



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1142878  
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: \_\_\_\_\_



1142878

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  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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Brad 3508 4-12H
Doc ID	1142878

All Electric Logs Run

Prizm Log
Boresight
Nuclear
Resistivity
Mud Log

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Brad 3508 4-12H
Doc ID	1142878

#### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8904-9176	1500 gals 15% HCL Acid, 6565 bbls los pH Fresh Slickwater, Running TLTR 6744 bbls	
5	8606-8850	1500 gals 15% HCL Acid, 4337 bbls los pH Fresh Slickwater, Running TLTR 11154 bbls	
5	8265-8513	1500 gals 15% HCL Acid, 4329 bbls los pH Fresh Slickwater, Running TLTR 15643 bbls	
5	7766-8142	1500 gals 15% HCL Acid, 4310 bbls los pH Fresh Slickwater, Running TLTR 20092 bbls	
5	7448-7690	1500 gals 15% HCL Acid, 4407 bbls los pH Fresh Slickwater, Running TLTR 24623 bbls	
5	7044-7384	1500 gals 15% HCL Acid, 4170 bbls los pH Fresh Slickwater, Running TLTR 28901 bbls	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Brad 3508 4-12H
Doc ID	1142878

#### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	6727-6979	1500 gals 15% HCL Acid, 4430 bbls los pH Fresh Slickwater, Running TLTR 33397 bbls	
5	6350-6676	1500 gals 15% HCL Acid, 4069 bbls los pH Fresh Slickwater, Running TLTR 37566 bbls	
5	5946-6291	1500 gals 15% HCL Acid, 4108 bbls los pH Fresh Slickwater, Running TLTR 41786 bbls	
5	5528-5832	1500 gals 15% HCL Acid, 4025 bbls los pH Fresh Slickwater, Running TLTR 45811 bbls	

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

May 29, 2013

Tiffany Golay  
SandRidge Exploration and Production LLC  
123 ROBERT S. KERR AVE  
OKLAHOMA CITY, OK 73102-6406

Re: ACO1  
API 15-077-21923-01-00  
Brad 3508 4-12H  
NE/4 Sec.12-35S-08W  
Harper County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Tiffany Golay



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

# TICKET

TICKET NUMBER: WY-2-1  
 TICKET DATE: 04/24/2013

SANDRIDGE ENERGY  
 123 ROBERT S KERR AVE  
 OKLAHOMA CITY, OK 73102-6406

YARD: WY WAYNOKA OK  
 LEASE: Taylor  
 WELL#: 3406 3-29H  
 RIG #: Unit 310  
 Co/St: HARPER, KS

DESCRIPTION	QUANTITY	RATE	AMOUNT
4/24/2013 DRILLED 30" CONDUCTOR HOLE			
4/24/2013 20" CONDUCTOR PIPE (.250 WALL)			
4/24/2013 6' X 6' CELLAR TINHORN WITH PROTECTIVE RING			
4/24/2013 DRILL & INT FALL 6' X 6' CELLAR TINHORN			
4/24/2013 DRILLED 20" MOUSE HOLE (PER FOOT)			
4/24/2013 16" CONDUCTOR PIPE (.250 WALL)			
4/24/2013 MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE			
4/24/2013 WELDING SERVICES FOR PIPE & LIDS			
4/24/2013 PROVIDED EQUIPMENT & LABOR TO ASSIST IN PUMPING CONCRETE			
4/24/2013 PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR MOUSEHOLE PIPE)			
4/24/2013 11 YARDS P SACK GROUT			
4/24/2013 TAXABLE ITEMS			9,850.00
4/24/2013 BID + TAXABLE ITEMS			6,400.00
		Sub Total:	16,250.00
		Tax HARPER COUNTY (6.3 %):	620.55
		<b>TICKET TOTAL:</b>	<b>\$ 16,870.55</b>

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

Approved Signature \_\_\_\_\_

AFE Number: DC 12936  
 Well Name: Taylor 3406 3-29H  
 Code: 850.010  
 Amount: \$ 16,870.55  
 Co. Man: CRIMM Marberry MICHAEL KOLCHISKY  
 Co. Man Sig.: [Signature]  
 Notes: \_\_\_\_\_

