CORRECTION #1

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1193463

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: Chelsey Green
Phone: (405) 429-5500
CONTRACTOR: License # 33596
Name: Unit Petroleum Company
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 #:

11/5/2013	11/27/2013	3/4/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-077-21979-01-00
Spot Description:
SE - SW - SE - SE Sec. 36 Twp. 33 S. R. 5 ☐ East ☑ West
200 Feet from ☐ North / ☑ South Line of Section
680 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: Gabriel 3305 Well #: 1-36H
Field Name:
Producing Formation: Mississippi
Elevation: Ground: 1249 Kelly Bushing: 1265
Total Vertical Depth: 9289 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 550 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: 03/05/2014
☑ **Confidential Release Date:** 03/04/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 03/11/2014

CORRECTION #1
Page Two

[redacted]

1193463

Operator Name: SandRidge Exploration and Production LLC Lease Name: Gabriel 3305 Well #: 1-36H

Sec. 36 Twp. 33 S. R. 5 ☐ 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:

Attached

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

Name	Top	Datum
Base Heebner	2976	
Lansing	3300	
Cottage Grove	3621	
Oswego Limestone	3972	
Cherokee	4100	
Verdigris	4110	
Mississippi	4384	

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	100	grout	8	
Surface	12.25	9.625	36	550	Extendacem/ Swiftcem	340	3% CaCl, 0.25 Poly-e-flake
Intermediate	8.75	7	26	5267	Econocem/ Halcem	360	0.4% Halad(R)-9, 2% bentonite

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: 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:
☐ 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	Gabriel 3305 1-36H
Doc ID	1193463

All Electric Logs Run

Boresight
Prizm
Mud
Induction
Nuclear

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Gabriel 3305 1-36H
Doc ID	1193463

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9052-9165	1500 gals 15% HCl, 5762 bbls sw, TLTR 5945 bbls	
5	8753-8958	1500 gals 15% HCl, 5632 bbls sw, TLTR 11747 bbls	
5	8416-8685	1500 gals 15% HCl, 5656 bbls sw, TLTR 17403 bbls	
5	7998-8348	1500 gals 15% HCl, 6038 bbls sw, TLTR 23604 bbls	
5	7624-7898	1500 gals 15% HCl, 5824 bbls sw, TLTR 29561 bbls	
5	7188-7494	1500 gals 15% HCl, 5530 bbls sw, TLTR 35345 bbls	
5	6822-7118	1500 gals 15% HCl, 5727 bbls sw, TLTR 41161 bbls	
5	6430-6743	1500 gals 15% HCl, 5540 bbls sw, TLTR 46772 bbls	
5	6158-6368	1500 gals 15% HCl, 5363 bbls sw, TLTR 52196 bbls	
5	5710-6060	1500 gals 15% HCl, 5590 bbls sw, TLTR 57838 bbls	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Gabriel 3305 1-36H
Doc ID	1193463

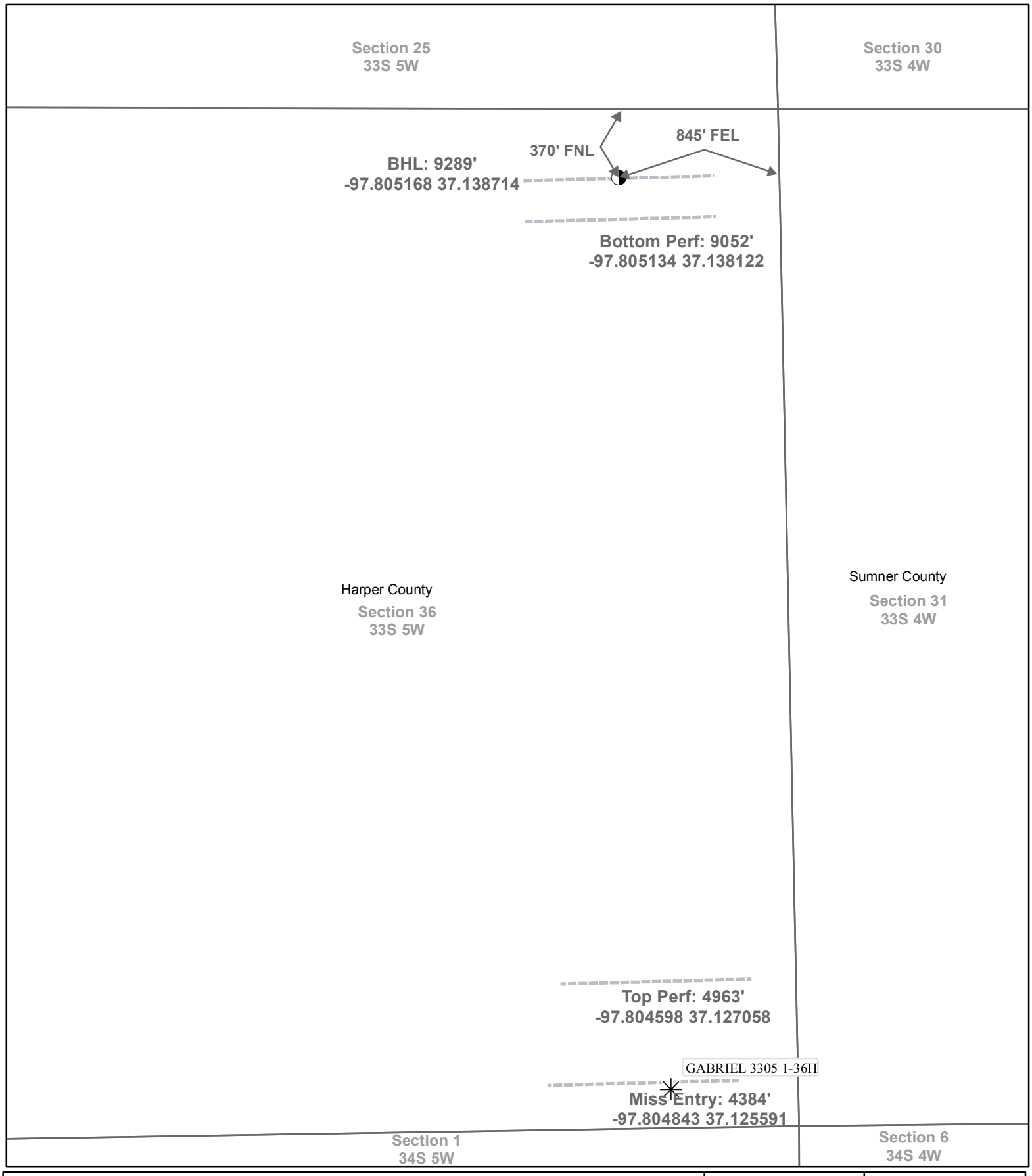
Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	5334-5604	1500 gals 15% HCl, 6485 bbls sw, TLTR 64361 bbls	
5	4963-5100	2016 gals 15% HCl, 4085 bbls sw, TLTR 68446 bbls	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Gabriel 3305 1-36H
Doc ID	1193463

