



Confidentiality Requested:

Yes  No

**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: \_\_\_\_\_

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

<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> _____ <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	Biaggi 2520 1-28H
Doc ID	1182938

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	6712-6805	Acid Frac 1877 bbls of Water & 888 bbls of 15% NEFE	5396-7359
4	5792-5878		
4	5924-6024		
4	6598-6664		
4	6840-6942		
4	6978-7056		
4	7114-7212		
4	7250-7336		
4	7357-7359		
4	5396-5488		
4	5530-5636		
4	5664-5752		

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Biaggi 2520 1-28H
Doc ID	1182938

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	120	grout	10	see report
Surface	12.25	9.625	36	1230	O-Tex Premium Plus	380	see report
Intermediate	8.75	7	26	5395	50/50 POZ	130	see report
Production	6.125	4	11.6	7422	50/50 POZ	100	see report

## Summary of Changes

Lease Name and Number: Biaggi 2520 1-28H

API/Permit #: 15-047-21623-01-00

Doc ID: 1182938

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	01/14/2014	01/21/2014
Fluid Mngmt - Chloride Content	16000	10000
Fluid Mngmt - County	Ford	Woods County, OK
Fluid Mngmt - Fluid Volume	7128	4470
Fluid Mngmt - Lease Name	Muno SWD 1-31	unknown
Fluid Mngmt - Operator License	34192	56371
Fluid Mngmt - Operator Name	SandRidge Exploration & Production LLC	Lojo Disposal
Fluid Mngmt - Permit	D31213	99999
Producing Formation	missi	Mississippi
Save Link	<a href="http://.../kcc/detail/operatorEditDetail.cfm?docID=1177086">../..kcc/detail/operatorEditDetail.cfm?docID=1177086</a>	<a href="http://.../kcc/detail/operatorEditDetail.cfm?docID=1182938">../..kcc/detail/operatorEditDetail.cfm?docID=1182938</a>

Summary of changes for correction 1 continued

Field Name	Previous Value	New Value
Well Type	GAS	SIOW



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1177086  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed

Form must be Signed

All blanks must be Filled

# CONFIDENTIAL 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: \_\_\_\_\_

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](mailto: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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Biaggi 2520 1-28H
Doc ID	1177086

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	6712-6805	Acid Frac 1877 bbls of Water & 888 bbls of 15% NEFE	5396-7359
4	5792-5878		
4	5924-6024		
4	6598-6664		
4	6840-6942		
4	6978-7056		
4	7114-7212		
4	7250-7336		
4	7357-7359		
4	5396-5488		
4	5530-5636		
4	5664-5752		

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Biaggi 2520 1-28H
Doc ID	1177086

#### 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	120	grout	10	see report
Surface	12.25	9.625	36	1230	O-Tex Premium Plus	380	see report
Intermediate	8.75	7	26	5395	50/50 POZ	130	see report
Production	6.125	4	11.6	7422	50/50 POZ	100	see report



**INVOICE**

DATE	INVOICE #
9/12/2013	4202

<b>BILL TO</b>
SANDRIDGE ENERGY, INC. ATTN: PURCHASING MANAGER 123 ROBERT S. KERR AVENUE OKLAHOMA CITY, OK 73102

<b>REMIT TO</b>
EDGE SERVICES, INC. PO BOX 609 WOODWARD, OK 73802

COUNTY	STARTING D...	WORK ORDER	RIG NUMBER	LEASE NAME	Terms
EDWARDS, KS	9/11/2013	3274	HORIZON 4	BIAGGI 2520 1-28H	Due on rec...

