.48	275.97	963.84
Survey	4345.00	30.40	220.90	4155.00	88.95	-969.08	133.68	6.92	3.55	11.94	275.24	973.15
Survey	4377.00	31.70	216.30	4182.42	76.05	-979.36	148.58	8.45	4.06	14.38	274.44	982.31
Survey	4408.00	32.80	211.90	4208.64	62.36	-988.62	164.02	8.36	3.55	14.19	273.61	990.58
Survey	4440.00	34.80	209.30	4235.23	47.03	-997.67	181.00	7.71	6.25	8.12	272.70	998.78
Survey	4471.00	37.20	207.10	4260.31	30.97	-1006.27	198.60	8.79	7.74	7.10	271.76	1006.75
Survey	4503.00	38.80	204.30	4285.53	13.22	-1014.80	217.82	7.35	5.00	8.75	270.75	1014.89
Survey	4534.00	40.90	202.10	4309.33	-5.04	-1022.62	237.38	8.16	6.77	7.10	269.72	1022.63
Survey	4566.00	43.60	200.60	4333.01	-25.08	-1030.44	258.67	9.01	8.44	4.69	268.61	1030.75
Survey	4597.00	46.30	198.90	4354.95	-45.69	-1037.84	280.43	9.53	8.71	5.48	267.48	1038.85
Survey	4629.00	48.80	198.60	4376.55	-68.05	-1045.42	303.92	7.84	7.81	0.94	266.28	1047.63
Survey	4660.00	51.00	198.10	4396.51	-90.55	-1052.89	327.53	7.20	7.10	1.61	265.08	1056.78
Survey	4692.00	53.30	196.60	4416.15	-114.67	-1060.42	352.73	8.08	7.19	4.69	263.83	1066.60
Survey	4724.00	55.90	194.60	4434.69	-139.79	-1067.42	378.79	9.59	8.12	6.25	262.54	1076.53
Survey	4755.00	58.50	193.60	4451.48	-165.06	-1073.77	404.84	8.81	8.39	3.23	261.26	1086.38
Survey	4787.00	60.70	192.90	4467.67	-191.92	-1080.09	432.43	7.13	6.88	2.19	259.92	1097.01
Survey	4818.00	63.70	192.40	4482.13	-218.68	-1086.09	459.86	9.78	9.68	1.61	258.62	1107.89
Survey	4850.00	66.60	191.80	4495.57	-247.07	-1092.18	488.89	9.22	9.06	1.88	257.25	1119.78
Survey	4881.00	68.80	191.40	4507.33	-275.16	-1097.94	517.55	7.20	7.10	1.29	255.93	1131.89
Survey	4913.00	70.50	189.10	4518.46	-304.68	-1103.28	547.51	8.58	5.31	7.19	254.56	1144.58
Survey	4944.00	72.80	186.80	4528.22	-333.82	-1107.34	576.81	10.23	7.42	7.42	253.22	1156.56
Survey	4976.00	73.90	184.60	4537.39	-364.32	-1110.39	607.21	7.43	3.44	6.88	251.84	1168.63
Survey	5007.00	75.60	184.30	4545.55	-394.14	-1112.71	636.77	5.56	5.48	0.97	250.50	1180.45
Survey	5039.00	79.40	183.40	4552.47	-425.30	-1114.80	667.59	12.19	11.88	2.81	249.12	1193.17
Survey	5070.00	82.50	183.40	4557.35	-455.86	-1116.62	697.77	10.00	10.00	0.00	247.79	1206.09
Survey	5102.00	85.20	184.60	4560.78	-487.60	-1118.84	729.18	9.22	8.44	3.75	246.45	1220.47
Survey	5133.00	86.90	182.90	4562.91	-518.45	-1120.86	759.68	7.75	5.48	5.48	245.18	1234.96
Survey	5165.00	86.80	182.40	4564.67	-550.37	-1122.34	791.10	1.59	0.31	1.56	243.88	1250.02
Survey	5197.00	86.80	182.10	4566.46	-582.30	-1123.59	822.48	0.94	0.00	0.94	242.60	1265.51
Survey	5229.00	86.70	182.10	4568.27	-614.22	-1124.76	853.83	0.31	0.31	0.00	241.36	1281.54
Survey	5260.00	86.50	182.10	4570.11	-645.15	-1125.90	884.21	0.65	0.65	0.00	240.19	1297.64
Survey	5292.00	86.10	182.40	4572.17	-677.06	-1127.15	915.57	1.56	1.25	0.94	239.01	1314.87
Survey	5323.00	86.20	182.10	4574.26	-707.96	-1128.36	945.94	1.02	0.32	0.97	237.89	1332.07
Survey	5354.00	85.80	181.90	4576.42	-738.87	-1129.44	976.28	1.44	1.29	0.65	236.81	1349.65
Survey	5375.00	86.10	181.80	4577.90	-759.81	-1130.12	996.83	1.51	1.43	0.48	236.09	1361.79
Survey	5424.00	86.80	181.60	4580.93	-808.69	-1131.57	1044.76	1.49	1.43	0.41	234.45	1390.84
Survey	5487.00	88.90	181.30	4583.30	-871.62	-1133.16	1106.40	3.37	3.33	0.48	232.43	1429.61