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	100	grout	8	
Surface	12.25	9.625	36	550	Extendacem/ Swiftcem	340	3% CaCl, 0.25 Poly-e-flake
Intermediate	8.75	7	26	5267	Econocem / Halcem	360	0.4% Halad(R)-9, 2% bentonite



SANDRIDGE
THE POWER OF US

Actual BH Location
SandRidge Wells
Perf
Sections

Actual Bottom-Hole Location of Gabriel 3305 1-36H
Harper County, Kansas
T&R: 33S 5W
Section: 36, 845' FEL & 370' FNL
-97.805168 37.138714

1 in = 667 ft

0 500 1,000 2,000 Feet

N

Draftsman: Naomi Martinez	Draft Date: 3/7/2014
Drawing Name/Number: Addendum_Gabriel 3306 1-36Hc.mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	

Summary of Changes

Lease Name and Number: Gabriel 3305 1-36H

API/Permit #: 15-077-21979-01-00

Doc ID: 1193463

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	03/06/2014	03/11/2014
Save Link	../../kcc/detail/operatorEditDetail.cfm?docID=1192356	../../kcc/detail/operatorEditDetail.cfm?docID=1193463

Summary of Attachments

Lease Name and Number: Gabriel 3305 1-36H

API: 15-077-21979-01-00

Doc ID: 1193463

Correction Number: 1

Attachment Name

As Drilled Plat

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1192356

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 # 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: Chelsey Green
Phone: (405) 429-5500
CONTRACTOR: License # 33596
Name: Unit Petroleum Company
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 #:

11/5/2013	11/27/2013	3/4/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-077-21979-01-00
Spot Description:
SE - SW - SE - SE Sec. 36 Twp. 33 S. R. 5 ☐ East ☑ West
200 Feet from ☐ North / ☑ South Line of Section
680 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: Gabriel 3305 Well #: 1-36H
Field Name:
Producing Formation: Mississippi
Elevation: Ground: 1249 Kelly Bushing: 1265
Total Vertical Depth: 9289 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 550 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: 03/05/2014
☐ **Confidential Release Date:**
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 03/06/2014

Operator Name: SandRidge Exploration and Production LLC Lease Name: Gabriel 3305 Well #: 1-36H

Sec. 36 Twp. 33 S. R. 5 ☐ 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 *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☐ Yes	☑ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☐ Yes	☐ No

List All E. Logs Run:

Attached

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

Name	Top	Datum
Base Heebner	2976	
Lansing	3300	
Cottage Grove	3621	
Oswego Limestone	3972	
Cherokee	4100	
Verdigris	4110	
Mississippi	4384	

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	100	grout	8	
Surface	12.25	9.625	36	550	Extendacem/ Swiftcem	340	3% CaCl, 0.25 Poly-e-flake
Intermediate	8.75	7	26	5267	Econocem/ Halcem	360	0.4% Halad(R)-9, 2% bentonite

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	-			
	-			

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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
Attached					Attached

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Gabriel 3305 1-36H
Doc ID	1192356

All Electric Logs Run

Boresight
Prizm
Mud
Induction
Nuclear

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Gabriel 3305 1-36H
Doc ID	1192356

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9052-9165	1500 gals 15% HCl, 5762 bbls sw, TLTR 5945 bbls	
5	8753-8958	1500 gals 15% HCl, 5632 bbls sw, TLTR 11747 bbls	
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5	6158-6368	1500 gals 15% HCl, 5363 bbls sw, TLTR 52196 bbls	
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Gabriel 3305 1-36H
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Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	5334-5604	1500 gals 15% HCl, 6485 bbls sw, TLTR 64361 bbls	
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Gabriel 3305 1-36H
Doc ID	1192356

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	100	grout	8	
Surface	12.25	9.625	36	550	Extendacem/ Swiftcem	340	3% CaCl, 0.25 Poly-e-flake
Intermediate	8.75	7	26	5267	Econocem / Halcem	360	0.4% Halad(R)-9, 2% bentonite

BASIN SERVICES, LLC
P O BOX 4268
ABILENE, TX 79608-4268
Phone # (325)690-0053
Fax # (325)698-0055

TICKET

TICKET NUMBER: WY-158-1
TICKET DATE: 11/06/2013

ELECTRONIC

YARD: WY WAYNOKA OK
LEASE: Gabriel 3305
WELL#: 1-36H
RIG #: Unit 310
Co/St: HARPER, KS

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

DESCRIPTION	QUANTITY	RATE	AMOUNT
11/5-6/2013 DRILLED 30" CONDUCTOR HOLE			
11/5-6/2013 20" CONDUCTOR PIPE (.250 WALL)			
11/5-6/2013 6' X 6' CELLAR TINHORN WITH PROTECTIVE RING			
11/5-6/2013 DRILL & INSTALL 6' X 6' CELLAR TINHORN			
11/5-6/2013 DRILLED 20" MOUSE HOLE (PER FOOT)			
11/5-6/2013 16" CONDUCTOR PIPE (.250 WALL)			
11/5-6/2013 MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE			
11/5-6/2013 WELDING SERVICES FOR PIPE & LIDS			
11/5-6/2013 PROVIDED EQUIPMENT & LABOR TO ASSIST IN PUMPING CONCRETE			
11/5-6/2013 PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR MOUSEHOLE PIPE)			
11/5-6/2013 8 YDS OF 10 SACK GROUT			
11/5-6/2013 TAXABLE ITEMS			6,530.00
11/5-6/2013 BID - TAXABLE ITEMS			11,970.00
11/5-6/2013 HOLE COVER			

Sub Total:	18,500.00
Tax HARPER COUNTY (6.15 %):	401.60
TICKET TOTAL:	$ 18,901.60

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

Approved Signature _____

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 3198597	**Quote #:**	**Sales Order #:** 900891322
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Webster, John	
Well Name: Gabriel 3305	**Well #:** 1-36H		**API/UWI #:** 15-077-21979
Field:	**City (SAP):** BLUFF CITY	**County/Parish:** Harper	**State:** Kansas
Legal Description: Section 36 Township 33S Range 5W			
Contractor: UNIT	**Rig/Platform Name/Num:** 310		
Job Purpose: Cement Surface Casing			
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** DAVIS, ROBERT	**MBU ID Emp #:** 458886	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DAVIS, ROBERT T	4	458886	OTTO, STEVEN Byron	4	505532	STOOPS, LEVI Keith	4	523378

