Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1234152

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: Tiffany Golay
Phone: (405) 429-6543
CONTRACTOR: License # 34445
Name: Keen Energy Services LLC
Wellsite Geologist: Ray Tichenor
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 #:

8/22/2014	9/4/2014	11/3/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-077-22085-02-00
Spot Description:
SE - SE - SW - SW Sec. 34 Twp. 34 S. R. 8 ☐ East ☑ West
235 Feet from ☐ North / ☑ South Line of Section
1300 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: Randy 3508 Well #: 2-3H 1L
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 1261 Kelly Bushing: 1284
Total Vertical Depth: 4832 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 689 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: 12000 ppm Fluid volume: 4130 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: NEMAHA
Lease Name: unnamed License #: 62384
Quarter W2 Sec. 15 Twp. 24 S. R. 7 ☐ East ☑ West
County: Garfield, OK Permit #: 99999

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: 12/15/2014
☑ **Confidential Release Date:** 12/14/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 12/16/2014

[redacted] 1234152

Operator Name: SandRidge Exploration and Production LLC Lease Name: Randy 3508 Well #: 2-3H 1L

Sec. 34 Twp. 34 S. R. 8 ☐ 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:

Array Induction Gamma Ray Memory Log
Spectral Density Dual Spaced Neutron Memory Log

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

Name	Top	Datum
Base Heebner	3500	
Lansing	3853	
Cottage Grove	4119	
Oswego	4493	
Cherokee	4671	
Miss Unconformity	5055	

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Conductor	30	20	75	90	Edge Services 10 sack grout	9	none
Surface	12.25	9.63	36	389	O-Tex Lite Premium Plus 65/35	380	(6% gel) 2% calcium chloride, 1/4 pps ce
Intermediate	8.75	7	26	5334	50/50 Poz Premium; Premium	310	4% gel, .2% FL-17, .1% C-51, .2% C-20,

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

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 11/8/2014

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:

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Randy 3508 2-3H 1L
Doc ID	1234152

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Conductor	30	20	75	90	Edge Services 10 sack grout	9	none
Surface	12.25	9.63	36	389	O-Tex Lite Premium Plus 65/35l Premium Plus (Class C)	380	(6% gel) 2% calcium chloride, 1/4 pps cello-flake, .4% C-41P
Intermediate	8.75	7	26	5334	50/50 Poz Premium; Premium	310	4% gel, .2% FL-17, .1% C-51, .2% C-20, .1% C-37, .4% C-41P

EDGE SERVICES
580-254-3216
Woodward, OK

INVOICE

DATE	INVOICE #
8/22/2014	5038

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

REMIT TO
EDGE SERVICES, INC. PO BOX 609 WOODWARD, OK 73802

COUNTY	STARTING D...	WORK ORDER	RIG NUMBER	LEASE NAME	Terms
HARPER, KS	8/21/2014	3947	LATSHAW 27	RANDY 3508 2-3H	Due on rec...

Description

DRILLED 90' OF 30" CONDUCTOR HOLE
DRILLED 6' OF 76" HOLE
FURNISHED AND SET 6' X 6' TINHORN CELLAR
FURNISHED 90' OF 20" CONDUCTOR PIPE
FURNISHED 20' MOUSE HOLE SHUCK
FURNISHED MUD, WATER, AND TRUCKING
FURNISHED WELDER AND MATERIALS
FURNISHED 9 YARDS OF 10 SACK GROUT FOR CONDUCTOR HOLE
FURNISHED 4 YARDS OF 10 SACK GROUT FOR MOUSE HOLE
FURNISHED GROUT PUMP
DRILL MOUSE HOLE
FURNISHED 75' OF 16" CONDUCTOR PIPE

TOTAL BID $20,850.00

AFE Number: DC14206
Well Name: Randy 3508 2-3H
Code: 850.010
Amount: $21050.16
Co. Man: Randy Loftis
Co. Man Sig.:
Notes:

Sales Tax (6.15%)	$180.16
TOTAL	$21,030.16

JOB SUMMARY

PROJECT NUMBER	TICKET DATE
SOK 4113	08/26/14

COUNTY	State	COMPANY	CUSTOMER REP
Harper	Kansas	dridge Exploration & Produc	Jerry Bias

LEASE NAME	Well No.	JOB TYPE	EMPLOYEE NAME
Randy 3508	2-3H	Surface	Mike Hall

EMP NAME							
Mike Hall		0					
Cheryl Newton							
Dustin Odom							
Vontray Watkins							

Form. Name _____ Type: _____

Packer Type _____ Set At 0

Bottom Hole Temp. 80 Pressure _____

Retainer Depth _____ Total Depth 689'

	Called Out	On Location	Job Started	Job Completed
Date	8/25/2014	8/25/2014	8/26/2014	8/26/2014
Time		23:00	08:04	10:00

Tools and Accessories

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	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	Max. Allow
Casing		36#	9 5/8"		Surface	800	1,500
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			12¼"		Surface	800	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials

Mud Type	WBM	Density	9	Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33	Lb/Gal
Spacer type	Fresh Wate	BBL.	10	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	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

Other _____

Hours On Location

Date	Hours
8/25,8/26	11.0
Total	11.0

Operating Hours

Date	Hours
8/26	1.0
Total	1.0

Description of Job

Surface

Pressures

MAX 1,500 PSI AVG. 150

Average Rates in BPM

MAX 6 BPM AVG 4.5

Cement Left in Pipe

Feet 46' Reason SHOE JOINT

Cement Data

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	215	TEX Lite Premium Plus 65	(6% Gel) 2% Calcium Chloride - ¼pps Cello-Flake - .4% C-41P	11.11	2.01	12.40
2	165	Premium Plus (Class C)	2% Calcium Chloride - ¼pps Cello-Flake	6.32	1.32	14.80
3	0	0	0	0.00	0.00	0.00

Summary

Preflush _____ Type: _____

Breakdown _____ MAXIMUM 1,500 PSI

_____ Lost Returns-N NO/FULL

_____ Actual TOC 689

Average _____ Bump Plug PSI: 800

ISIP _____ 5 Min. _____ 10 Min _____ 15 Min _____

Preflush:	BBl	10.00
Load & Bkdn:	Gal - BBl	N/A
Excess /Return	BBl	50
Calc. TOC:		689
Final Circ.	PSI:	250
Cement Slurry	BBl	114.0
Total Volume	BBl	174.00