RECEIVED

MAY 20 2013

**HALLIBURTON****Cementing Job Summary**REGULATORY DEPT  
The Road to Excellence Starts with Safety

Sold To #: 305021	Ship To #: 2998067	Quote #:	Sales Order #: 900437377
Customer: SANDRIDGE ENERGY INC EBUSINESS		Customer Rep: Webster, John	
Well Name: Taylor 3406	Well #: 3-29H	API/UWI #:	
Field:	City (SAP): ANTHONY	County/Parish: Harper	State: Kansas
Legal Description: Section 16 Township 33S Range 6W			
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: 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 #
GUYTON, JAMES Patrick	8	454880	OSBORN, JAMES David	8	518950	PROVINES, TYLER Wesley	8	523867
TURNER, DANIEL Justin	8	461812						

**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
5/14/2013	8	1						
<b>TOTAL</b>			Total is the sum of each column separately					

**Job****Job Times**

Formation Name	Date	Time	Time Zone	
Formation Depth (MD) Top	Called Out	14 - May - 2013	04:00	CST
Formation Depth (MD) Bottom	On Location	14 - May - 2013	08:00	CST
Form Type	Job Started	14 - May - 2013	00:00	CST
Job depth MD	Job Completed	14 - May - 2013	02:00	CST
Water Depth	Departed Loc	14 - May - 2013	00:00	CST
Perforation Depth (MD) From				
Perforation Depth (MD) To				

**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.	700.		
9.625" Surface Casing	Unknown	1150	9.625	8.921	36.	LTC	J-55	.	700.		
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	hes
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	9.625	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 ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	



# HALLIBURTON

## Cementing Job Summary

1	Fresh Water		10.00	bbl	8.33	.0	.0	.0	
2	HLC STANDARD	EXTENDACEM (TM) SYSTEM (452981)	220.0	sacks	12.4	2.11	11.61		11.61
	3 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	11.609 Gal	FRESH WATER							
3	STANDARD	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)							
	5.319 Gal	FRESH WATER							
4	Displacement			bbl	8.33	.0	.0	.0	
<b>Calculated Values</b>		<b>Pressures</b>			<b>Volumes</b>				
Displacement	49.5	Shut In: Instant		Lost Returns	0	Cement Slurry	115	Pad	
Top Of Cement	surface	5 Min		Cement Returns	50	Actual Displacement	49	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
<b>Rates</b>									
Circulating		Mixing		Displacement		Avg. Job			
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		
<b>The Information Stated Herein Is Correct</b>				Customer Representative Signature 					

RECEIVED

JUN 4 2013

**HALLIBURTON**

**Cementing Job Summary**

REGULATORY DEPT  
SANDRIDGE ENERGY

The Road to Excellence Starts with Safety

Sold To #: 305021	Ship To #: 2998067	Quote #:	Sales Order #: 900439507
Customer: SANDRIDGE ENERGY INC EBUSINESS		Customer Rep: Webster, John	
Well Name: Taylor 3406	Well #: 3-29H	API/UWI #:	
Field:	City (SAP): ANTHONY	County/Parish: Harper	State: Kansas
Legal Description: Section 16 Township 33S Range 6W			
Contractor: UNIT		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: WALTON, SCOTTY	MBU ID Emp #: 478229

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CRAWFORD, ANDREW B	9.5	480612	TOPE, GEOFFREY Daniel	9.5	489420	WALTON, SCOTTY Dwayne	9.5	478229

**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
5-19-13	9.5	2						
TOTAL			Total is the sum of each column separately					

**Job**

**Job Times**

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
Form Type	Job depth MD	5380. ft	Job Depth TVD	Job Started	19 - May - 2013	06:44	CST
Water Depth	Perforation Depth (MD)	From	To	Job Completed	19 - May - 2013	07:40	CST
				Departed Loc	19 - May - 2013	09:30	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
8.75" Open Hole				8.75				700.	5380.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5380.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	700.		