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
11-11-2013	4	4						
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	550. ft	**Job Depth TVD**	550. ft		
Water Depth		**Wk Ht Above Floor**	6. ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	11 - Nov - 2013	11:00	CST
On Location	11 - Nov - 2013	17:00	CST
Job Started	11 - Nov - 2013	19:30	CST
Job Completed	11 - Nov - 2013	20:20	CST
Departed Loc	11 - Nov - 2013	22:30	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
12.25" Open Hole				12.25				80.	550.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	550.		
Preset Conductor	Unknown		20.	19.124	94.			.	80.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9.625	1	
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9.625	1	
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc	%
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1

HALLIBURTON

Cementing Job Summary

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water		10.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	EXTENDACEM (TM) SYSTEM (452981)	190.0	sacks	12.4	2.12	11.68		11.68
3 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.25 lbm		POLY-E-FLAKE (101216940) 72 lbs							
11.681 Gal		FRESH WATER							
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	150.0	sacks	15.6	1.2	5.32		5.32
2 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.125 lbm		POLY-E-FLAKE (101216940) 32 lbs							
5.319 Gal		FRESH WATER							
4	Displacement			bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	40	Shut In: Instant		Lost Returns	0	Cement Slurry	104	Pad	
Top Of Cement	0	5 Min		Cement Returns	50	Actual Displacement	35	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	149

Rates							
Circulating		Mixing	6	Displacement	6	Avg. Job	6

Cement Left In Pipe	Amount	42 ft	Reason	Shoe Joint

Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID

The Information Stated Herein Is Correct	Customer Representative Signature

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 3198597	**Quote #:**	**Sales Order #:** 900891322
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Webster, John	
Well Name: Gabriel 3305	**Well #:** 1-36H		**API/UWI #:** 15-077-21979
Field:	**City (SAP):** BLUFF CITY	**County/Parish:** Harper	**State:** Kansas
Legal Description: Section 36 Township 33S Range 5W			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		**Long:** E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: UNIT	**Rig/Platform Name/Num:** 310		
Job Purpose: Cement Surface Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Surface Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** DAVIS, ROBERT		**MBU ID Emp #:** 458886

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	11/11/2013 11:00							ON LOCATION @ 1700
Safety Meeting	11/11/2013 13:00							HES, DISCUSS ROUTS AND STOPS
Depart from Service Center or Other Site	11/11/2013 13:30							
Arrive At Loc	11/11/2013 17:00							RUNNING 9 5/8 36# CASING
Other	11/11/2013 17:10							MEET WITH CUSTOMER TO GO OVER NUMBERS
Safety Meeting	11/11/2013 17:30							HES, WATCH FOR PINCH POINTS, TEAM LIFT, USE TAG LINES WHEN NEEDED
Rig-Up Equipment	11/11/2013 18:00							
Other	11/11/2013 18:30							WAIT ON CASING AND CIRC WELL
Safety Meeting	11/11/2013 19:00							ALL ON LOCATION
Test Lines	11/11/2013 19:34							@ 3000 PSI
Pump Spacer	11/11/2013 19:35		4	10			57.0	FRESH WATER
Pump Lead Cement	11/11/2013 19:43		6	72			117.0	EXTENDACEM, 190 SKS @ 12.4#, YEILD @ 2.12, GAL/SK @ 11.68, HOC-350.8-TOL-0
Pump Tail Cement	11/11/2013 19:56		4	32			96.0	SWIFTCEM, 150 SKS @ 15.6#, YEILD @ 1.2, GAL/SK @ 5.32, HOT-207, TOT-350.8
Shutdown	11/11/2013 20:04							

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Drop Plug	11/11/2013 20:06							TOP PLUG
Pump Displacement	11/11/2013 20:07		6	30			224.0	FRESH WATER
Other	11/11/2013 20:14		3	10			230.0	SLOW RATE LAST 20 BBL
Bump Plug	11/11/2013 20:15		3				350.0	500 OVER, BUMPED @ 350 TOOK TO 1180
Check Floats	11/11/2013 20:19							FLOATS HELD 1/2 BBL BACK
End Job	11/11/2013 20:20							50 BBLS OF CEMENT RETURNS TO SURFACE
Safety Meeting	11/11/2013 20:30							HES, WATCH FOR PINCH POINTS, TEAM LIFT, USE TAG LINES WHEN NEEDED
Rig-Down Equipment	11/11/2013 21:00							
Safety Meeting	11/11/2013 21:30							HES, DISCUSS ROUTS AND STOPS
Depart Location for Service Center or Other Site	11/11/2013 22:00							THANKS FOR CALLING HALLIBURTON. ROBERT DAVIS AND CREW

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 3198597	**Quote #:**	**Sales Order #:** 900890265
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Webster, John	
Well Name: Gabriel 3305	**Well #:** 1-36H		**API/UWI #:** 15-077-21979
Field:	**City (SAP):** BLUFF CITY	**County/Parish:** Harper	**State:** Kansas
Legal Description: Section 36 Township 33S Range 5W			
Contractor: *UNIT DRILLING*	**Rig/Platform Name/Num:** 310		
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well	**Job Type:** Cement Intermediate Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** OSBORN, JAMES	**MBU ID Emp #:** 518950	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
APPLEBEE, SCOTT Joy	8	521237	OSBORN, JAMES David	8	518950	Stinnett, Mark	8	502278

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
11/19/2013	8	2						
TOTAL			*Total is the sum of each column separately*					

Job

Formation Name					
Formation Depth (MD)	**Top**		**Bottom**		
Form Type		**BHST**			
Job depth MD	5289. ft	**Job Depth TVD**	5289. ft		
Water Depth		**Wk Ht Above Floor**	5. ft		
Perforation Depth (MD)	**From**		**To**		

Job Times

	Date	Time	Time Zone
Called Out	19 - Nov - 2013	04:00	CST
On Location	19 - Nov - 2013	08:00	CST
Job Started	19 - Nov - 2013	12:47	CST
Job Completed	08 - Nov - 2013	13:54	CST
Departed Loc	19 - Nov - 2013	15:15	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
8.75" Open Hole				8.75				550.	5267.		
7" Intermediate Casing	Unknown	1151	7.	6.276	26.	LTC	P-110	.	5267.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	550.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	7	1	hes
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	7	1	hes
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty		Conc	%
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size		Qty	

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk

Stage/Plug #: 1

HALLIBURTON

Cementing Job Summary

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	HES Supplied Gel Water		30.00	bbl	8.33	.0	.0	.0	
	1.66 lbm/bbl	CAUSTIC SODA BEADS, 50 LB SK (100003650)							
	10 lbm/bbl	AQUAGEL - 100 LB BAG (101252566)							
2	Lead Cement	ECONOCEM (TM) SYSTEM (452992)	170.0	sacks	13.6	1.53	7.46		7.46
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	2 %	BENTONITE, BULK (100003682)							
	7.459 Gal	FRESH WATER							
3	Tail Cement	HALCEM (TM) SYSTEM (452986)	190.0	sacks	15.6	1.18	5.2		5.2
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	5.197 Gal	FRESH WATER							
4	Displacement		0.00	bbl	8.33	.0	.0	.0	