Type: Fresh Water

Pad:Bbl -Gal N/A

Calc.Disp Bbl 50

Actual Disp. 50.00

Disp:Bbl 50.00

CUSTOMER REPRESENTATIVE _____ SIGNATURE

JOB SUMMARY

PROJECT NUMBER	TICKET DATE
SOK 4137	08/31/14

COUNTY	State	COMPANY	CUSTOMER REP
Harper	Kansas	Sandridge Exploration & Production	Vince Brown

LEASE NAME	Well No.	JOB TYPE	EMPLOYEE NAME
Randy 3508	2-3H	Intermediate	John Hall

EMP NAME

John Hall		Jacob Jackson					
Louis Arney							
James Derry							
Vontray Watkins							

Form. Name _____ Type: _____

Packer Type _____ Set At 0

Bottom Hole Temp. 155 Pressure _____

Retainer Depth _____ Total Depth 5400

	Called Out	On Location	Job Started	Job Completed
Date	8/31/2014	8/31/2014	8/31/2014	8/31/2014
Time	1000pm	1230am	800am	1000am

Tools and Accessories

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	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	Max. Allow
Casing		26#	7"		Surface		5,000
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			8¾"		Surface	5,400	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials

Mud Type	WBM	Density 9	Lb/Gal	
Disp. Fluid	Fresh Water	Density 8.33	Lb/Gal	
Spacer type	GEL	BBL. 30		8.40
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	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

Other _____

Hours On Location

Date	Hours
8/31	10.0
Total	10.0

Operating Hours

Date	Hours
8/31	2.0
Total	2.0

Description of Job

Intermediate

Pressures

MAX 5,000 PSI AVG. 500 psi

Average Rates in BPM

MAX 8 BPM AVG 5 bpm

Cement Left in Pipe

Feet 45 Reason SHOE JOINT

Cement Data

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	210	50/50 POZ PREMIUM	4% Gel - 0.2% FL-17 - 0.1% C-51 - 0.2% C-20 - 0.1% C-37 - 0.4% C-41P	6.93	1.43	13.60
2	100	Premium	0.2% FL-17 - 0.1% C-51 - 0.1% C-20 - 0.4% C-41P	5.19	1.19	15.60
3	0	0	0	0.00	0.00	0.00

Summary

Preflush		Type:		Preflush: BBl	30.00
Breakdown		MAXIMUM	5,000 PSI	Load & Bkdn: Gal - BBl	N/A
		Lost Returns-N	NO/FULL	Excess /Return BBl	N/A
		Actual TOC	2,847	Calc. TOC:	2,847
Average		Bump Plug PSI:	1,500	Final Circ. PSI:	1,000
ISIP	5 Min.	10 Min	15 Min	Cement Slurry BBl	74.4
				Total Volume BBl	307.10

Type: Gel Spacer

Pad:Bbl -Gal N/A

Calc.Disp Bbl 203

Actual Disp. 202.70

Disp:Bbl 202.70

CUSTOMER REPRESENTATIVE _____

SIGNATURE

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/24/2014
Job End Date:	10/25/2014
State:	Kansas
County:	Harper
API Number:	15-077-22085-02-00
Operator Name:	SandRidge Energy
Well Name and Number:	Randy 3508 2-3H 1L
Longitude:	-98.17788869
Latitude:	37.03680864
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,832
Total Base Water Volume (gal):	2,834,286
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	Archer	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	95.80717	None
Sand (Proppant)	Archer	Proppant					
			Silica Substrate	NA	100.00000	3.47719	None
C102	Bosque Disposal Systems, LLC	Oxidizer					
			Chlorine Dioxide	10049-04-4	15.00000	0.27318	
Hydrochloric Acid (15%)	Archer	Acidizing					
			Hydrochloric Acid	7647-01-0	15.00000	0.05296	None
			Methyl Alcohol	67-56-1	80.00000	0.00040	None
			thiourea-formaldehyde copolymer	68527-49-1	15.00000	0.00008	None
AIC	Archer	Liquid Acid Iron Control					
			Acetic Acid	64-19-7	50.00000	0.00090	None
			Citric Acid	77-92-9	30.00000	0.00054	None
Chemflush	Archer	Enviro-Friendly Chemical Flush					
			Hydrotreated Petroleum Distillate	64742-47-8	99.00000	0.00126	None
			Alcohol Ethoxylate Surfactants	NA	10.00000	0.00013	None

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
		Other Chemicals					
			Water	7732-18-5		0.04570	
			Anionic Polymer	N/A		0.02285	
			Aliphatic Hydrocarbon	64742-47-8		0.02285	
			Water	7732-18-5		0.00868	
			Oxyalkylated Alcohol	68002-97-1		0.00381	
			Polyol Ester	N/A		0.00381	
			Sodium Salt of Phosphate Ester	68131-72-6		0.00145	
			Acrylic Polymer	28205-96-1		0.00145	
			Polyglycol Ester	N/A		0.00076	
			Water	7732-18-5		0.00063	
			Tetrasodium Ethylenediaminetetraacetate	64-02-8		0.00008	
			Alcohol Ethoxylate Surfactants	N/A		0.00008	
			n-olefins	N/A		0.00004	
			Propargyl Alcohol	107-19-7		0.00003	
			METHANOL	67-56-1			
			Cinnamic Aldehyde	104-55-2			
			WATER	7732-18-5			
			Acetic Acid	64-19-7			
			Surfactant	N/A			
			TRADE SECRET	N/A			
			Buffer	N/A			
			ISOPROPANOL	67-63-0			
			Water	7732-18-5			

* 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)

STAGE 1								
P-Sleeve @ 9,793 '								
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	750	18					0.9
Slickwater	65	18744	446					6.9
Slickwater	65	14000	333	40/70	0.25	Garnet	3500	5.1
Slickwater	65	3990	95					1.5
Slickwater	65	14000	333	40/70	0.50	Genoa	7000	5.1
Slickwater	65	3990	95					1.5
Slickwater	65	14133	337	40/70	0.75	Genoa	10600	5.2
Slickwater	65	3990	95					1.5
Slickwater	65	10600	252	40/70	1.00	Genoa	10600	3.9
Slickwater	65	3990	95					1.5
Slickwater	65	3500	83	40/70	1.00	Garnet	3500	1.3
Slickwater	65	8407	200					3.1
TOTAL		100,094	2,383				35,200	37.3

Frac the MISSISSIPPI (Stage 2) as follows:
Drop 1.938" ball. Reduce rate to 5-10 bpm at +/- 98 bbls (50 bbls before ball seats).