Description
DRILLED 120' OF 30" CONDUCTOR HOLE FURNISHED AND SET 6' X 6' TINHORN CELLAR FURNISHED 120' OF 20" CONDUCTOR PIPE FURNISHED 25' MOUSE HOLE SHUCK FURNISHED 1 LOAD(S) MUD FURNISHED WELDER AND MATERIALS FURNISHED 12 YARDS OF GRADE A CEMENT FURNISHED GROUT PUMP DRILL MOUSE HOLE FURNISHED 25' OF 14" CONDUCTOR PIPE FOR MOUSE HOLE  TOTAL BID \$ 17,000.00

<b>Sales Tax (7.3%)</b>	\$214.66
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<b>TOTAL</b>	\$17,214.66
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<b>JOB SUMMARY</b>			PROJECT NUMBER <b>SOK 3089</b>	TICKET DATE <b>10/13/13</b>
COUNTY <b>Edwards</b>	State <b>Kansas</b>	COMPANY <b>Bridge Exploration &amp; Produc</b>	CUSTOMER REP <b>Luis Solis</b>	
LEASE NAME <b>Biaggi 2520</b>	Well No. <b>1-28H</b>	JOB TYPE <b>Surface</b>	EMPLOYEE NAME <b>Daniel Wells</b>	

EMP NAME					
Daniel Wells		0			
Vontray Watkins					
Wallace Berry					
Nate Cotta					

Form. Name \_\_\_\_\_ Type: \_\_\_\_\_  
 Packer Type \_\_\_\_\_ Set At **0**  
 Bottom Hole Temp. **80** Pressure \_\_\_\_\_  
 Retainer Depth \_\_\_\_\_ Total Depth **1250**

	Called Out	On Location	Job Started	Job Completed
Date	<b>10/12/2013</b>	<b>10/12/2013</b>	<b>10/13/2013</b>	<b>10/13/2013</b>
Time	<b>1400</b>	<b>1800</b>	<b>0140</b>	<b>0240</b>

Tools and Accessories		
Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Val	0	IR
Centralizers	0	IR
Top Plug	1	IR
HEAD	1	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data						
	New/Used	Weight	Size	Grade	From	To
Casing		36#	9 5/8"		Surface	1,234
Liner						
Liner						
Tubing			0			
Drill Pipe						
Open Hole			12 1/4"		Surface	1,230
Perforations						
Perforations						
Perforations						

Materials			
Mud Type	WBM	Density	<b>9</b> Lb/Gal
Disp. Fluid	Fresh Water	Density	<b>8.33</b> Lb/Gal
Spacer type	resh Water	BBL	<b>10</b> 8.33
Spacer type	BBL		
Acid Type	Gal.	%	
Acid Type	Gal.	%	
Surfactant	Gal.	In	
NE Agent	Gal.	In	
Fluid Loss	Gal/Lb	In	
Gelling Agent	Gal/Lb	In	
Fric. Red.	Gal/Lb	In	
MISC.	Gal/Lb	In	

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
<b>10/12</b>	<b>8.0</b>	<b>10/13</b>	<b>1.0</b>	Surface
Total	<b>8.0</b>	Total	<b>1.0</b>	

Perfpac Balls \_\_\_\_\_ Qty. \_\_\_\_\_  
 Other \_\_\_\_\_  
 Other \_\_\_\_\_  
 Other \_\_\_\_\_  
 Other \_\_\_\_\_

Pressures	
MAX	1,500 PSI
AVG.	180
Average Rates in BPM	
MAX	6 BPM
AVG	5
Cement Left in Pipe	
Feet	44.67'
Reason	SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	250	TEX Lite Premium Plus 65	(6% Gel) 2% Calcium Chloride - 1/4pps Cello-Flake - .5% C-41P	11.11	2.01	12.40
2	130	Premium Plus (Class C)	2% Calcium Chloride - 1/4pps Cello-Flake	6.32	1.32	14.80

Summary					
Preflush	_____	Type: _____	Preflush: BBI	<b>10.00</b>	Type: Fresh Water
Breakdown	_____	MAXIMUM	Load & Bkdn: Gal - BBI	N/A	Pad: Bbl - Gal
	_____	Lost Returns-N	Excess /Return BBI	40	Calc. Disp Bbl
	_____	Actual TOC	Calc. TOC:	SURFACE	Actual Disp.
Average	_____	Bump Plug PSI:	Final Circ. PSI:	260	Disp: Bbl
ISIP	5 Min. _____	10 Min _____	Cement Slurry: BBI	<b>120.1</b>	
		15 Min _____	Total Volume	BBI	<b>222.04</b>