**Tools and Accessories**

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
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 ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	Rig Supplied Gel Water		30.00	bbl	8.33	.0	.0	.0		
2	STANDARD 33 / POZ 34 / ENHANCER 33	ECONOCEM (TM) SYSTEM (452992)	140.0	sacks	13.6	1.5	6.76		6.76	
	5 lbm	KOL-SEAL, BULK (100064233)								
	0.25 %	SA-1015, 50 LB SACK (102077046)								
	0.2 %	CFR-3, W/O DEFOAMER, 50 LB SK (100003653)								
	6.756 Gal	FRESH WATER								
3	PREMIUM	HALCEM (TM) SYSTEM (452986)	190.0	sacks	15.6	1.19	5.08		5.08	
	0.4 %	HALAD(R)-9, 50 LB (100001617)								
	2 lbm	KOL-SEAL, BULK (100064233)								
	5.076 Gal	FRESH WATER								
4	Displacement		202.00	bbl	8.33	.0	.0	.0		
<b>Calculated Values</b>			<b>Pressures</b>			<b>Volumes</b>				
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad		
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment		
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job		
<b>Rates</b>										
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						
										

Directional Survey Calculations	Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
SHL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7725	202	4635	660
BHL	9276	92.40	2.60	4793.07	4749.07	-24.44	4749.13	0.00	2976	4951	4639	652
Miss Entry	5044	75.47	358.43	4797.56	523.87	9.00	523.80	9.29	7201	726	4648	647
Top Perf	5532	88.98	357.06	4825.02	1008.64	-19.71	1008.75	1.09	6716	1211	4622	673
Bottom Perf	9176	91.82	2.36	4796.76	4649.24	-28.76	4649.33	2.12	3076	4851	4634	657

Survey Points		X	Y		X	Y	m				
NW Corner XY Coord		2103319	134777				North Line slope	0.0066175			
SW Corner XY Coord		2103366	126840	Surface XY	2108000	127083	East Line slope	-0.0066877			
NE Corner XY Coord		2108608	134812				South Line slope	0.0088763			
SE Corner XY Coord		2108661	126887				West Line slope	-0.0059216			

Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)	FNL	FSL	FWL	FEL
0	0.0	0	0	0	0	0	0	7725	202	4635	660
242	0.40	107.00	242.00	-0.247	0.808	-0.25	0.17	7725	202	4636	659
489	0.40	107.00	488.99	-0.751	2.457	-0.77	0.00	7726	201	4638	657
765	0.00	107.00	764.99	-1.033	3.378	-1.05	0.14	7726	201	4639	656
863	0.20	107.00	862.99	-1.083	3.542	-1.11	0.20	7726	201	4639	656
1138	0.30	98.90	1137.99	-1.335	4.712	-1.36	0.04	7726	200	4640	655
1412	0.20	92.50	1411.98	-1.466	5.898	-1.50	0.04	7726	200	4641	654
1886	0.40	121.30	1885.98	-2.362	8.139	-2.41	0.05	7727	199	4644	652
2360	0.40	127.90	2359.97	-4.238	10.858	-4.31	0.01	7729	198	4646	649
2834	0.20	55.60	2833.96	-4.787	12.846	-4.87	0.08	7730	197	4648	647
3309	0.60	328.10	3308.95	-2.207	12.216	-2.28	0.13	7727	200	4648	647
3783	0.60	97.60	3782.94	-0.428	13.365	-0.51	0.23	7725	201	4649	646
4034	0.60	37.90	4033.93	0.435	15.475	0.34	0.24	7725	202	4651	644
4066	0.50	54.00	4065.93	0.649	15.690	0.55	0.57	7724	202	4651	644
4097	1.30	357.70	4096.92	1.080	15.786	0.98	3.56	7724	203	4651	644
4129	3.10	356.00	4128.90	2.306	15.711	2.21	5.63	7723	204	4651	644
4160	4.70	2.50	4159.83	4.411	15.708	4.31	5.35	7721	206	4651	644
4192	6.20	0.10	4191.68	7.449	15.768	7.35	4.74	7718	209	4651	644
4222	8.20	358.30	4221.44	11.208	15.707	11.11	6.71	7714	213	4651	644
4254	10.40	358.90	4253.02	16.377	15.584	16.28	6.88	7709	218	4651	644
4286	11.40	1.50	4284.44	22.427	15.612	22.33	3.48	7703	224	4651	644
4318	13.60	358.00	4315.68	29.349	15.563	29.25	7.27	7696	231	4651	644
4349	16.20	355.70	4345.64	37.305	15.111	37.21	8.60	7688	239	4651	644
4381	19.30	353.20	4376.11	47.010	14.150	46.92	9.97	7678	249	4650	645
4412	22.50	354.00	4405.07	57.999	12.923	57.92	10.36	7667	260	4649	646
4444	25.00	356.80	4434.36	70.842	11.906	70.77	8.57	7654	273	4648	647
4475	27.60	359.60	4462.15	84.566	11.490	84.49	9.29	7640	286	4647	648
4506	30.20	0.90	4489.28	99.546	11.562	99.47	8.63	7626	301	4648	647
4537	33.30	1.10	4515.64	115.854	11.848	115.78	10.01	7609	318	4648	647
4569	36.20	0.70	4541.93	134.090	12.132	134.01	9.09	7591	336	4648	647
4600	38.70	359.80	4566.54	152.938	12.210	152.86	8.26	7572	355	4649	646
4632	41.70	359.50	4590.98	173.590	12.082	173.51	9.39	7551	375	4649	646
4664	45.40	359.70	4614.17	195.633	11.930	195.55	11.57	7529	397	4649	646
4695	48.60	359.30	4635.31	218.301	11.730	218.22	10.37	7507	420	4648	646
4727	51.30	358.80	4655.89	242.790	11.322	242.71	8.52	7482	445	4648	647
4758	53.80	358.20	4674.74	267.390	10.675	267.32	8.21	7458	469	4648	647
4789	56.50	357.70	4692.46	292.812	9.764	292.74	8.81	7432	495	4647	648
4821	58.90	358.60	4709.55	319.844	8.893	319.78	7.87	7405	522	4646	649
4852	60.80	359.00	4725.12	346.643	8.333	346.58	6.23	7378	548	4646	649
4884	63.10	0.40	4740.17	374.880	8.189	374.82	8.16	7350	577	4646	649
4915	65.30	0.90	4753.66	402.787	8.507	402.72	7.24	7322	605	4646	648
4947	67.30	1.90	4766.52	432.077	9.224	432.01	6.87	7293	634	4647	648
4978	69.80	0.60	4777.86	460.920	9.851	460.85	8.96	7264	663	4648	647
5010	72.40	359.00	4788.23	491.191	9.742	491.12	9.40	7234	693	4648	647
5041	75.30	358.60	4796.85	520.958	9.118	520.89	9.44	7204	723	4648	647
5073	77.10	356.80	4804.48	552.006	7.869	551.95	7.84	7173	754	4647	648
5105	79.80	356.30	4810.89	583.298	5.982	583.25	8.58	7142	785	4645	650
5136	81.80	356.30	4815.84	613.834	4.007	613.80	6.45	7111	816	4643	652
5168	84.00	356.40	4819.80	645.522	1.986	645.50	6.88	7079	847	4641	653
5200	86.30	356.70	4822.50	677.348	0.067	677.33	7.25	7048	879	4640	655
5231	87.30	356.80	4824.23	708.249	-1.688	708.25	3.24	7017	910	4638	657
5263	88.20	356.70	4825.49	740.173	-3.500	740.18	2.83	6985	942	4636	658
5294	89.70	356.80	4826.06	771.117	-5.258	771.13	4.85	6954	973	4635	660
5325	91.00	356.30	4825.87	802.060	-7.123	802.09	4.49	6923	1004	4633	661
5357	91.10	356.00	4825.28	833.982	-9.271	834.02	0.99	6891	1036	4631	663
5389	91.70	356.00	4824.50	865.894	-11.503	865.95	1.87	6859	1068	4629	665
5420	90.50	356.40	4823.91	896.820	-13.557	896.89	4.08	6828	1099	4627	667
5452	89.50	356.80	4823.91	928.763	-15.455	928.84	3.37	6796	1131	4625	669
5545	88.90	357.10	4825.20	1021.622	-20.402	1021.73	0.72	6703	1224	4621	673
5576	89.20	356.90	4825.72	1052.575	-22.025	1052.69	1.16	6672	1255	4620	675
5608	87.90	356.70	4826.53	1084.514	-23.810	1084.64	4.11	6640	1287	4618	676
5640	87.30	356.70	4827.87	1116.433	-25.651	1116.57	1.87	6608	1319	4616	678
5671	87.30	356.80	4829.33	1147.349	-27.406	1147.50	0.32	6577	1349	4615	679
5703	87.00	356.40	4830.92	1179.253	-29.302	1179.41	1.56	6546	1381	4613	681
5735	86.60	356.10	4832.71	1211.134	-31.391	1211.31	1.56	6514	1413	4611	683