STAGE 2								
			Port @	9,651 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	500	12					0.6
Slickwater	70	14933	356					5.1
Slickwater	70	11200	267	40/70	0.25	Garnet	2800	3.8
Slickwater	70	3990	95					1.4
Slickwater	70	11200	267	40/70	0.50	Genoa	5600	3.8
Slickwater	70	3990	95					1.4
Slickwater	70	11200	267	40/70	0.75	Genoa	8400	3.8
Slickwater	70	3990	95					1.4
Slickwater	70	8400	200	40/70	1.00	Genoa	8400	2.9
Slickwater	70	3990	95					1.4
Slickwater	70	2800	67	40/70	1.00	Garnet	2800	1.0
Slickwater	70	8314	198					2.8
TOTAL		84,507	2,012				28,000	29.2

Frac the MISSISSIPPI (Stage 3) as follows:
Drop 2.000" ball. Reduce rate to 5-10 bpm at +/- 96 bbls (50 bbls before ball seats).

STAGE 3								
			Port @	9,510 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	75	15078	359					4.8
Slickwater	75	11200	267	40/70	0.25	Garnet	2800	3.6
Slickwater	75	3990	95					1.3
Slickwater	75	11400	271	40/70	0.50	Genoa	5700	3.6
Slickwater	75	3990	95					1.3
Slickwater	75	11333	270	40/70	0.75	Genoa	8500	3.6
Slickwater	75	3990	95					1.3
Slickwater	75	8500	202	40/70	1.00	Genoa	8500	2.7
Slickwater	75	3990	95					1.3
Slickwater	75	2800	67	40/70	1.00	Garnet	2800	0.9
Slickwater	75	8223	196					2.6
TOTAL		84,744	2,018				28,300	27.1

Frac the MISSISSIPPI (Stage 4) as follows:
Drop 2.063" ball. Reduce rate to 5-10 bpm at +/- 94 bbls (50 bbls before ball seats).

STAGE 4								
			Port @	9,365 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	80	15544	370					4.6
Slickwater	80	11600	276	40/70	0.25	Garnet	2900	3.5
Slickwater	80	3990	95					1.2
Slickwater	80	11600	276	40/70	0.50	Genoa	5800	3.5
Slickwater	80	3990	95					1.2
Slickwater	80	11733	279	40/70	0.75	Genoa	8800	3.5
Slickwater	80	3990	95					1.2
Slickwater	80	8800	210	40/70	1.00	Genoa	8800	2.6
Slickwater	80	3990	95					1.2
Slickwater	80	2900	69	40/70	1.00	Garnet	2900	0.9
Slickwater	80	8128	194					2.4
TOTAL		86,515	2,060				29,200	26.0

Frac the MISSISSIPPI (Stage 5) as follows:
Drop 2.125" ball. Reduce rate to 5-10 bpm at +/- 91 bbls (50 bbls before ball seats).

STAGE 5								
			Port @	9,219 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	85	14478	345					4.1
Slickwater	85	10800	257	40/70	0.25	Garnet	2700	3.0
Slickwater	85	3990	95					1.1
Slickwater	85	10800	257	40/70	0.50	Genoa	5400	3.0
Slickwater	85	3990	95					1.1
Slickwater	85	10933	260	40/70	0.75	Genoa	8200	3.1
Slickwater	85	3990	95					1.1
Slickwater	85	8200	195	40/70	1.00	Genoa	8200	2.3
Slickwater	85	3990	95					1.1
Slickwater	85	2700	64	40/70	1.00	Garnet	2700	0.8
Slickwater	85	8033	191					2.3
TOTAL		82,154	1,956				27,200	23.2

Frac the MISSISSIPPI (Stage 6) as follows:
Drop 2.188" ball. Reduce rate to 5-10 bpm at +/- 89 bbls (50 bbls before ball seats).

STAGE 6								
			Port @	9,042 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	90	14544	346					3.8
Slickwater	90	10800	257	40/70	0.25	Garnet	2700	2.9
Slickwater	90	3990	95					1.1
Slickwater	90	11000	262	40/70	0.50	Genoa	5500	2.9
Slickwater	90	3990	95					1.1
Slickwater	90	10933	260	40/70	0.75	Genoa	8200	2.9
Slickwater	90	3990	95					1.1
Slickwater	90	8200	195	40/70	1.00	Genoa	8200	2.2
Slickwater	90	3990	95					1.1
Slickwater	90	2700	64	40/70	1.00	Garnet	2700	0.7
Slickwater	90	7918	189					2.1
TOTAL		82,305	1,960				27,300	22.0

Frac the MISSISSIPPI (Stage 7) as follows:
Drop 2.250" ball. Reduce rate to 5-10 bpm at +/- 86 bbls (50 bbls before ball seats).

STAGE 7								
			Port @	8,900 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	95	15544	370					3.9
Slickwater	95	11600	276	40/70	0.25	Garnet	2900	2.9
Slickwater	95	3990	95					1.0
Slickwater	95	11600	276	40/70	0.50	Genoa	5800	2.9
Slickwater	95	3990	95					1.0
Slickwater	95	11733	279	40/70	0.75	Genoa	8800	2.9
Slickwater	95	3990	95					1.0
Slickwater	95	8800	210	40/70	1.00	Genoa	8800	2.2
Slickwater	95	3990	95					1.0
Slickwater	95	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	95	7825	186					2.0
TOTAL		86,212	2,053				29,200	21.8

Frac the MISSISSIPPI (Stage 8) as follows:
Drop 2.313" ball. Reduce rate to 5-10 bpm at +/- 84 bbls (50 bbls before ball seats).

STAGE 8								
			Port @	8,754 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15467	368					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.75	Genoa	8700	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8700	207	40/70	1.00	Genoa	8700	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	7730	184					1.8
TOTAL		85,807	2,043				29,000	20.7

Frac the MISSISSIPPI (Stage 9) as follows:
Drop 2.375" ball. Reduce rate to 5-10 bpm at +/- 83 bbls (50 bbls before ball seats).

STAGE 9								
			Port @	8,655 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15544	370					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11733	279	40/70	0.75	Genoa	8800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8800	210	40/70	1.00	Genoa	8800	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	7666	183					1.8
TOTAL		86,053	2,049				29,200	20.7

Frac the MISSISSIPPI (Stage 10) as follows:
Drop 2.438" ball. Reduce rate to 5-10 bpm at +/- 80 bbls (50 bbls before ball seats).

STAGE 10								
			Port @	8,509 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15467	368					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.75	Genoa	8700	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8700	207	40/70	1.00	Genoa	8700	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	7571	180					1.8
TOTAL		85,648	2,039				29,000	20.6

Frac the MISSISSIPPI (Stage 11) as follows:
Drop 2.500" ball. Reduce rate to 5-10 bpm at +/- 77 bbls (50 bbls before ball seats).