CUSTOMER REPRESENTATIVE \_\_\_\_\_  
 \_\_\_\_\_  
 SIGNATURE









Standard Wellpath Report  
 Sandridge  
 Sec 28 - 25S - 20W, Kansas  
 Edwards County  
 Wellbore: Biaggi 2520 1-28H (Actual)

Wellpath (Grid) Report

MD[m]	Incl[deg]	Azi[deg]	TVD[m]	North[m]	East[m]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
0.00	0.00	0.00	0.00	0.00N	0.00E	0.00E	0.00	1706307.69	429196.09
1258.00	0.70	110.500	1257.97	2.69S	7.20E	0.06	2.53	1706314.89	429193.40
1416.00	0.50	107.300	1415.96	3.23S	8.76E	0.13	3.04	1706316.45	429192.86
1921.00	0.70	100.000	1920.93	4.43S	13.90E	0.04	4.11	1706321.59	429191.67
2425.00	0.50	180.600	2424.91	7.16S	16.91E	0.16	6.78	1706324.60	429188.93
2930.00	0.50	156.300	2929.89	11.38S	17.77E	0.04	10.98	1706325.46	429184.71
3435.00	0.50	164.800	3434.87	15.52S	19.24E	0.07	15.09	1706326.93	429180.57
3897.00	0.80	167.700	3896.84	20.62S	20.45E	0.07	20.16	1706328.14	429175.47
3941.00	0.50	165.800	3940.84	21.11S	20.56E	0.68	20.64	1706328.25	429174.98
3972.00	1.00	190.700	3971.84	21.50S	20.55E	1.89	21.04	1706328.24	429174.59
4004.00	2.60	198.800	4003.82	22.46S	20.26E	5.05	22.01	1706327.95	429173.63
4036.00	5.30	194.900	4035.74	24.58S	19.65E	8.47	24.14	1706327.34	429171.51
4067.00	7.10	192.900	4066.56	27.83S	18.85E	5.85	27.41	1706326.54	429168.26
4098.00	8.80	198.300	4097.26	31.95S	17.68E	5.98	31.55	1706325.37	429164.14
4129.00	10.90	196.900	4127.80	37.01S	16.08E	6.82	36.64	1706323.77	429159.08
4192.00	16.20	194.600	4189.04	51.24S	12.38E	8.75	50.95	1706320.07	429144.86
4224.00	18.90	193.100	4219.55	60.61S	10.08E	8.55	60.37	1706317.77	429135.49
4254.00	21.20	190.900	4247.73	70.67S	7.96E	8.07	70.47	1706315.65	429125.43
4286.00	23.80	189.100	4277.29	82.73S	5.84E	8.40	82.58	1706313.53	429113.37
4317.00	26.00	188.300	4305.41	95.63S	3.87E	7.18	95.52	1706311.56	429100.47
4349.00	28.80	186.900	4333.81	110.22S	1.93E	8.98	110.15	1706309.62	429085.87
4380.00	31.60	184.400	4360.60	125.74S	0.41E	9.90	125.70	1706308.10	429070.36
4412.00	34.20	183.800	4387.47	143.07S	0.83W	8.19	143.06	1706306.86	429053.03
4444.00	37.20	183.100	4413.45	161.71S	1.95W	9.46	161.71	1706305.74	429034.39
4475.00	39.90	183.300	4437.70	181.00S	3.03W	8.72	181.02	1706304.66	429015.10
4507.00	42.40	183.000	4461.79	202.02S	4.18W	7.84	202.06	1706303.51	428994.08
4539.00	44.70	183.000	4484.98	224.04S	5.34W	7.19	224.10	1706302.35	428972.07
4570.00	46.70	183.500	4506.63	246.19S	6.60W	6.55	246.27	1706301.09	428949.92
4601.00	48.40	183.900	4527.55	269.01S	8.07W	5.57	269.13	1706299.62	428927.10
4633.00	49.50	183.300	4548.57	293.10S	9.59W	3.72	293.24	1706298.10	428903.01
4665.00	51.10	181.500	4569.01	317.69S	10.61W	6.61	317.85	1706297.08	428878.42
4697.00	54.20	180.600	4588.42	343.12S	11.08W	9.94	343.29	1706296.61	428852.99