Survey	5579.00	91.00	181.60	4583.38	-963.59	-1135.49	1196.49	2.31	2.28	0.33	229.68	1489.24
Survey	5669.00	91.60	179.10	4581.34	-1053.55	-1136.04	1284.22	2.86	0.67	2.78	227.16	1549.37
Survey	5760.00	90.30	179.30	4579.83	-1144.53	-1134.77	1372.53	1.45	1.43	0.22	224.75	1611.72
Survey	5852.00	91.90	179.60	4578.06	-1236.51	-1133.89	1461.90	1.77	1.74	0.33	222.52	1677.70
Survey	5944.00	91.20	178.40	4575.57	-1328.46	-1132.28	1551.08	1.51	0.76	1.30	220.44	1745.53
Survey	6009.00	91.00	178.40	4574.32	-1393.42	-1130.47	1613.93	0.31	0.31	0.00	219.05	1794.32
Survey	6100.00	92.30	178.10	4571.70	-1484.34	-1127.69	1701.84	1.47	1.43	0.33	217.22	1864.12
Survey	6192.00	89.90	177.40	4569.94	-1576.24	-1124.08	1790.51	2.72	2.61	0.76	215.49	1936.00
Survey	6285.00	89.30	178.10	4570.59	-1669.17	-1120.43	1880.18	0.99	0.65	0.75	213.87	2010.35

Nulik 3404 1-29H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	6376.00	91.00	178.60	4570.35	-1760.13	-1117.81	1968.16	1.95	1.87	0.55	212.42	2085.08
Survey	6467.00	89.80	179.40	4569.71	-1851.11	-1116.22	2056.39	1.58	1.32	0.88	211.09	2161.61
Survey	6557.00	90.00	180.60	4569.87	-1941.11	-1116.22	2144.04	1.35	0.22	1.33	209.90	2239.16
Survey	6649.00	90.10	181.90	4569.79	-2033.08	-1118.23	2234.06	1.42	0.11	1.41	208.81	2320.31
Survey	6741.00	91.30	181.90	4568.67	-2125.02	-1121.28	2324.28	1.30	1.30	0.00	207.82	2402.70
Survey	6832.00	90.90	181.90	4566.92	-2215.95	-1124.29	2413.52	0.44	0.44	0.00	206.90	2484.85
Survey	6926.00	91.90	180.90	4564.62	-2309.90	-1126.59	2505.53	1.50	1.06	1.06	206.00	2569.99
Survey	7021.00	90.10	179.80	4562.97	-2404.87	-1127.17	2598.15	2.22	1.89	1.16	205.11	2655.92
Survey	7116.00	89.70	179.40	4563.13	-2499.87	-1126.51	2690.51	0.60	0.42	0.42	204.26	2741.97
Survey	7210.00	89.30	178.60	4563.95	-2593.85	-1124.87	2781.65	0.95	0.43	0.85	203.44	2827.26
Survey	7330.00	88.00	177.90	4566.78	-2713.76	-1121.20	2897.59	1.23	1.08	0.58	202.45	2936.25
Survey	7425.00	91.20	177.10	4567.44	-2808.65	-1117.06	2989.06	3.47	3.37	0.84	201.69	3022.64
Survey	7519.00	93.00	177.40	4564.00	-2902.48	-1112.55	3079.40	1.94	1.91	0.32	200.97	3108.40
Survey	7613.00	93.40	177.90	4558.75	-2996.25	-1108.70	3169.84	0.68	0.43	0.53	200.31	3194.80
Survey	7708.00	89.50	178.90	4556.35	-3091.17	-1106.05	3261.68	4.24	4.11	1.05	199.69	3283.09
Survey	7801.00	88.80	178.90	4557.73	-3184.14	-1104.27	3351.81	0.75	0.75	0.00	199.13	3370.19
Survey	7896.00	88.80	178.90	4559.72	-3279.10	-1102.44	3443.86	0.00	0.00	0.00	198.58	3459.46
Survey	7990.00	88.50	181.30	4561.93	-3373.07	-1102.61	3535.41	2.57	0.32	2.55	198.10	3548.71
Survey	8084.00	89.50	181.60	4563.57	-3467.02	-1104.99	3627.44	1.11	1.06	0.32	197.68	3638.85
Survey	8180.00	91.00	182.40	4563.15	-3562.96	-1108.34	3721.63	1.77	1.56	0.83	197.28	3731.37
Survey	8275.00	91.90	182.30	4560.75	-3657.85	-1112.23	3814.92	0.95	0.95	0.11	196.91	3823.21
Survey	8369.00	92.60	181.40	4557.06	-3751.73	-1115.26	3907.03	1.21	0.74	0.96	196.56	3913.99
Survey	8464.00	89.70	180.40	4555.15	-3846.69	-1116.75	3999.85	3.23	3.05	1.05	196.19	4005.52
Survey	8559.00	91.10	181.60	4554.49	-3941.67	-1118.41	4092.72	1.94	1.47	1.26	195.84	4097.27
Survey	8657.00	89.60	181.10	4553.89	-4039.64	-1120.72	4188.65	1.61	1.53	0.51	195.51	4192.22
Survey	8751.00	89.90	180.10	4554.30	-4133.63	-1121.70	4280.40	1.11	0.32	1.06	195.18	4283.12