Calculated Values		Pressures		Volumes					
Displacement	198	Shut In: Instant		Lost Returns	0	Cement Slurry	85	Pad	
Top Of Cement	2195	5 Min		Cement Returns	0	Actual Displacement	198	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	

Rates							
Circulating		Mixing		Displacement		Avg. Job	
Cement Left In Pipe	Amount	84 ft	Reason	Shoe Joint			
Frac Ring # 1 @	ID		Frac ring # 2 @	ID		Frac Ring # 3 @	ID		Frac Ring # 4 @	ID	

The Information Stated Herein Is Correct	Customer Representative Signature

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 305021	**Ship To #:** 3198597	**Quote #:**	**Sales Order #:** 900890265
Customer: SANDRIDGE ENERGY INC EBUSINESS		**Customer Rep:** Webster, John	
Well Name: Gabriel 3305	**Well #:** 1-36H		**API/UWI #:** 15-077-21979
Field:	**City (SAP):** BLUFF CITY	**County/Parish:** Harper	**State:** Kansas
Legal Description: Section 36 Township 33S Range 5W			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		**Long:** E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: *UNIT DRILLING*	**Rig/Platform Name/Num:** 310		
Job Purpose: Cement Intermediate Casing			**Ticket Amount:**
Well Type: Development Well	**Job Type:** Cement Intermediate Casing		
Sales Person: FRENCH, JEREMY	**Srvc Supervisor:** OSBORN, JAMES		**MBU ID Emp #:** 518950

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	11/19/2013 04:00							
Pre-Convoy Safety Meeting	11/19/2013 05:30							discuss route and safe driving
Depart from Service Center or Other Site	11/19/2013 05:35							
Arrive At Loc	11/19/2013 08:30							
Assessment Of Location Safety Meeting	11/19/2013 08:35							check location for possible safety concerns, locate water supply, muster point and smoking area, go over job numbers with company man
Wait on Customer or Customer Sub-Contractor Equip	11/19/2013 08:45							customer running casing, rigging down casing crew
Pre-Rig Up Safety Meeting	11/19/2013 09:00							discuss task at hand and safe work actions
Rig-Up Equipment	11/19/2013 09:10							
Pre-Job Safety Meeting	11/19/2013 12:40							discuss job parameters with al hands and discuss safety concerns and issues
Pressure Test	11/19/2013 12:45							test hes lines to 5000 psi
Pump Spacer	11/19/2013 12:47		5	30	30		220.0	pump 30 bbl gel caustic spacer
Pump Lead Cement	11/19/2013 12:57		5	46	46		241.0	pump 170sks of cement mixed @ 13.6 totalling 46.32bbl
Pump Tail Cement	11/19/2013 13:10		5	39	39		160.0	pump 190sks of cement mixed @ 15.6 totalling 39.93bbl

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Drop Plug	11/19/2013 13:20							
Pump Displacement	11/19/2013 13:24		6	198	198		400.0	pump 198bbl of rig supplied fresh water
Bump Plug	11/19/2013 13:51						600.0	bumped plug @ 600psi took 500 over to 1151psi
Check Floats	11/19/2013 13:54						1151.0	floats held 1 bbl back to truck when released
Pre-Rig Down Safety Meeting	11/19/2013 14:05							discuss task to be done and safe work actions
Rig-Down Equipment	11/19/2013 14:20							
Pre-Convoy Safety Meeting	11/19/2013 15:15							discuss route to be taken and safe driving
Depart from Service Center or Other Site	11/19/2013 15:30							

BAKER HUGHES INTEQ

Company:	SandRidge	Job Number:	5939820	Calculation Method	Minimum Curvature
Well:	Gabriel 3305 1-36H	Magnetic Decl.:	4.34	Proposed Azimuth	358.7
Location:	Harper County KS	Grid Corr.:	0.43	Depth Reference	
Rig:	Unit 310	Total Grid Corr.:	3.91	Tie Into:	