4729.00	56.40	180.200	4606.64	369.43S	11.26W	6.95	369.59	1706296.43	428826.68
4760.00	59.30	180.700	4623.13	395.77S	11.42W	9.39	395.83	1706296.27	428800.44
4792.00	62.50	180.700	4638.69	423.63S	11.71W	10.01	423.78	1706296.98	428772.42
4823.00	64.60	181.800	4652.50	451.37S	12.32W	7.48	451.54	1706295.37	428744.74
4855.00	67.60	182.500	4665.06	479.69S	13.39W	9.90	479.87	1706294.30	428716.43
4885.00	70.50	183.000	4676.14	508.61S	14.78W	9.48	508.81	1706292.91	428687.52
4917.00	73.40	182.300	4686.05	539.00S	16.18W	9.30	539.22	1706291.51	428657.13
4949.00	75.80	181.600	4694.55	569.83S	17.23W	7.79	570.07	1706290.46	428626.30
4980.00	78.80	180.600	4701.37	600.06S	17.81W	10.18	600.31	1706289.88	428596.07
5010.00	81.20	180.300	4706.58	629.60S	18.04W	8.06	629.85	1706289.65	428566.53
5041.00	84.00	179.800	4710.57	660.34S	18.07W	9.17	660.58	1706289.62	428535.79
5072.00	85.70	180.300	4713.35	691.21S	18.09W	5.71	691.44	1706289.60	428504.92
5104.00	86.40	180.700	4715.55	723.14S	18.37W	2.52	723.36	1706289.76	428473.00
5136.00	87.60	181.300	4717.23	755.09S	18.93W	4.19	755.32	1706288.72	428441.05
5167.00	88.50	181.400	4718.28	786.06S	19.66W	2.92	786.30	1706288.03	428410.08
5198.00	89.80	181.400	4718.85	817.04S	20.42W	2.90	817.30	1706287.27	428379.10
5230.00	89.80	180.900	4719.08	849.04S	21.06W	2.00	849.29	1706286.63	428347.11
5261.00	90.20	181.200	4719.08	880.03S	21.63W	1.61	880.29	1706286.06	428316.12
5292.00	90.50	181.000	4718.89	911.02S	22.22W	1.16	911.29	1706285.47	428285.12
5324.00	91.00	181.000	4718.47	943.02S	22.78W	1.56	943.29	1706284.91	428253.13
5340.00	91.30	180.700	4718.15	959.01S	23.02W	2.65	959.29	1706284.67	428237.14
5392.00	90.90	180.800	4716.84	1026.99S	23.91W	0.61	1027.27	1706283.78	428169.16
5422.00	90.40	180.000	4715.23	1217.98S	24.02W	0.16	1218.22	1706283.67	428105.17
5459.00	90.40	180.100	4715.67	1154.96S	23.96W	0.78	1155.23	1706283.73	428041.18
5492.00	90.40	180.000	4715.68	1281.98S	23.96W	2.50	1282.20	1706283.73	427978.19
5522.00	88.60	181.000	4717.69	1345.95S	23.91W	1.88	1345.15	1706283.78	427850.23
5598.00	85.30	181.700	4732.75	1632.75S	28.09W	0.63	1632.97	1706279.61	427659.36
6014.00	88.00	181.400	4727.20	1536.83S	26.24W	0.76	1537.04	1706281.45	427552.95
6109.00	85.30	181.700	4735.26	1823.36S	35.00W	6.92	1823.69	1706272.69	427372.85
6205.00	91.70	183.500	4731.24	1919.10S	40.78W	1.46	1919.53	1706266.92	427277.11
6396.00	93.10	183.400	4725.94	2013.85S	45.16W	1.59	2014.35	1706262.53	427182.37
6492.00	92.70	182.600	4716.69	2204.50S	52.07W	0.80	2205.11	1706255.63	426991.74
6584.00	90.60	181.800	4714.15	2301.39S	55.79W	2.03	2302.06	1706251.91	426894.85
6779.00	89.70	181.500	4713.90	2396.35S	58.52W	1.00	2397.05	1706249.17	426799.90
6875.00	88.70	180.600	4715.24	2492.32S	60.28W	1.40	2493.04	1706247.41	426703.93