STAGE 11								
			Port @	8,321 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	14789	352					3.5
Slickwater	100	11200	267	40/70	0.25	Garnet	2800	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11000	262	40/70	0.50	Genoa	5500	2.6
Slickwater	100	3990	95					1.0
Slickwater	100	11067	264	40/70	0.75	Genoa	8300	2.6
Slickwater	100	3990	95					1.0
Slickwater	100	8300	198	40/70	1.00	Genoa	8300	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2800	67	40/70	1.00	Garnet	2800	0.7
Slickwater	100	7448	177					1.8
TOTAL		82,814	1,972				27,700	20.0

Frac the MISSISSIPPI (Stage 12) as follows:
Drop 2.563" ball. Reduce rate to 5-10 bpm at +/- 76 bbls (50 bbls before ball seats).

STAGE 12								
			Port @	8,226 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15467	368					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.75	Genoa	8700	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8700	207	40/70	1.00	Genoa	8700	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	7387	176					1.8
TOTAL		85,464	2,035				29,000	20.6

Frac the MISSISSIPPI (Stage 13) as follows:
Drop 2.625" ball. Reduce rate to 5-10 bpm at +/- 74 bbls (50 bbls before ball seats).

STAGE 13								
			Port @	8,080 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15544	370					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11733	279	40/70	0.75	Genoa	8800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8800	210	40/70	1.00	Genoa	8800	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	7292	174					1.7
TOTAL		85,679	2,040				29,200	20.6

Frac the MISSISSIPPI (Stage 14) as follows:
Drop 2.688" ball. Reduce rate to 5-10 bpm at +/- 71 bbls (50 bbls before ball seats).

STAGE 14								
			Port @	7,935 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15467	368					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.75	Genoa	8700	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8700	207	40/70	1.00	Genoa	8700	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	7197	171					1.7
TOTAL		85,274	2,030				29,000	20.5

Frac the MISSISSIPPI (Stage 15) as follows:
Drop 2.750" ball. Reduce rate to 5-10 bpm at +/- 68 bbls (50 bbls before ball seats).

STAGE 15								
			Port @	7,743 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15389	366					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11467	273	40/70	0.75	Genoa	8600	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	8600	205	40/70	1.00	Genoa	8600	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	7072	168					1.7
TOTAL		84,838	2,020				28,800	20.4

Frac the MISSISSIPPI (Stage 16) as follows:
Drop 2.813" ball. Reduce rate to 5-10 bpm at +/- 66 bbls (50 bbls before ball seats).

STAGE 16								
			Port @	7,599 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15389	366					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11467	273	40/70	0.75	Genoa	8600	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	8600	205	40/70	1.00	Genoa	8600	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	6978	166					1.7
TOTAL		84,744	2,018				28,800	20.4

Frac the MISSISSIPPI (Stage 17) as follows:
Drop 2.875" ball. Reduce rate to 5-10 bpm at +/- 65 bbls (50 bbls before ball seats).

STAGE 17								
			Port @	7,502 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15544	370					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11733	279	40/70	0.75	Genoa	8800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8800	210	40/70	1.00	Genoa	8800	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	6915	165					1.6
TOTAL		85,302	2,031				29,200	20.5

Frac the MISSISSIPPI (Stage 18) as follows:
Drop 2.938" ball. Reduce rate to 5-10 bpm at +/- 62 bbls (50 bbls before ball seats).

STAGE 18								
			Port @	7,316 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	14856	354					3.5
Slickwater	100	11200	267	40/70	0.25	Garnet	2800	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11200	267	40/70	0.50	Genoa	5600	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11067	264	40/70	0.75	Genoa	8300	2.6
Slickwater	100	3990	95					1.0
Slickwater	100	8300	198	40/70	1.00	Genoa	8300	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2800	67	40/70	1.00	Garnet	2800	0.7
Slickwater	100	6794	162					1.6
TOTAL		82,427	1,963				27,800	19.9

Frac the MISSISSIPPI (Stage 19) as follows:
Drop 3.000" ball. Reduce rate to 5-10 bpm at +/- 60 bbls (50 bbls before ball seats).

STAGE 19								
			Port @	7,217 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15011	357					3.6
Slickwater	100	11200	267	40/70	0.25	Garnet	2800	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11200	267	40/70	0.50	Genoa	5600	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11333	270	40/70	0.75	Genoa	8500	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	8500	202	40/70	1.00	Genoa	8500	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2800	67	40/70	1.00	Garnet	2800	0.7
Slickwater	100	6730	160					1.6
TOTAL		82,984	1,976				28,200	20.0

Frac the MISSISSIPPI (Stage 20) as follows:
Drop 3.063" ball. Reduce rate to 5-10 bpm at +/- 58 bbls (50 bbls before ball seats).

STAGE 20								
			Port @	7,077 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15467	368					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.75	Genoa	8700	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8700	207	40/70	1.00	Genoa	8700	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	6639	158					1.6
TOTAL		84,716	2,017				29,000	20.4

Frac the MISSISSIPPI (Stage 21) as follows:
Drop 3.125" ball. Reduce rate to 5-10 bpm at +/- 56 bbls (50 bbls before ball seats).

STAGE 21								
			Port @	6,931 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15544	370					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11733	279	40/70	0.75	Genoa	8800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8800	210	40/70	1.00	Genoa	8800	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	6544	156					1.6
TOTAL		84,931	2,022				29,200	20.5

Frac the MISSISSIPPI (Stage 22) as follows:
Drop 3.188" ball. Reduce rate to 5-10 bpm at +/- 54 bbls (50 bbls before ball seats).

STAGE 22								
			Port @	6,786 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	14789	352					3.5
Slickwater	100	11200	267	40/70	0.25	Garnet	2800	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11000	262	40/70	0.50	Genoa	5500	2.6
Slickwater	100	3990	95					1.0
Slickwater	100	11067	264	40/70	0.75	Genoa	8300	2.6
Slickwater	100	3990	95					1.0
Slickwater	100	8300	198	40/70	1.00	Genoa	8300	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2800	67	40/70	1.00	Garnet	2800	0.7
Slickwater	100	6449	154					1.5
TOTAL		81,815	1,948				27,700	19.7

Frac the MISSISSIPPI (Stage 23) as follows:
Drop 3.250" ball. Reduce rate to 5-10 bpm at +/- 51 bbls (50 bbls before ball seats).