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
Tie In Coordinates														
Tie In	0	0.00	0.00	N 0.0 E	0	0	0	0 N	0 W					
MWD	0	0.00	0.00	N 0.0 E	0	0.00	0.00	0.00 N	0.00 E	0.00	0.00	#DIV/0!	#DIV/0!	#DIV/0!
MWD	18	0.00	0.00	N 0.0 E	18	18.00	0.00	0.00 N	0.00 E	0.00	0.00	0.00	0.00	0.00
MWD	250	0.50	82.46	N 82.5 E	232	250.00	0.11	0.13 N	1.00 E	1.01	82.46	0.22	0.22	35.54
MWD	549	0.50	82.46	N 82.5 E	299	548.99	0.39	0.48 N	3.59 E	3.62	82.46	0.00	0.00	0.00
MWD	611	0.66	82.46	N 82.5 E	62	610.98	0.46	0.56 N	4.21 E	4.25	82.46	0.26	0.26	0.00
MWD	642	0.65	135.92	S 44.1 E	31	641.98	0.35	0.45 N	4.51 E	4.53	84.25	1.90	-0.03	172.45
MWD	673	0.69	154.86	S 25.1 E	31	672.98	0.05	0.16 N	4.71 E	4.72	88.06	0.72	0.13	61.10
MWD	705	1.10	169.90	S 10.1 E	32	704.97	-0.43	0.32 S	4.85 E	4.86	93.75	1.47	1.28	47.00
MWD	736	1.41	173.78	S 6.2 E	31	735.97	-1.10	0.99 S	4.94 E	5.04	101.32	1.04	1.00	12.52
MWD	767	1.83	180.98	S 1.0 W	31	766.95	-1.98	1.86 S	4.98 E	5.31	110.53	1.50	1.35	23.23
MWD	798	2.16	183.87	S 3.9 W	31	797.94	-3.05	2.94 S	4.93 E	5.74	120.83	1.11	1.06	9.32
MWD	829	2.52	188.09	S 8.1 W	31	828.91	-4.31	4.20 S	4.79 E	6.37	131.23	1.29	1.16	13.61
MWD	860	3.11	194.66	S 14.7 W	31	859.87	-5.79	5.69 S	4.48 E	7.24	141.75	2.17	1.90	21.19
MWD	892	3.82	198.62	S 18.6 W	32	891.81	-7.62	7.54 S	3.92 E	8.50	152.50	2.34	2.22	12.38
MWD	954	5.06	205.34	S 25.3 W	62	953.63	-12.01	11.97 S	2.09 E	12.15	170.08	2.17	2.00	10.84
MWD	1017	6.33	215.63	S 35.6 W	63	1016.32	-17.27	17.30 S	1.12 W	17.34	183.70	2.58	2.02	16.33
MWD	1079	6.76	225.91	S 45.9 W	62	1077.91	-22.48	22.62 S	5.73 W	23.33	194.22	2.01	0.69	16.58
MWD	1141	7.08	231.11	S 51.1 W	62	1139.46	-27.29	27.56 S	11.33 W	29.79	202.34	1.13	0.52	8.39
MWD	1203	7.10	230.93	S 50.9 W	62	1200.99	-31.97	32.37 S	17.27 W	36.69	208.09	0.05	0.03	-0.29
MWD	1265	6.73	230.16	S 50.2 W	62	1262.54	-36.58	37.11 S	23.04 W	43.68	211.83	0.62	-0.60	-1.24
MWD	1328	7.46	233.47	S 53.5 W	63	1325.06	-41.24	41.91 S	29.16 W	51.06	214.83	1.33	1.16	5.25
MWD	1390	8.15	233.58	S 53.6 W	62	1386.48	-46.09	46.92 S	35.93 W	59.09	217.45	1.11	1.11	0.18
MWD	1452	7.59	230.42	S 50.4 W	62	1447.90	-51.15	52.13 S	42.62 W	67.34	219.27	1.14	-0.90	-5.10
MWD	1515	7.77	229.28	S 49.3 W	63	1510.33	-56.44	57.56 S	49.06 W	75.63	220.44	0.37	0.29	-1.81
MWD	1579	7.24	228.39	S 48.4 W	64	1573.78	-61.79	63.06 S	55.35 W	83.91	221.27	0.85	-0.83	-1.39
MWD	1642	6.88	226.39	S 46.4 W	63	1636.31	-66.90	68.30 S	61.05 W	91.61	221.79	0.69	-0.57	-3.17
MWD	1705	7.21	230.26	S 50.3 W	63	1698.83	-71.90	73.43 S	66.82 W	99.29	222.30	0.92	0.52	6.14
MWD	1768	6.92	232.57	S 52.6 W	63	1761.35	-76.59	78.27 S	72.88 W	106.94	222.96	0.64	-0.46	3.67
MWD	1832	6.96	230.60	S 50.6 W	64	1824.88	-81.26	83.07 S	78.94 W	114.59	223.54	0.38	0.06	-3.08
MWD	1895	7.28	232.50	S 52.5 W	63	1887.40	-85.97	87.92 S	85.05 W	122.33	224.05	0.63	0.51	3.02
MWD	1958	6.70	229.56	S 49.6 W	63	1949.93	-90.65	92.74 S	91.02 W	129.94	224.46	1.08	-0.92	-4.67
MWD	2022	6.57	227.61	S 47.6 W	64	2013.50	-95.41	97.63 S	96.56 W	137.31	224.69	0.41	-0.20	-3.05
MWD	2085	6.74	225.70	S 45.7 W	63	2076.08	-100.30	102.64 S	101.87 W	144.61	224.78	0.44	0.27	-3.03

BAKER HUGHES INTEQ

Company:	SandRidge	Job Number:	5939820	Calculation Method	Minimum Curvature
Well:	Gabriel 3305 1-36H	Magnetic Decl.:	4.34	Proposed Azimuth	358.7
Location:	Harper County KS	Grid Corr.:	0.43	Depth Reference	
Rig:	Unit 310	Total Grid Corr.:	3.91	Tie Into:	

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
MWD	2148	6.32	227.25	S 47.3 W	63	2138.67	-105.12	107.58 S	107.06 W	151.77	224.86	0.72	-0.67	2.46
MWD	2211	6.34	230.09	S 50.1 W	63	2201.28	-109.59	112.16 S	112.28 W	158.70	225.03	0.50	0.03	4.51
MWD	2275	6.37	232.13	S 52.1 W	64	2264.89	-113.91	116.61 S	117.79 W	165.75	225.29	0.36	0.05	3.19
MWD	2338	7.12	234.55	S 54.6 W	63	2327.45	-118.18	121.02 S	123.73 W	173.07	225.63	1.27	1.19	3.84
MWD	2401	7.54	238.03	S 58.0 W	63	2389.94	-122.48	125.47 S	130.42 W	180.97	226.11	0.97	0.67	5.52
MWD	2465	7.51	235.58	S 55.6 W	64	2453.39	-126.91	130.06 S	137.43 W	189.21	226.58	0.50	-0.05	-3.83
MWD	2528	7.27	236.34	S 56.3 W	63	2515.86	-131.29	134.59 S	144.14 W	197.21	226.96	0.41	-0.38	1.21
MWD	2591	6.77	233.78	S 53.8 W	63	2578.39	-135.55	139.00 S	150.46 W	204.84	227.27	0.94	-0.79	-4.06
MWD	2654	6.44	231.54	S 51.5 W	63	2640.97	-139.81	143.39 S	156.22 W	212.05	227.45	0.66	-0.52	-3.56
MWD	2717	5.78	235.39	S 55.4 W	63	2703.62	-143.69	147.39 S	161.60 W	218.72	227.63	1.23	-1.05	6.11
MWD	2780	4.60	234.11	S 54.1 W	63	2766.36	-146.86	150.67 S	166.25 W	224.37	227.81	1.88	-1.87	-2.03
MWD	2875	2.90	238.74	S 58.7 W	95	2861.15	-150.22	154.15 S	171.39 W	230.52	228.03	1.82	-1.79	4.87
MWD	2970	1.53	247.88	S 67.9 W	95	2956.08	-151.88	155.88 S	174.62 W	234.08	228.25	1.48	-1.44	9.62
MWD	3002	0.91	246.58	S 66.6 W	32	2988.07	-152.12	156.14 S	175.25 W	234.72	228.30	1.94	-1.94	-4.06
MWD	3065	1.01	244.67	S 64.7 W	63	3051.06	-152.54	156.58 S	176.21 W	235.73	228.38	0.17	0.16	-3.03
MWD	3160	0.36	293.84	N 66.2 W	95	3146.05	-152.75	156.81 S	177.24 W	236.66	228.50	0.86	-0.68	51.76
MWD	3255	0.22	140.90	S 39.1 E	95	3241.05	-152.77	156.83 S	177.40 W	236.79	228.52	0.59	-0.15	-160.99
MWD	3350	0.58	122.48	S 57.5 E	95	3336.05	-153.18	157.23 S	176.88 W	236.66	228.37	0.40	0.38	-19.39
MWD	3445	0.50	154.07	S 25.9 E	95	3431.05	-153.82	157.87 S	176.29 W	236.65	228.16	0.32	-0.08	33.25
MWD	3540	0.33	113.61	S 66.4 E	95	3526.04	-154.32	158.35 S	175.86 W	236.65	228.00	0.35	-0.18	-42.59
MWD	3634	0.26	198.97	S 19.0 W	94	3620.04	-154.63	158.66 S	175.68 W	236.72	227.92	0.43	-0.07	90.81
MWD	3729	0.29	122.05	S 58.0 E	95	3715.04	-154.97	158.99 S	175.55 W	236.84	227.83	0.36	0.03	-80.97
MWD	3793	0.66	350.38	N 9.6 W	64	3779.04	-154.69	158.71 S	175.47 W	236.60	227.87	1.37	0.58	356.77
MWD	3824	1.88	354.16	N 5.8 W	31	3810.03	-154.01	158.03 S	175.56 W	236.21	228.01	3.94	3.94	12.19
MWD	3856	3.32	349.94	N 10.1 W	32	3842.00	-152.57	156.59 S	175.77 W	235.41	228.30	4.54	4.50	-13.19
MWD	3888	5.11	350.81	N 9.2 W	32	3873.91	-150.24	154.28 S	176.16 W	234.17	228.79	5.60	5.59	2.72
MWD	3919	6.50	350.13	N 9.9 W	31	3904.75	-147.14	151.18 S	176.68 W	232.54	229.45	4.49	4.48	-2.19
MWD	3983	9.87	353.77	N 6.2 W	64	3968.09	-138.09	142.16 S	177.90 W	227.72	231.37	5.32	5.27	5.69
MWD	4015	12.08	358.53	N 1.5 W	32	3999.51	-132.01	136.08 S	178.28 W	224.28	232.65	7.46	6.91	14.88
MWD	4046	14.84	3.25	N 3.3 E	31	4029.65	-124.80	128.88 S	178.14 W	219.87	234.12	9.58	8.90	15.23
MWD	4078	17.24	6.37	N 6.4 E	32	4060.40	-116.02	120.07 S	177.38 W	214.20	235.91	7.97	7.50	9.75
MWD	4110	20.05	9.34	N 9.3 E	32	4090.72	-105.92	109.94 S	175.96 W	207.49	238.00	9.27	8.78	9.28
MWD	4141	22.75	10.60	N 10.6 E	31	4119.58	-94.83	98.81 S	174.00 W	200.10	240.41	8.83	8.71	4.06
MWD	4173	25.72	10.96	N 11.0 E	32	4148.76	-81.99	85.90 S	171.54 W	191.85	243.40	9.29	9.28	1.13
MWD	4204	28.32	11.24	N 11.2 E	31	4176.37	-68.24	72.09 S	168.83 W	183.57	246.88	8.40	8.39	0.90