All data is in Feet unless otherwise stated  
 Coordinates are from Slot MD and TVD's are from Slot (Biaggi 2520 1-28H 0.00ft above Mean Sea Level)  
 Vertical Section is from 0.00N 0.00E on azimuth 181.18 degrees from Wellhead  
 Bottom hole distance is 3039.91 Feet on azimuth 181.18 degrees from Wellhead  
 Calculation method uses Minimum Curvature method  
 Prepared by  
 Date Printed: 6-Nov-2013

Standard Wellpath Report  
 Sandridge  
 Sec 28 - 25S - 20W, Kansas  
 Edwards County  
 Wellbore: Biaggi 2520 1-28H (Actual)

Wellpath (Grid) Report

MD[ft]	Incl[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
6971.00	89.10	181.100	4717.09	2588.29S	61.71W	0.67	2589.02	1706245.99	426607.97
7066.00	90.10	180.500	4717.75	2683.28S	63.03W	1.23	2684.01	1706244.66	426512.99
7162.00	90.60	179.800	4717.16	2779.27S	63.28W	0.90	2779.99	1706244.41	426417.00
7258.00	89.70	179.700	4716.91	2875.27S	62.86W	0.94	2875.96	1706244.83	426321.01
7353.00	90.40	179.900	4716.83	2970.27S	62.53W	0.77	2970.93	1706245.16	426226.01
7422.00	90.40	179.900	4716.35	3039.27S	62.41W	==>	3039.90	1706245.28	426157.02

All data is in Feet unless otherwise stated  
 Coordinates are from Slot MD's are from Slot ( Biaggi 2520 1-28H 0.00ft above Mean Sea Level )  
 Vertical Section is from 0.00N 0.00E on azimuth 181.280 degrees  
 Bottom hole distance is 3039.91 Feet on azimuth 181.18 degrees from Wellhead  
 Calculation method uses Minimum Curvature method  
 Prepared by  
 Date Printed: 6-Nov-2013



# SHAMROCK GAS ANALYSIS, INC.

LABORATORY REFERENCE NUMBER : R16033.S02235



**SANDRIDGE ENERGY, INC.**

ID: **KS03R0271**  
 AREA: **NOT/REC**  
 METER: **BIAGGI 1-28H**  
 LEASE: **BIAGGI 1-28H**  
 OPERATOR: **SANDRIDGE**  
 STATION: **KS03R0271**  
 SAMPLE DATE: **12/30/2013**  
 SAMPLE OF: **GAS**

LINE PRESSURE: **56.08 PSI**  
 LINE TEMPERATURE: **39.61 F**  
 CYLINDER NUMBER: **715**  
 EFFECTIVE DATE: **12/1/2013**  
 SAMPLED BY: **NOT/REC**  
 ANALYZED BY: **BRENNAN**  
 ANALYZED DATE: **1/6/2014**  
 SAMPLE TYPE: **SPOT**

**For: SANDRIDGE ENERGY, INC.**  
**Attn: JULIE COSTELLO**  
**123 ROBERT S. KERR AVENUE**

**OKLAHOMA CITY, OK 73102-6406**

Physical Properties per GPA 2145-09

Calculations per GPA 2172-09

Note: Zero = Less than detection limit

	MOL%	GPM @ 14.696
HYDROGEN	0.428	0.038
HELIUM	1.416	0.143
HYDROGEN SULFIDE	0.030	0.004
NITROGEN	39.380	4.316
CARBON DIOXIDE	32.556	5.535
METHANE	23.594	3.985
ETHANE	1.935	0.516
PROPANE	0.318	0.087
ISOBUTANE	0.061	0.020
N-BUTANE	0.107	0.034
ISOPENTANE	0.029	0.011
N-PENTANE	0.040	0.014
HEXANES PLUS	0.106	0.047
	100.000	14.750

BTU	Vol. IDEAL Gas Fuel	Vol. Real Gas Fuel
BTU @ 14.65 PSIA ( DRY )	295.0	295.6
BTU @ 14.65 PSIA ( SAT. )	289.9	290.5
Specific Gravity	1.0424	1.0440
Compressibility ( Z )	0.9980	

Gasoline Content ( Gallons Per Thousand - GPM )