STAGE 23								
			Port @	6,647 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15389	366					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11467	273	40/70	0.75	Genoa	8600	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	8600	205	40/70	1.00	Genoa	8600	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	6359	151					1.5
TOTAL		84,125	2,003				28,800	20.3

Frac the MISSISSIPPI (Stage 24) as follows:
Drop 3.313" ball. Reduce rate to 5-10 bpm at +/- 49 bbls (50 bbls before ball seats).

STAGE 24								
			Port @	6,506 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15322	365					3.6
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11400	271	40/70	0.50	Genoa	5700	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11467	273	40/70	0.75	Genoa	8600	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	8600	205	40/70	1.00	Genoa	8600	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	6267	149					1.5
TOTAL		83,766	1,994				28,700	20.2

Frac the MISSISSIPPI (Stage 25) as follows:
Drop 3.375" ball. Reduce rate to 5-10 bpm at +/- 47 bbls (50 bbls before ball seats).

STAGE 25								
			Port @	6,361 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15078	359					3.6
Slickwater	100	11200	267	40/70	0.25	Garnet	2800	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11400	271	40/70	0.50	Genoa	5700	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	11333	270	40/70	0.75	Genoa	8500	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	8500	202	40/70	1.00	Genoa	8500	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2800	67	40/70	1.00	Garnet	2800	0.7
Slickwater	100	6173	147					1.5
TOTAL		82,694	1,969				28,300	19.9

Frac the MISSISSIPPI (Stage 26) as follows:
Drop 3.438" ball. Reduce rate to 5-10 bpm at +/- 45 bbls (50 bbls before ball seats).

STAGE 26								
			Port @	6,218 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15544	370					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11733	279	40/70	0.75	Genoa	8800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8800	210	40/70	1.00	Genoa	8800	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	6079	145					1.4
TOTAL		84,466	2,011				29,200	20.3

Frac the MISSISSIPPI (Stage 27) as follows:
Drop 3.500" ball. Reduce rate to 5-10 bpm at +/- 43 bbls (50 bbls before ball seats).

STAGE 27								
			Port @	6,073 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15467	368					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.75	Genoa	8700	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8700	207	40/70	1.00	Genoa	8700	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	5985	143					1.4
TOTAL		84,062	2,001				29,000	20.3

Frac the MISSISSIPPI (Stage 28) as follows:
Drop 3.563" ball. Reduce rate to 5-10 bpm at +/- 40 bbls (50 bbls before ball seats).

STAGE 28								
			Port @	5,927 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15467	368					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.75	Genoa	8700	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	8700	207	40/70	1.00	Genoa	8700	2.1
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	5890	140					1.4
TOTAL		83,967	1,999				29,000	20.2

Frac the MISSISSIPPI (Stage 29) as follows:
Drop 3.625" ball. Reduce rate to 5-10 bpm at +/- 38 bbls (50 bbls before ball seats).

STAGE 29								
			Port @	5,782 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	15389	366					3.7
Slickwater	100	11600	276	40/70	0.25	Garnet	2900	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11600	276	40/70	0.50	Genoa	5800	2.8
Slickwater	100	3990	95					1.0
Slickwater	100	11467	273	40/70	0.75	Genoa	8600	2.7
Slickwater	100	3990	95					1.0
Slickwater	100	8600	205	40/70	1.00	Genoa	8600	2.0
Slickwater	100	3990	95					1.0
Slickwater	100	2900	69	40/70	1.00	Garnet	2900	0.7
Slickwater	100	5796	138					1.4
TOTAL		83,562	1,990				28,800	20.1

Frac the MISSISSIPPI (Stage 30) as follows:
Drop 3.688" ball. Reduce rate to 5-10 bpm at +/- 36 bbls (50 bbls before ball seats).

STAGE 30								
			Port @	5,638 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	250	6					0.3
Slickwater	100	9989	238					2.4
Slickwater	100	7600	181	40/70	0.25	Garnet	1900	1.8
Slickwater	100	3990	95					1.0
Slickwater	100	7400	176	40/70	0.50	Genoa	3700	1.8
Slickwater	100	3990	95					1.0
Slickwater	100	7467	178	40/70	0.75	Genoa	5600	1.8
Slickwater	100	3990	95					1.0
Slickwater	100	5600	133	40/70	1.00	Genoa	5600	1.3
Slickwater	100	3990	95					1.0
Slickwater	100	1900	45	40/70	1.00	Garnet	1900	0.5
Slickwater	100	5702	136					1.4
TOTAL		61,868	1,473				18,700	15.0

Frac the MISSISSIPPI (Stage 31) as follows:
Drop 3.750" ball. Reduce rate to 5-10 bpm at +/- 34 bbls (50 bbls before ball seats).
MAXIMUM PRESSURE FOR THIS STAGE IS 5000 PSI.

STAGE 31								
			Port @	5,499 '				
Fluid	Rate	Vol, gal	Vol, bbl	Prop	Prop Con	Prop type	Prop, lbs	Time, min
15% HCl acid	20	750	18					0.9
Slickwater	100	151200	3600					36.0
TOTAL		151,950	3,618				0	36.9

TOTAL FRAC JOB VOLUMES: 63,702 bbls 855,699 lbs, Prop

Sandridge Energy

Harper County (NAD-27)
Sec 03-T35S-R08W
Randy 3508 2-3H 1L/ Latshaw 27

Wellbore #1

Design: Wellbore #1

Standard Survey Report

18 September, 2014

Survey Report

Company:	Sandridge Energy	**Local Co-ordinate Reference:**	Well Randy 3508 2-3H 1L/ Latshaw 27
Project:	Harper County (NAD-27)	**TVD Reference:**	KB @ 1283.0usft
Site:	Sec 03-T35S-R08W	**MD Reference:**	KB @ 1283.0usft
Well:	Randy 3508 2-3H 1L/ Latshaw 27	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Project Harper County (NAD-27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Kansas South 1502		

Site Sec 03-T35S-R08W

Site Position:		**Northing:**	134,692.00 usft	**Latitude:**	37° 2' 10.114 N
From:	Map	**Easting:**	2,092,733.00 usft	**Longitude:**	98° 10' 56.389 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.20 °

Well Randy 3508 2-3H 1L/ Latshaw 27

Well Position	**+N/-S**	0.0 usft	**Northing:**	134,939.00 usft	**Latitude:**	37° 2' 12.512 N
	+E/-W	0.0 usft	**Easting:**	2,094,028.00 usft	**Longitude:**	98° 10' 40.408 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	1,261.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/19/2014	4.40	65.08	51,564