BAKER HUGHES INTEQ

Company:	SandRidge	Job Number:	5939820	Calculation Method	Minimum Curvature
Well:	Gabriel 3305 1-36H	Magnetic Decl.:	4.34	Proposed Azimuth	358.7
Location:	Harper County KS	Grid Corr.:	0.43	Depth Reference	
Rig:	Unit 310	Total Grid Corr.:	3.91	Tie Into:	

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
MWD	4236	30.80	12.00	N 12.0 E	32	4204.21	-52.85	56.63 S	165.64 W	175.06	251.13	7.84	7.75	2.38
MWD	4267	33.55	11.79	N 11.8 E	31	4230.44	-36.78	40.47 S	162.24 W	167.22	255.99	8.88	8.87	-0.68
MWD	4299	36.14	12.05	N 12.1 E	32	4256.70	-18.99	22.59 S	158.47 W	160.07	261.89	8.11	8.09	0.81
MWD	4330	39.06	11.98	N 12.0 E	31	4281.26	-0.58	4.09 S	154.53 W	154.58	268.48	9.42	9.42	-0.23
MWD	4362	42.36	11.92	N 11.9 E	32	4305.51	19.73	16.33 N	150.21 W	151.09	276.20	10.31	10.31	-0.19
MWD	4394	45.27	11.55	N 11.6 E	32	4328.60	41.31	38.02 N	145.71 W	150.58	284.62	9.13	9.09	-1.16
MWD	4425	47.99	11.01	N 11.0 E	31	4349.89	63.31	60.12 N	141.30 W	153.56	293.05	8.87	8.77	-1.74
MWD	4457	50.97	9.64	N 9.6 E	32	4370.68	87.13	84.04 N	136.95 W	160.68	301.54	9.86	9.31	-4.28
MWD	4488	53.45	9.18	N 9.2 E	31	4389.67	111.20	108.21 N	132.94 W	171.42	309.14	8.09	8.00	-1.48
MWD	4520	55.68	9.18	N 9.2 E	32	4408.22	136.84	133.95 N	128.78 W	185.82	316.13	6.97	6.97	0.00
MWD	4552	58.02	9.84	N 9.8 E	32	4425.72	163.15	160.37 N	124.36 W	202.94	322.21	7.51	7.31	2.06
MWD	4583	60.24	9.86	N 9.9 E	31	4441.63	189.25	186.58 N	119.80 W	221.74	327.30	7.16	7.16	0.06
MWD	4615	63.13	10.46	N 10.5 E	32	4456.80	216.86	214.31 N	114.83 W	243.14	331.82	9.18	9.03	1.88
MWD	4647	65.60	10.17	N 10.2 E	32	4470.65	245.12	242.69 N	109.67 W	266.32	335.68	7.76	7.72	-0.91
MWD	4678	68.04	9.93	N 9.9 E	31	4482.85	273.06	270.75 N	104.70 W	290.29	338.86	7.90	7.87	-0.77
MWD	4710	69.22	9.10	N 9.1 E	32	4494.51	302.33	300.14 N	99.77 W	316.29	341.61	4.41	3.69	-2.59
MWD	4774	72.59	7.56	N 7.6 E	64	4515.44	361.94	359.97 N	91.02 W	371.30	345.81	5.74	5.27	-2.41
MWD	4806	75.49	7.76	N 7.8 E	32	4524.24	392.33	390.46 N	86.92 W	400.02	347.45	9.08	9.06	0.63
MWD	4837	78.14	8.12	N 8.1 E	31	4531.31	422.12	420.35 N	82.75 W	428.42	348.86	8.62	8.55	1.16
MWD	4869	80.65	7.41	N 7.4 E	32	4537.20	453.18	451.51 N	78.50 W	458.29	350.14	8.14	7.84	-2.22
MWD	4932	84.42	5.83	N 5.8 E	63	4545.38	515.03	513.55 N	71.31 W	518.48	352.10	6.48	5.98	-2.51
MWD	4995	85.65	6.45	N 6.5 E	63	4550.84	577.27	575.95 N	64.59 W	579.56	353.60	2.18	1.95	0.98
MWD	5059	86.74	6.52	N 6.5 E	64	4555.08	640.54	639.40 N	57.38 W	641.97	354.87	1.71	1.70	0.11
MWD	5122	87.63	6.53	N 6.5 E	63	4558.18	702.87	701.92 N	50.23 W	703.71	355.91	1.41	1.41	0.02
MWD	5185	88.52	6.03	N 6.0 E	63	4560.29	765.29	764.50 N	43.34 W	765.73	356.76	1.62	1.41	-0.79
MWD	5265	90.15	5.53	N 5.5 E	80	4561.22	844.67	844.09 N	35.29 W	844.82	357.61	2.13	2.04	-0.63
MWD	5346	89.91	4.44	N 4.4 E	81	4561.18	925.18	924.78 N	28.25 W	925.21	358.25	1.38	-0.30	-1.35
MWD	5409	89.69	4.18	N 4.2 E	63	4561.40	987.88	987.60 N	23.51 W	987.88	358.64	0.54	-0.35	-0.41
MWD	5504	89.20	3.20	N 3.2 E	95	4562.32	1082.51	1082.40 N	17.40 W	1082.54	359.08	1.15	-0.52	-1.03
MWD	5536	89.04	2.98	N 3.0 E	32	4562.81	1114.42	1114.35 N	15.67 W	1114.46	359.19	0.85	-0.50	-0.69
MWD	5631	89.85	0.49	N 0.5 E	95	4563.73	1209.27	1209.29 N	12.80 W	1209.36	359.39	2.76	0.85	-2.62
MWD	5726	91.23	359.65	N 0.4 W	95	4562.84	1304.24	1304.28 N	12.68 W	1304.35	359.44	1.70	1.45	-0.88
MWD	5790	89.88	359.45	N 0.6 W	64	4562.22	1368.22	1368.28 N	13.19 W	1368.34	359.45	2.13	-2.11	-0.31
MWD	5821	89.63	358.94	N 1.1 W	31	4562.35	1399.22	1399.27 N	13.62 W	1399.34	359.44	1.83	-0.81	-1.65
MWD	5917	89.45	358.61	N 1.4 W	96	4563.12	1495.22	1495.25 N	15.67 W	1495.33	359.40	0.39	-0.19	-0.34