Measured Depth (ft)	Sub-Sea Incl. (deg)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vert Section (ft)	DLS deg/100' (deg)				
								FNL	FSL	FWL	FEL
5766	86.50	356.80	4834.57	1242.019	-33.307	1242.20	2.28	6483	1444	4609	685
5798	86.80	357.20	4836.44	1273.920	-34.979	1274.12	1.56	6451	1476	4608	686
5829	87.70	357.70	4837.93	1304.853	-36.357	1305.06	3.32	6420	1507	4607	687
5861	89.00	358.70	4838.85	1336.823	-37.361	1337.03	5.12	6388	1539	4606	688
5892	88.90	358.90	4839.42	1367.811	-38.010	1368.02	0.72	6357	1570	4606	689
5924	89.20	359.30	4839.95	1399.803	-38.513	1400.02	1.56	6325	1602	4605	689
5956	89.80	0.90	4840.23	1431.800	-38.457	1432.01	5.34	6293	1634	4605	689
5986	90.40	2.20	4840.18	1461.788	-37.646	1462.00	4.77	6263	1664	4606	688
6018	90.90	2.30	4839.81	1493.761	-36.389	1493.96	1.59	6231	1696	4608	686
6049	90.90	2.50	4839.33	1524.730	-35.091	1524.92	0.65	6200	1727	4609	685
6144	92.50	2.30	4836.51	1619.602	-31.115	1619.77	1.70	6105	1822	4614	680
6238	92.30	2.30	4832.57	1713.444	-27.346	1713.58	0.21	6011	1916	4618	676
6333	92.20	1.80	4828.84	1808.310	-23.950	1808.42	0.54	5917	2010	4622	672
6428	91.90	1.50	4825.44	1903.209	-21.217	1903.31	0.45	5822	2105	4625	668
6523	90.10	1.10	4823.78	1998.166	-19.062	1998.25	1.94	5727	2200	4628	665
6620	89.50	1.00	4824.12	2095.149	-17.284	2095.22	0.63	5630	2297	4631	663
6715	90.50	0.50	4824.12	2190.139	-16.041	2190.20	1.18	5535	2392	4632	661
6809	90.90	0.40	4822.98	2284.129	-15.303	2284.18	0.44	5441	2486	4634	660
6904	92.00	1.10	4820.57	2379.089	-14.060	2379.13	1.37	5346	2581	4635	658
7000	88.80	0.00	4819.90	2475.068	-13.139	2475.10	3.52	5250	2677	4637	656
7095	89.30	0.50	4821.48	2570.053	-12.724	2570.08	0.74	5155	2772	4638	655
7188	93.00	0.70	4819.61	2663.013	-11.751	2663.03	3.98	5062	2865	4639	654
7283	92.00	0.80	4815.47	2757.914	-10.508	2757.92	1.06	4967	2960	4641	652
7378	90.10	0.10	4813.73	2852.890	-9.763	2852.89	2.13	4872	3055	4643	650
7472	90.30	0.30	4813.40	2946.888	-9.434	2946.89	0.30	4778	3149	4643	649
7567	89.60	358.90	4813.48	3041.883	-10.098	3041.89	1.65	4683	3244	4643	649
7662	89.90	358.70	4813.89	3136.861	-12.087	3136.88	0.38	4588	3339	4642	651
7757	90.20	357.60	4813.81	3231.810	-15.154	3231.84	1.20	4493	3434	4639	653
7851	91.40	357.60	4812.50	3325.717	-19.090	3325.77	1.28	4399	3528	4636	657
7945	90.50	356.50	4810.94	3419.577	-23.927	3419.66	1.51	4305	3622	4632	661
8040	89.60	356.80	4810.86	3514.414	-29.478	3514.53	1.00	4210	3717	4627	666
8160	94.10	358.20	4806.98	3634.203	-34.710	3634.35	3.93	4091	3836	4622	670
8255	95.00	358.40	4799.45	3728.861	-37.520	3729.02	0.97	3996	3931	4620	672
8349	93.10	358.90	4792.81	3822.596	-39.728	3822.77	2.09	3902	4025	4618	674
8,444	90.9	359.9	4,789	3917.525	-40.722	3,918	2.543507	3807	4120	4618	674
8,538	90.6	0.5	4,788	4011.516	-40.394	4,012	0.713589	3713	4214	4619	673
8,633	88.4	0.6	4,789	4106.502	-39.482	4,107	2.31818	3618	4309	4620	672
8,728	88.599998	0.5	4,792	4201.465	-38.570	4,202	0.235358	3523	4404	4622	670
8823	89.30	1.10	4793.32	4296.439	-37.244	4296.59	0.97	3428	4499	4624	668
8918	88.50	0.60	4795.14	4391.410	-35.835	4391.55	0.99	3333	4594	4626	666
9014	88.50	1.50	4797.66	4487.360	-34.076	4487.49	0.94	3237	4690	4628	664
9108	90.50	1.80	4798.48	4581.313	-31.370	4581.42	2.15	3143	4783	4631	660
9206	92.40	2.60	4796.00	4679.204	-27.610	4679.28	2.10	3046	4881	4636	656
9276	92.40	2.60	4793.07	4749.070	-24.437	4749.13	0.00	2976	4951	4639	652