Design Wellbore #1

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	186.65

Survey Program **Date** 9/18/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
717.0	5,485.0	Drillright MWD Surveys (Wellbore #1)	MWD	MWD - Standard
5,554.0	9,872.0	Drillright MWD Surveys ST1 (Wellbore #1)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
717.0	0.20	313.60	717.0	0.9	-0.9	-0.8	0.03	0.03	0.00
First Drillright MWD Survey OH									
957.0	0.40	110.90	957.0	0.9	-0.4	-0.8	0.25	0.08	65.54
1,140.0	0.60	202.20	1,140.0	-0.3	-0.2	0.3	0.40	0.11	49.89
1,232.0	1.30	3.00	1,232.0	0.3	-0.3	-0.3	2.04	0.76	174.78
1,422.0	3.30	358.90	1,421.8	8.0	-0.3	-7.9	1.06	1.05	-2.16
1,897.0	3.40	354.60	1,896.0	35.6	-1.9	-35.2	0.06	0.02	-0.91
2,369.0	2.90	356.90	2,367.3	61.5	-3.9	-60.6	0.11	-0.11	0.49

Survey Report

Company:	Sandridge Energy	**Local Co-ordinate Reference:**	Well Randy 3508 2-3H 1L/ Latshaw 27
Project:	Harper County (NAD-27)	**TVD Reference:**	KB @ 1283.0usft
Site:	Sec 03-T35S-R08W	**MD Reference:**	KB @ 1283.0usft
Well:	Randy 3508 2-3H 1L/ Latshaw 27	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,842.0	2.40	359.50	2,839.8	83.4	-4.6	-82.3	0.11	-0.11	0.55
3,317.0	2.30	8.60	3,314.4	102.7	-3.3	-101.7	0.08	-0.02	1.92
3,789.0	2.80	355.20	3,785.9	123.6	-2.8	-122.4	0.16	0.11	-2.84
3,884.0	1.60	4.80	3,880.9	127.2	-2.9	-126.0	1.32	-1.26	10.11
3,916.0	0.20	185.70	3,912.9	127.6	-2.9	-126.4	5.62	-4.38	-559.69
3,947.0	2.00	165.10	3,943.8	127.0	-2.7	-125.9	5.85	5.81	-66.45
3,979.0	4.10	172.10	3,975.8	125.4	-2.4	-124.2	6.65	6.56	21.88
4,010.0	5.80	178.80	4,006.7	122.7	-2.2	-121.6	5.78	5.48	21.61
4,042.0	7.70	179.10	4,038.5	118.9	-2.2	-117.9	5.94	5.94	0.94
4,074.0	9.50	177.50	4,070.1	114.1	-2.0	-113.1	5.67	5.63	-5.00
4,105.0	11.20	176.90	4,100.6	108.6	-1.7	-107.6	5.49	5.48	-1.94
4,137.0	13.00	177.30	4,131.9	101.9	-1.4	-101.0	5.63	5.63	1.25
4,168.0	15.60	178.40	4,161.9	94.2	-1.1	-93.5	8.43	8.39	3.55
4,200.0	18.50	180.10	4,192.5	84.9	-1.0	-84.2	9.19	9.06	5.31
4,231.0	21.40	179.60	4,221.6	74.3	-1.0	-73.7	9.37	9.35	-1.61
4,263.0	24.20	180.60	4,251.1	61.9	-1.0	-61.3	8.83	8.75	3.13
4,294.0	26.80	180.00	4,279.1	48.5	-1.1	-48.1	8.43	8.39	-1.94
4,326.0	28.90	180.20	4,307.4	33.6	-1.1	-33.2	6.57	6.56	0.63
4,357.0	30.90	180.00	4,334.3	18.1	-1.1	-17.9	6.46	6.45	-0.65
4,389.0	33.80	179.20	4,361.3	1.0	-1.0	-0.9	9.16	9.06	-2.50
4,420.0	36.20	178.90	4,386.7	-16.8	-0.7	16.7	7.76	7.74	-0.97
4,452.0	38.30	178.90	4,412.2	-36.1	-0.3	35.9	6.56	6.56	0.00
4,483.0	40.50	179.80	4,436.1	-55.8	-0.1	55.4	7.33	7.10	2.90
4,515.0	42.60	180.90	4,460.1	-77.0	-0.3	76.5	6.95	6.56	3.44
4,546.0	44.30	181.80	4,482.6	-98.3	-0.8	97.8	5.84	5.48	2.90
4,578.0	45.90	180.90	4,505.2	-121.0	-1.3	120.3	5.38	5.00	-2.81
4,609.0	48.00	180.00	4,526.3	-143.6	-1.5	142.9	7.10	6.77	-2.90
4,641.0	50.40	180.20	4,547.2	-167.9	-1.5	166.9	7.51	7.50	0.63
4,672.0	52.30	179.70	4,566.6	-192.1	-1.5	191.0	6.26	6.13	-1.61
4,704.0	54.10	178.50	4,585.8	-217.7	-1.1	216.4	6.38	5.63	-3.75
4,735.0	55.90	177.80	4,603.5	-243.1	-0.3	241.5	6.09	5.81	-2.26
4,767.0	58.50	178.00	4,620.9	-270.0	0.7	268.1	8.14	8.13	0.63
4,798.0	60.10	179.30	4,636.7	-296.6	1.3	294.4	6.30	5.16	4.19
4,830.0	60.40	180.10	4,652.6	-324.4	1.5	322.0	2.36	0.94	2.50
4,861.0	62.80	180.20	4,667.3	-351.6	1.4	349.1	7.75	7.74	0.32
4,893.0	65.50	180.60	4,681.3	-380.4	1.2	377.7	8.51	8.44	1.25
4,924.0	67.80	180.70	4,693.6	-408.9	0.9	406.0	7.43	7.42	0.32
5,019.0	68.20	180.20	4,729.2	-497.0	0.2	493.6	0.64	0.42	-0.53
5,113.0	68.30	180.60	4,764.0	-584.3	-0.4	580.4	0.41	0.11	0.43
5,145.0	68.20	181.00	4,775.8	-614.0	-0.8	610.0	1.20	-0.31	1.25
5,176.0	69.10	180.90	4,787.1	-642.9	-1.3	638.7	2.92	2.90	-0.32
5,207.0	71.60	180.10	4,797.6	-672.1	-1.5	667.7	8.42	8.06	-2.58
5,239.0	75.50	180.00	4,806.6	-702.7	-1.6	698.2	12.19	12.19	-0.31