BAKER HUGHES INTEQ

Company:	SandRidge	Job Number:	5939820	Calculation Method	Minimum Curvature
Well:	Gabriel 3305 1-36H	Magnetic Decl.:	4.34	Proposed Azimuth	358.7
Location:	Harper County KS	Grid Corr.:	0.43	Depth Reference	
Rig:	Unit 310	Total Grid Corr.:	3.91	Tie Into:	

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
MWD	6011	90.62	358.78	N 1.2 W	94	4563.06	1589.22	1589.22 N	17.81 W	1589.32	359.36	1.26	1.24	0.18
MWD	6107	87.22	358.01	N 2.0 W	96	4564.87	1685.18	1685.15 N	20.50 W	1685.28	359.30	3.63	-3.54	-0.80
MWD	6202	88.59	357.45	N 2.6 W	95	4568.34	1780.10	1780.01 N	24.26 W	1780.18	359.22	1.56	1.44	-0.59
MWD	6297	89.51	357.35	N 2.6 W	95	4569.92	1875.07	1874.90 N	28.57 W	1875.12	359.13	0.97	0.97	-0.11
MWD	6392	90.80	357.39	N 2.6 W	95	4569.66	1970.04	1969.80 N	32.93 W	1970.07	359.04	1.36	1.36	0.04
MWD	6486	91.88	357.40	N 2.6 W	94	4567.46	2063.99	2063.67 N	37.20 W	2064.01	358.97	1.15	1.15	0.01
MWD	6581	91.39	357.56	N 2.4 W	95	4564.75	2158.93	2158.54 N	41.38 W	2158.94	358.90	0.54	-0.52	0.17
MWD	6676	88.03	357.44	N 2.6 W	95	4565.23	2253.89	2253.44 N	45.52 W	2253.90	358.84	3.54	-3.54	-0.13
MWD	6771	87.69	357.11	N 2.9 W	95	4568.78	2348.79	2348.26 N	50.03 W	2348.80	358.78	0.50	-0.36	-0.35
MWD	6866	89.32	357.06	N 2.9 W	95	4571.26	2443.72	2443.11 N	54.86 W	2443.72	358.71	1.72	1.72	-0.05
MWD	6960	89.42	356.86	N 3.1 W	94	4572.29	2537.67	2536.97 N	59.85 W	2537.67	358.65	0.24	0.11	-0.21
MWD	7055	88.46	356.72	N 3.3 W	95	4574.05	2632.60	2631.80 N	65.17 W	2632.61	358.58	1.02	-1.01	-0.15
MWD	7150	88.86	355.90	N 4.1 W	95	4576.27	2727.49	2726.58 N	71.28 W	2727.51	358.50	0.96	0.42	-0.86
MWD	7245	89.94	356.18	N 3.8 W	95	4577.27	2822.38	2821.34 N	77.84 W	2822.42	358.42	1.17	1.14	0.29
MWD	7298	89.63	356.28	N 3.7 W	53	4577.47	2875.33	2874.23 N	81.32 W	2875.38	358.38	0.61	-0.58	0.19
MWD	7362	89.75	356.01	N 4.0 W	64	4577.81	2939.27	2938.08 N	85.63 W	2939.33	358.33	0.46	0.19	-0.42
MWD	7457	89.41	357.75	N 2.3 W	95	4578.51	3034.21	3032.94 N	90.80 W	3034.29	358.29	1.87	-0.36	1.83
MWD	7552	90.28	359.44	N 0.6 W	95	4578.77	3129.21	3127.90 N	93.12 W	3129.29	358.29	2.00	0.92	1.78
MWD	7647	91.11	358.99	N 1.0 W	95	4577.61	3224.20	3222.89 N	94.43 W	3224.27	358.32	0.99	0.87	-0.47
MWD	7742	90.22	358.30	N 1.7 W	95	4576.51	3319.19	3317.85 N	96.67 W	3319.26	358.33	1.19	-0.94	-0.73
MWD	7837	90.15	359.03	N 1.0 W	95	4576.20	3414.19	3412.82 N	98.89 W	3414.26	358.34	0.77	-0.07	0.77
MWD	7932	91.26	359.21	N 0.8 W	95	4575.04	3509.18	3507.80 N	100.34 W	3509.24	358.36	1.18	1.17	0.19
MWD	8027	91.02	359.88	N 0.1 W	95	4573.15	3604.15	3602.78 N	101.10 W	3604.20	358.39	0.75	-0.25	0.71
MWD	8122	90.59	359.78	N 0.2 W	95	4571.81	3699.12	3697.77 N	101.38 W	3699.16	358.43	0.46	-0.45	-0.11
MWD	8217	90.71	359.26	N 0.7 W	95	4570.73	3794.10	3792.76 N	102.18 W	3794.14	358.46	0.56	0.13	-0.55
MWD	8312	88.77	357.84	N 2.2 W	95	4571.16	3889.10	3887.72 N	104.58 W	3889.13	358.46	2.53	-2.04	-1.49
MWD	8407	89.32	357.09	N 2.9 W	95	4572.75	3984.06	3982.62 N	108.78 W	3984.10	358.44	0.98	0.58	-0.79
MWD	8502	89.23	356.28	N 3.7 W	95	4573.95	4078.99	4077.45 N	114.27 W	4079.05	358.39	0.86	-0.09	-0.85
MWD	8597	89.69	355.85	N 4.1 W	95	4574.84	4173.89	4172.22 N	120.79 W	4173.97	358.34	0.66	0.48	-0.45
MWD	8692	89.14	357.31	N 2.7 W	95	4575.81	4268.81	4267.04 N	126.46 W	4268.92	358.30	1.64	-0.58	1.54
MWD	8786	89.26	357.55	N 2.4 W	94	4577.13	4362.78	4360.94 N	130.67 W	4362.90	358.28	0.29	0.13	0.26
MWD	8881	89.60	357.56	N 2.4 W	95	4578.07	4457.76	4455.85 N	134.73 W	4457.88	358.27	0.36	0.36	0.01
MWD	8976	88.86	357.65	N 2.4 W	95	4579.35	4552.73	4550.76 N	138.70 W	4552.87	358.25	0.78	-0.78	0.09
MWD	9071	88.43	358.08	N 1.9 W	95	4581.60	4647.69	4645.66 N	142.24 W	4647.84	358.25	0.64	-0.45	0.45
MWD	9166	87.84	358.46	N 1.5 W	95	4584.69	4742.64	4740.57 N	145.10 W	4742.79	358.25	0.74	-0.62	0.40