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/12/2013
Job End Date:	6/14/2013
State:	Kansas
County:	Harper
API Number:	15-077-21923-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Brad 3508 4-12H
Longitude:	-98.13013302
Latitude:	37.01508998
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,793
Total Base Water Volume (gal):	1,843,444
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	Sandridge Energy Corp	Carrier / Base Fluid	Carrier / Base Fluid - Water	7732-18-5	100.00000	94.03514	
40/70 Premium	WFT	Proppant	Crystalline Silica in the form of Quartz	14808-60-7	100.00000	4.58495	
15% HCL	WFT	Acid	Hydrochloric Acid	7647-01-0	15.00000	0.16617	
WGA-35LC	WFT	Gelling Agents	Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide	69418-26-4	50.00000	0.07154	
			Petroleum Distillates	64742-47-8	40.00000	0.05723	
			Alcohols, C12-14-secondary, ethoxylated	84133-50-6	5.00000	0.00715	
WNE-363L	WFT	Surfactant	Ethylene/Propylene Oxide Polymer	9003-11-6	30.00000	0.01601	
			Dodecylbenzenesulfonic acid, monoethanolamine salt	26836-07-7	15.00000	0.00801	
			2-Ethylhexanol	104-76-7	7.00000	0.00374	
			Poly(oxy-1,2-ethanediyl), a-isotridecyl-w-hydroxy-	9043-30-5	5.00000	0.00267	

Bio-Clear® 242D	WFT	Bactericide				
			Glutaraldehyde	111-30-8	42.00000	0.01144
			Quaternary ammonium compounds, benzyl-C12-18-alkldimethyl, chlorides	68424-85-1	7.00000	0.00191
WIC-644L	WFT	Iron Control				
			acetic acid glacial	64-19-7	90.00000	0.00490
WSI-671L	WFT	Inhibitor				
			Ammonium Chloride	12125-02-9	20.00000	0.00426
WIC-641L	WFT	Iron Control				
			Citric acid	77-92-9	60.00000	0.00380
WAI-251LC	WFT	Inhibitor				
			Ethylene Glycol	111-76-2	40.00000	0.00044
			N,N-Dimethylformamide	68-12-2	20.00000	0.00022
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	10.00000	0.00011
			2-Butoxyethanol	111-76-2	10.00000	0.00011
			Isopropyl Alcohol	67-63-0	5.00000	0.00005
			Triethylphosphate	78-40-0	5.00000	0.00005
			1-Octanol	111-87-5	5.00000	0.00005
			1-Decanol	112-30-1	5.00000	0.00005
			Ethoxylated Nonylphenol	68412-54-4	5.00000	0.00005
WFR-55LA	WFT	Friction Reducers				
			Ethylene Glycol	107-21-1	5.00000	0.00071
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.						
		Other Chemicals				
			Proprietary Ingredient	Proprietary		0.05660
			Amines, polyethylenepoly-, ethoxylated, phosphonomethylated	68966-36-9		0.00852
			Citric Acid	77-92-9		0.00715
			Adipic acid	124-04-9		0.00715
			Acrylamide	79-06-1		0.00143
			Cinnamaldehyde	104-55-2		0.00005
			Dioxane	123-91-1		0.00001
			Ethylene Oxide	75-21-8		0.00001
			Acetaldehyde	75-07-0		0.00001