Survey Report

Company:	Sandridge Energy	**Local Co-ordinate Reference:**	Well Randy 3508 2-3H 1L/ Latshaw 27
Project:	Harper County (NAD-27)	**TVD Reference:**	KB @ 1283.0usft
Site:	Sec 03-T35S-R08W	**MD Reference:**	KB @ 1283.0usft
Well:	Randy 3508 2-3H 1L/ Latshaw 27	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,270.0	79.40	179.50	4,813.3	-733.0	-1.4	728.2	12.68	12.58	-1.61
5,302.0	83.50	178.90	4,818.1	-764.6	-1.0	759.6	12.95	12.81	-1.88
5,359.0	88.00	178.80	4,822.3	-821.5	0.1	815.9	7.90	7.89	-0.18
5,391.0	88.00	178.70	4,823.4	-853.4	0.8	847.6	0.31	0.00	-0.31
5,485.0	91.50	179.20	4,823.9	-947.4	2.6	940.7	3.76	3.72	0.53
5,554.0	90.70	179.40	4,822.5	-1,016.4	3.4	1,009.1	1.20	-1.16	0.29
First Drillright MWD Survey ST									
5,585.0	85.80	180.90	4,823.5	-1,047.4	3.3	1,039.9	16.53	-15.81	4.84
5,617.0	84.60	182.00	4,826.2	-1,079.2	2.5	1,071.7	5.08	-3.75	3.44
5,648.0	85.50	184.40	4,828.8	-1,110.1	0.8	1,102.5	8.24	2.90	7.74
5,680.0	86.90	185.10	4,831.0	-1,141.9	-1.9	1,134.4	4.89	4.38	2.19
5,711.0	89.10	186.30	4,832.0	-1,172.7	-4.9	1,165.4	8.08	7.10	3.87
5,743.0	90.80	188.10	4,832.1	-1,204.5	-8.9	1,197.4	7.74	5.31	5.63
5,774.0	91.80	190.50	4,831.4	-1,235.0	-13.9	1,228.3	8.39	3.23	7.74
5,807.0	91.50	192.90	4,830.4	-1,267.3	-20.6	1,261.2	7.33	-0.91	7.27
5,839.0	91.00	195.70	4,829.7	-1,298.3	-28.5	1,292.9	8.89	-1.56	8.75
5,930.0	90.40	202.30	4,828.6	-1,384.3	-58.1	1,381.7	7.28	-0.66	7.25
6,021.0	88.90	206.40	4,829.2	-1,467.2	-95.7	1,468.4	4.80	-1.65	4.51
6,112.0	89.40	209.40	4,830.5	-1,547.6	-138.2	1,553.2	3.34	0.55	3.30
6,204.0	89.80	215.00	4,831.1	-1,625.4	-187.2	1,636.2	6.10	0.43	6.09
6,295.0	89.80	215.30	4,831.5	-1,699.8	-239.6	1,716.1	0.33	0.00	0.33
6,387.0	89.40	215.30	4,832.1	-1,774.9	-292.8	1,796.9	0.43	-0.43	0.00
6,478.0	90.30	208.90	4,832.3	-1,852.0	-341.1	1,879.0	7.10	0.99	-7.03
6,568.0	90.60	204.40	4,831.6	-1,932.4	-381.5	1,963.6	5.01	0.33	-5.00
6,659.0	90.40	201.70	4,830.8	-2,016.1	-417.1	2,050.8	2.98	-0.22	-2.97
6,749.0	91.80	198.90	4,829.1	-2,100.5	-448.3	2,138.3	3.48	1.56	-3.11
6,839.0	90.90	195.70	4,827.0	-2,186.4	-475.1	2,226.7	3.69	-1.00	-3.56
6,932.0	91.00	194.50	4,825.5	-2,276.1	-499.3	2,318.7	1.29	0.11	-1.29
7,023.0	90.50	193.20	4,824.3	-2,364.5	-521.1	2,408.9	1.53	-0.55	-1.43
7,118.0	91.50	190.90	4,822.6	-2,457.4	-540.9	2,503.5	2.64	1.05	-2.42
7,211.0	92.60	190.20	4,819.3	-2,548.7	-557.9	2,596.2	1.40	1.18	-0.75
7,305.0	94.10	188.20	4,813.8	-2,641.4	-572.9	2,690.0	2.66	1.60	-2.13
7,400.0	95.60	186.00	4,805.7	-2,735.3	-584.6	2,784.6	2.80	1.58	-2.32
7,498.0	92.60	183.10	4,798.7	-2,832.7	-592.4	2,882.3	4.25	-3.06	-2.96
7,593.0	89.20	183.60	4,797.3	-2,927.5	-597.9	2,977.1	3.62	-3.58	0.53
7,687.0	89.00	184.00	4,798.7	-3,021.3	-604.1	3,071.0	0.48	-0.21	0.43
7,782.0	86.90	179.50	4,802.1	-3,116.2	-607.0	3,165.5	5.22	-2.21	-4.74
7,876.0	87.40	176.50	4,806.8	-3,210.0	-603.8	3,258.3	3.23	0.53	-3.19
7,971.0	89.30	178.60	4,809.5	-3,304.9	-599.7	3,352.1	2.98	2.00	2.21
8,066.0	90.00	178.80	4,810.1	-3,399.8	-597.6	3,446.2	0.77	0.74	0.21
8,160.0	90.60	180.30	4,809.6	-3,493.8	-596.8	3,539.4	1.72	0.64	1.60
8,255.0	91.00	180.80	4,808.3	-3,588.8	-597.7	3,633.9	0.67	0.42	0.53
8,349.0	88.60	181.20	4,808.6	-3,682.8	-599.4	3,727.4	2.59	-2.55	0.43
8,444.0	89.00	180.50	4,810.6	-3,777.8	-600.8	3,821.9	0.85	0.42	-0.74

Survey Report

Company:	Sandridge Energy	**Local Co-ordinate Reference:**	Well Randy 3508 2-3H 1L/ Latshaw 27
Project:	Harper County (NAD-27)	**TVD Reference:**	KB @ 1283.0usft
Site:	Sec 03-T35S-R08W	**MD Reference:**	KB @ 1283.0usft
Well:	Randy 3508 2-3H 1L/ Latshaw 27	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