BAKER HUGHES INTEQ

Company: SandRidge
Well: Gabriel 3305 1-36H
Location: Harper County KS
Rig: Unit 310

Job Number: 5939820
Magnetic Decl.: 4.34
Grid Corr.: 0.43
Total Grid Corr.: 3.91

Calculation Method: Minimum Curvature
Proposed Azimuth: 358.7
Depth Reference:
Tie Into:

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
MWD	9246	86.70	358.89	N 1.1 W	80	4588.50	4822.55	4820.45 N	146.95 W	4822.69	358.25	1.52	-1.43	0.54
PROJ	9289	86.70	358.89	N 1.1 W	43	4590.97	4865.48	4863.38 N	147.78 W	4865.62	358.26	0.00	0.00	0.00
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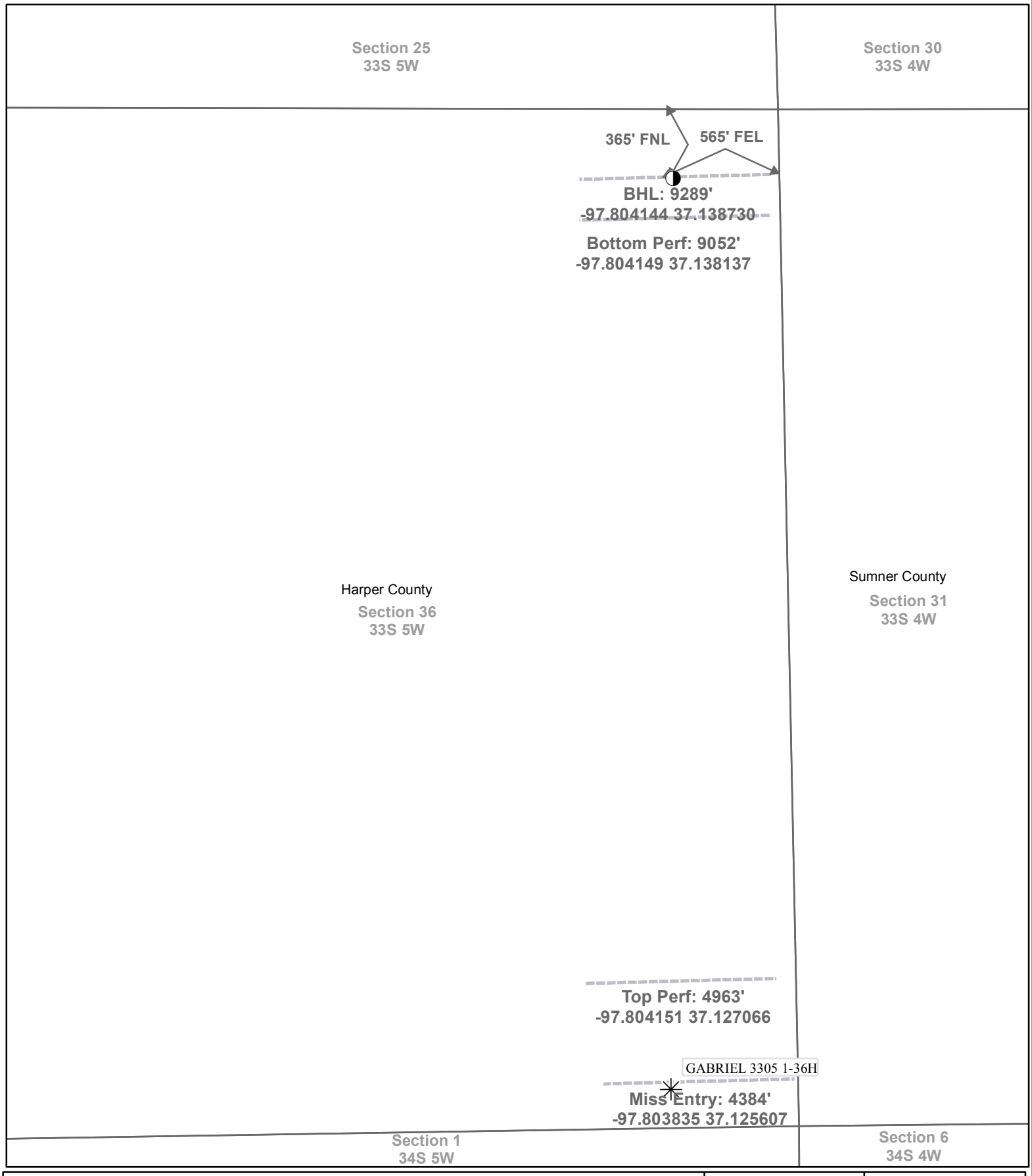

SANDRIDGE
THE POWER OF US

Actual BH Location

SandRidge Wells

Perf

Sections

Actual Bottom-Hole Location of Gabriel 3305 1-36H
Harper County, Kansas
T&R: 33S 5W
Section: 36, 565' FEL & 365' FNL
-97.804004 37.125473

1 in = 667 ft

0 500 1,000 2,000 Feet

N

Draftsman: Naomi Martinez	Draft Date: 3/4/2014
Drawing Name/Number: Addendum_Gabriel 3306 1-36H.mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	