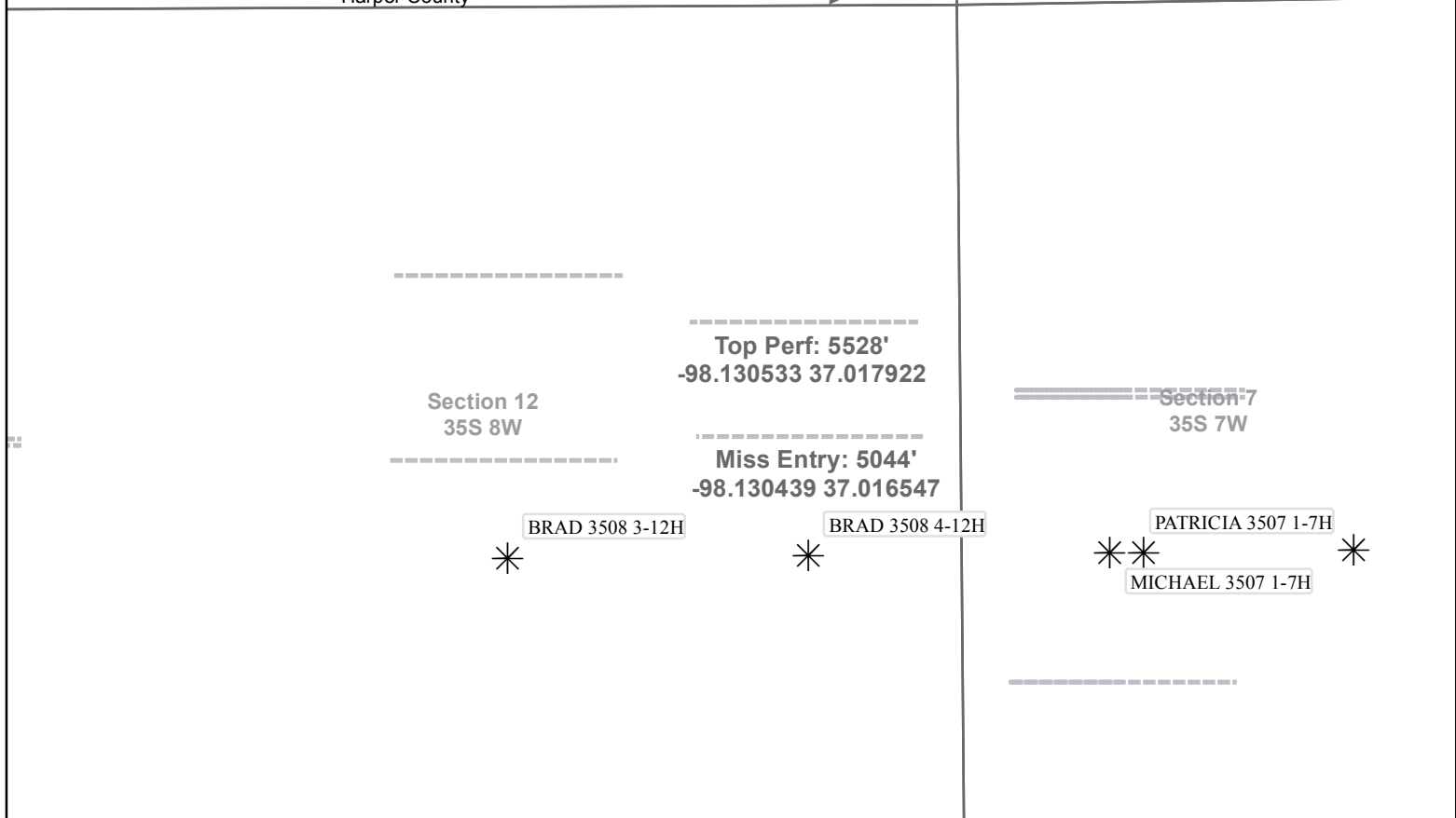
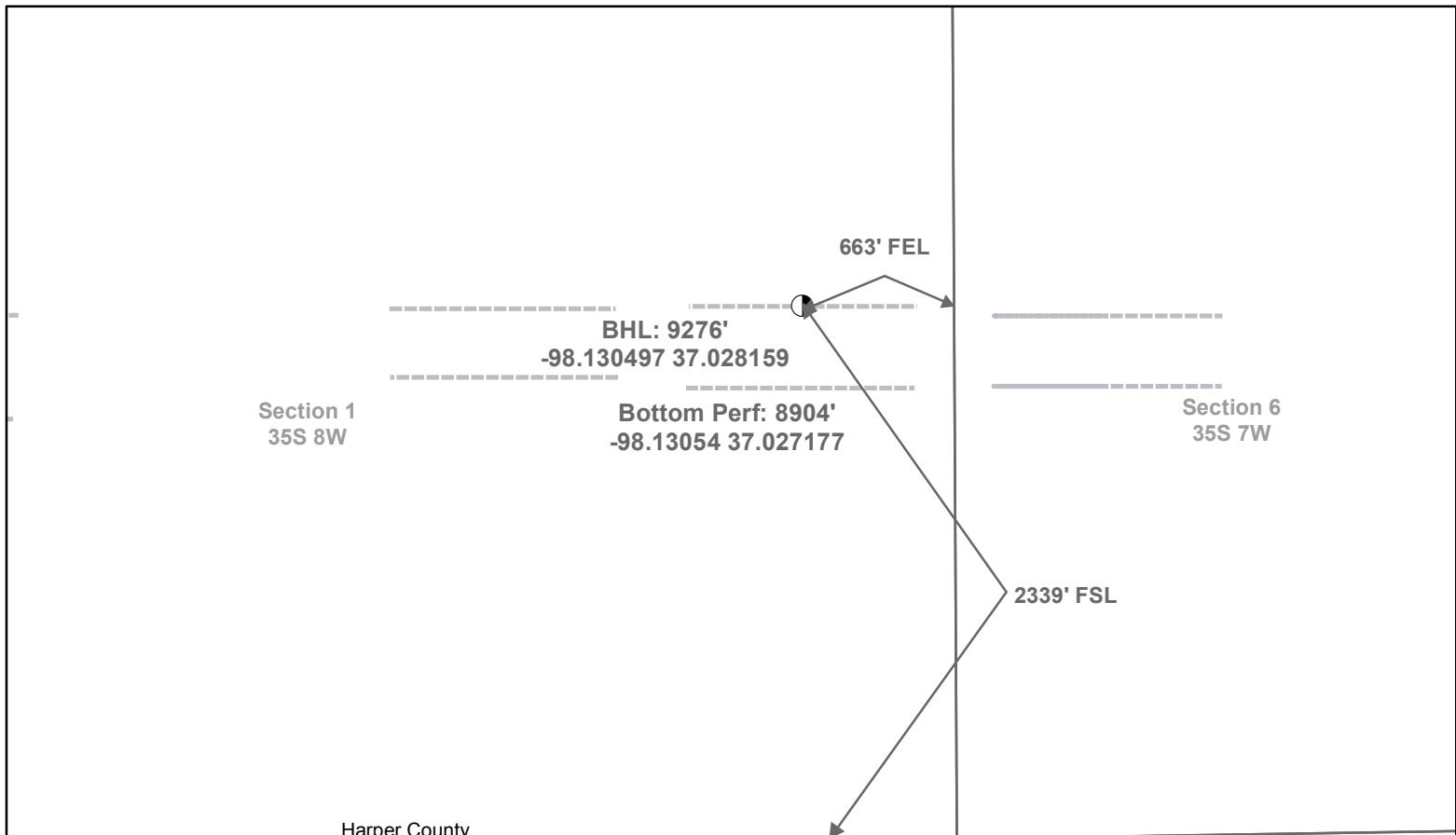
\* Total Water Volume sources may include fresh water, produced water, and/or recycled water

\*\* 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)







**Actual Bottom-Hole Location of Brad 3508 4-12H**  
 Harper County, Kansas  
 T&R: 35S 8W  
 Section: 1, 663' FEL & 2339' FSL  
 -98.130497 37.028159

1 in = 785 ft

Draftsman: Aaron Birk	Draft Date: 8/21/2013
Drawing Name/Number: Addendum_Brad 3508 4-12H.mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	



● Actual BH Location

\* SandRidge Wells

--- Perf

□ Sections



## Remarks

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Tiffany Golay  
08/05/013 04:18  
pm

Conductor weight: 106.5 lbs/ft

Tiffany Golay  
08/05/013 04:10  
pm

Well completed using an open hole packer system- no liner was cemented