Ethane & Heavier	0.729
Propane & Heavier	0.213
Butane & Heavier	0.126
Pentane & Heavier	0.072
Total 26 psi Reid V.P. Gasoline GPM	0.115

**Secondary BTU Psia Base**

BTU @ 14.73 PSIA ( DRY )
BTU @ 14.73 PSIA ( SAT. )
Compressibility ( Z ) at 14.73 =

Vol. IDEAL Gas Fuel	Vol. Real Gas Fuel
296.6	297.2
291.5	292.1
0.9980	

**Remarks:** Field H2S ppm = 300      NO PREVIOUS BTU AVAILABLE      RUSH SAMPLE  
**Remarks:** 47-36-17 HEXANES SPLIT AS PER K. HARPER 05/02/11

# SHAMROCK GAS ANALYSIS, INC.



LABORATORY REFERENCE NUMBER : **R16036.Q05864**

**SANDRIDGE ENERGY, INC.**

ID: **KS03R0271**  
 AREA: **NOT/REC**  
 METER: **BIAGGI 1-28H**  
 LEASE: **BIAGGI 1-28H**  
 OPERATOR: **SANDRIDGE**  
 STATION: **KS03R0271**  
 SAMPLE DATE: **12/30/2013**  
 SAMPLE OF: **GAS**

LINE PRESSURE: **56.08 PSI**  
 LINE TEMPERATURE: **39.61 F**  
 CYLINDER NUMBER: **4916**  
 EFFECTIVE DATE: **12/1/2013**  
 SAMPLED BY: **NOT/REC**  
 ANALYZED BY: **BRENNAN**  
 ANALYZED DATE: **1/6/2014**  
 SAMPLE TYPE: **SPOT**

**For: SANDRIDGE ENERGY, INC.**  
**Attn: JULIE COSTELLO**  
**123 ROBERT S. KERR AVENUE**  
**OKLAHOMA CITY, OK 73102-6406**

Physical Properties per GPA 2145-09

Calculations per GPA 2172-09

Note: Zero = Less than detection limit

	<u>MOL%</u>	<u>GPM @ 14.696</u>
HYDROGEN	0.344	0.031
HELIUM	1.407	0.142
HYDROGEN SULFIDE	0.030	0.004
NITROGEN	39.446	4.324
CARBON DIOXIDE	32.576	5.539
METHANE	23.615	3.989
ETHANE	1.934	0.515
PROPANE	0.316	0.087
ISOBUTANE	0.062	0.020
N-BUTANE	0.104	0.033
ISOPENTANE	0.032	0.012
N-PENTANE	0.028	0.010
HEXANES PLUS	0.106	0.047
	100.000	14.753

BTU	Vol. Ideal	Vol. Real	PREVIOUS BTU	12/30/2013	Vol. Ideal	Vol. Real	Vol. Ideal	Vol. Real
	Gas Fuel	Gas Fuel			Gas Fuel	Gas Fuel	Gas Fuel	Gas Fuel
BTU @ 14.65 PSIA ( DRY )	294.5	295.1	BTU @ 14.65 PSIA ( DRY )		295.0	295.6		
BTU @ 14.65 PSIA ( SAT. )	289.3	290.0	BTU @ 14.65 PSIA ( SAT. )		289.9	290.5		
Specific Gravity	1.0431	1.0447						
Compressibility ( Z )	0.9980							

Gasoline Content ( Gallons Per Thousand - GPM )

Ethane & Heavier	0.724
Propane & Heavier	0.209
Butane & Heavier	0.122
Pentane & Heavier	0.069
Total 26 psi Reid V.P. Gasoline GPM	0.110

**Secondary BTU Psia Base**

	Vol. IDEAL	Vol. Real	
	Gas Fuel	Gas Fuel	
BTU @ 14.73 PSIA ( DRY )	296.1	296.7	
BTU @ 14.73 PSIA ( SAT. )	290.9	291.6	
Compressibility ( Z ) at 14.73 =	0.9980		

**Remarks:** Field H2S ppm = 300      RUSH SAMPLE  
**Remarks:** 47-36-17 HEXANES SPLIT AS PER K. HARPER 05/02/11