Survey	8846.00	90.60	179.30	4553.89	-4228.63	-1121.21	4372.80	1.12	0.74	0.84	194.85	4374.75
Survey	8940.00	88.50	179.40	4554.63	-4322.62	-1120.14	4464.09	2.24	2.23	0.11	194.53	4465.40
Survey	9035.00	90.10	179.40	4555.79	-4417.60	-1119.15	4556.35	1.68	1.68	0.00	194.22	4557.16
Survey	9130.00	88.70	179.80	4556.79	-4512.59	-1118.48	4648.70	1.53	1.47	0.42	193.92	4649.14
Survey	9224.00	89.40	179.90	4558.35	-4606.58	-1118.23	4740.18	0.75	0.74	0.11	193.64	4740.36
Survey	9319.00	88.50	180.60	4560.09	-4701.56	-1118.64	4832.76	1.20	0.95	0.74	193.38	4832.81
Survey	9338.00	88.80	179.90	4560.54	-4720.55	-1118.72	4851.27	4.01	1.58	3.68	193.33	4851.30
PrjCalcPnt	9388	88.8	179.9	4561.59	-4770.54	-1118.63	4899.93	0	0	0	193.20	4899.94

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/5/2014
Job End Date:	6/5/2014
State:	Kansas
County:	Sumner
API Number:	15-191-22737-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Nulik 3404 #1-29H
Longitude:	-97.77622300
Latitude:	37.06675400
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,561
Total Base Water Volume (gal):	3,061,926
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	Well Operator	Carrier/Base Fluid	Water	7732-18-5	100.00000	96.28907	None
40/70 Premium Preferred Sand	Cimarron Acid	Proppant, Scouring, Fill	Crystalline Silica (quartz)	14808-60-7	100.00000	2.39730	None
40/70 Resin Coated Sand	Cimarron Acid	Proppant, Scouring, Fill	Crystalline Silica (quartz)	14808-60-7	97.00000	0.67638	None
15% Unihibited HCl Acid	Cimarron Acid	Etching, Dissolving, Cleaning	Water	7732-18-5	85.00000	0.45976	None
			Hydrochloric Acid	7647-01-0	15.00000	0.08113	None
			Water	7732-18-5	24.00000	0.00011	None
			Methanol	67-56-1	9.00000	0.00004	None
			Triethyl Phosphate	78-40-0	8.40000	0.00004	None
			N-Dimethylformamide	68-12-2	8.40000	0.00004	None
			Ethylene Glycol	107-21-1	8.40000	0.00004	None
			2-Butoxyethanol	111-76-2	8.40000	0.00004	None
			Ethoxylated Nonylphenol	68412-54-4	8.40000	0.00004	None
			isopropyl Alcohol	67-63-0	8.40000	0.00004	None

			Tar Bases-quinoline derivs-benzyl chloride/quaternized	72480-70-7	8.40000	0.00004	None
			Cinnamaldehyde	104-55-2	8.40000	0.00004	None
Iron Control, Sodium Erythorbate	Cimarron Acid	Iron Control					
			Water	7732-18-5	55.50000	0.01797	None
			Methanol	67-56-1	12.70000	0.00412	None
			Nonylphenal Polyethylene Glycol Ether	127087-87-0	9.10000	0.00294	None
			Dinanylphenyl Polyoxyethylene	201602-88-2	9.10000	0.00294	None
			Poly(ethylene Oxide)	25322-68-3	9.10000	0.00294	None
			Isopropanol	67-63-0	4.60000	0.00147	None
			Sodium Erythorbate	6381-77-7	100.00000	0.00018	None
			Water	7732-18-5	54.50000	0.00013	None
			Polyglycol Ethers	52624-57-4	13.60000	0.00003	None
			Isopropanol	67-63-0	13.60000	0.00003	None
			Methanol	67-56-1	9.00000	0.00002	None
			Glycol Ether EB	111-76-2	9.00000	0.00002	None
FR-986, Cationic Friction Reducer	Cimarron Acid	Friction Reducer					
			Water	7732-18-5	50.00000	0.00342	None
			Phosphoric Acid	7664-38-2	16.80000	0.00115	None
			Hydrochloric Acid	7647-01-0	16.80000	0.00115	None
			Petroleum Hydrotreated Light Distillate	64742-47-8	2.50000	0.00088	None
			Ethylene Glycol	107-21-1	12.70000	0.00087	None
			Methanol	67-56-1	3.60000	0.00025	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)