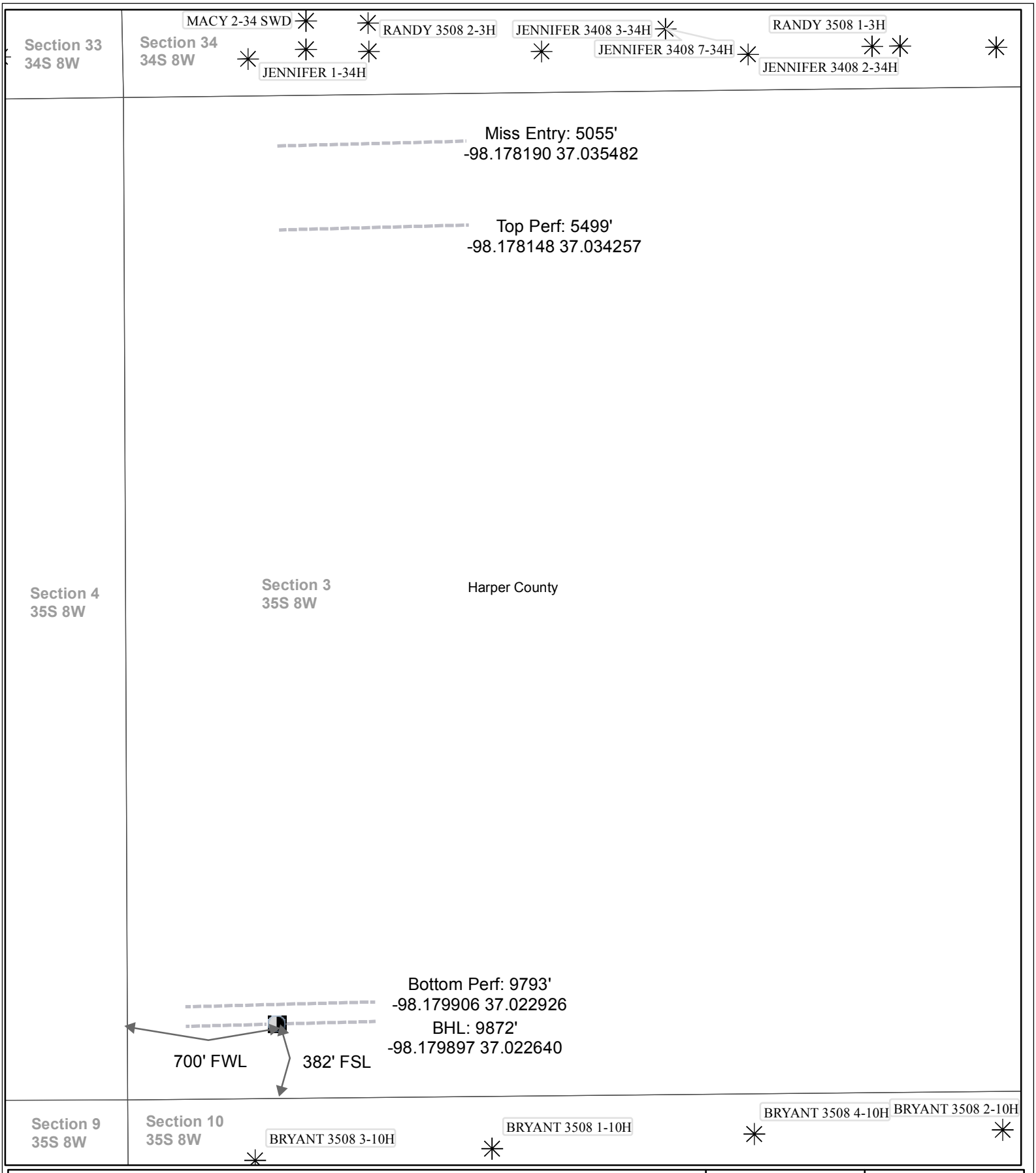
Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,538.0	89.30	181.20	4,812.0	-3,871.7	-602.2	3,915.4	0.81	0.32	0.74
8,632.0	89.90	182.60	4,812.7	-3,965.7	-605.3	4,009.1	1.62	0.64	1.49
8,727.0	89.20	181.70	4,813.4	-4,060.6	-608.9	4,103.8	1.20	-0.74	-0.95
8,822.0	91.30	180.30	4,813.0	-4,155.6	-610.5	4,198.3	2.66	2.21	-1.47
8,916.0	89.30	179.80	4,812.5	-4,249.6	-610.6	4,291.7	2.19	-2.13	-0.53
9,011.0	89.70	180.70	4,813.3	-4,344.6	-611.0	4,386.1	1.04	0.42	0.95
9,105.0	89.70	180.10	4,813.8	-4,438.6	-611.7	4,479.5	0.64	0.00	-0.64
9,200.0	88.70	177.70	4,815.2	-4,533.5	-609.8	4,573.7	2.74	-1.05	-2.53
9,294.0	89.60	178.00	4,816.5	-4,627.4	-606.3	4,666.5	1.01	0.96	0.32
9,388.0	89.10	178.10	4,817.6	-4,721.4	-603.1	4,759.5	0.54	-0.53	0.11
9,482.0	90.40	179.90	4,818.0	-4,815.4	-601.5	4,852.6	2.36	1.38	1.91
9,577.0	91.20	179.80	4,816.7	-4,910.4	-601.2	4,946.9	0.85	0.84	-0.11
9,672.0	91.30	179.70	4,814.6	-5,005.3	-600.8	5,041.2	0.15	0.11	-0.11
9,767.0	91.40	180.40	4,812.4	-5,100.3	-600.9	5,135.6	0.74	0.11	0.74
9,822.0	91.20	179.80	4,811.1	-5,155.3	-601.0	5,190.2	1.15	-0.36	-1.09
Last Drillright MWD Survey ST									
9,872.0	91.20	179.80	4,810.1	-5,205.3	-600.8	5,239.8	0.00	0.00	0.00
Projection to TD - PBHL Randy 2-3H 1L									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
717.0	717.0	0.9	-0.9	First Drillright MWD Survey OH
5,554.0	4,822.5	-1,016.4	3.4	First Drillright MWD Survey ST
9,822.0	4,811.1	-5,155.3	-601.0	Last Drillright MWD Survey ST
9,872.0	4,810.1	-5,205.3	-600.8	Projection to TD

Checked By: _____ Approved By: _____ Date: _____



SANDRIDGE
THE POWER OF US

Actual BH Location
SandRidge Wells
Perf
Sections

Actual Bottom-Hole Location of Hank Randy 3508 2-3H 1L
T&R: 35S 8W
Section: 3, 700' FWL & 382' FSL
-98.179897 37.022640

1 in = 667 ft

0 500 1,000 2,000 Feet

N

Draftsman: Dory Deines	Draft Date: 12/9/2014
Drawing Name/Number: Addendum_Randy 3508 2-3H 1L.mxd	
Coordinate System: NAD 1927 State Plane Kansas South FIPS: 1502	