

Confidentiality Requested:

Yes No

#### Kansas Corporation Commission Oil & Gas Conservation Division

1210881

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 #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R 🔲 East 🗌 West
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
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:	Producing Formation:  Elevation: Ground: Kelly Bushing: Feet  Total Vertical Depth: Plug Back Total Depth: Feet  Multiple Stage Cementing Collar Used? Yes No  If yes, show depth set: Feet  If Alternate II completion, cement circulated from: sx cmt.
Original Comp. Date: Original Total Depth:	
□ Deepening       □ Re-perf.       □ Conv. to ENHR       □ Conv. to SWD         □ Plug Back       □ Conv. to GSW       □ Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
□ Commingled         Permit #:	Chloride content: ppm Fluid volume: bbls  Dewatering method used:  Location of fluid disposal if hauled offsite:
☐ ENHR         Permit #:           ☐ GSW         Permit #:	Operator Name:
Spud Date or Date Reached TD Completion Date or Recompletion Date	QuarterSec.         TwpS. 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 Approved by: Date:				



Operator Name:			Lease Name: _			Well #:	
Sec Twp	S. R	East West	County:				
open and closed, flow	ring and shut-in pressu	ormations penetrated. Eures, whether shut-in predict final chart(s). Attach	essure reached stati	c level, hydrosta	atic pressures, bott		
		otain Geophysical Data a or newer AND an image		gs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electronic log
Drill Stem Tests Taker (Attach Additional S		Yes No		_	on (Top), Depth an		Sample
Samples Sent to Geo	logical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING	RECORD Ne	ew Used			
		Report all strings set-	conductor, surface, inte	ermediate, product	ion, 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
	Donth		. CEMENTING / SQL	JEEZE RECORD			
Purpose:  Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used		Type and P	ercent Additives	
	ulic fracturing treatment o	n this well?		Yes	No (If No, ski	p questions 2 aı	nd 3)
Does the volume of the to	otal base fluid of the hydr	aulic fracturing treatment ex submitted to the chemical	_	= :	No (If No, ski	p questions 2 at p question 3) out Page Three	
Shots Per Foot	PERFORATION Specify For	N RECORD - Bridge Plug ootage of Each Interval Per	s Set/Type forated		cture, Shot, Cement mount and Kind of Ma		d Depth
				,			
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No		
Date of First, Resumed	Production, SWD or ENH	IR. Producing Meth		Gas Lift (	Other (Explain)		
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf Wate	er B	bbls. G	as-Oil Ratio	Gravity
DISPOSITIO	ON OF GAS:	Open Hole		Comp. Con	mmingled	PRODUCTIO	ON INTERVAL:
(Submit AC (Submit AC O-18.)				400-5) (Sub	omit ACO-4)		

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Marie 3306 2-26H
Doc ID	1210881

## Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
1	8701-8704	750 gals 15% HCL, 1848 bbls fresh Slickwater, 1848 TLTR	
1	8515-8518	750 gals 15% HCL, 2460 bbls fresh Slickwater, 4308 TLTR	
1	8329-8332	750 gals 15% HCL, 2125 bbls fresh Slickwater, 6433 TLTR	
1	8189-8192	750 gals 15% HCL, 2149 bbls fresh Slickwater, 8582 TLTR	
1	8006-8009	750 gals 15% HCL, 2053 bbls fresh Slickwater, 10635 TLTR	
1	7821-7824	750 gals 15% HCL, 1936 bbls fresh Slickwater, 12571 TLTR	
1	7636-7639	750 gals 15% HCL, 2217 bbls fresh Slickwater, 14788 TLTR	
1	7450-7453	750 gals 15% HCL, 2120 bbls fresh Slickwater, 16908 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Marie 3306 2-26H
Doc ID	1210881

## Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
1	7266-7269	750 gals 15% HCL, 2529 bbls fresh Slickwater, 19437 TLTR	
1	7082-7085	750 gals 15% HCL, 2179 bbls fresh Slickwater, 21616 TLTR	
1	6898-6901	750 gals 15% HCL, 2143 bbls fresh Slickwater, 23759 TLTR	
1	6713-6716	750 gals 15% HCL, 2221 bbls fresh Slickwater, 25980 TLTR	
1	6573-6576	750 gals 15% HCL, 2017 bbls fresh Slickwater, 27997 TLTR	
1	6387-6390	750 gals 15% HCL, 1939 bbls fresh Slickwater, 29936 TLTR	
1	6201-6204	750 gals 15% HCL, 2065 bbls fresh Slickwater, 32001 TLTR	
1	6015-6018	750 gals 15% HCL, 2060 bbls fresh Slickwater, 34061 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Marie 3306 2-26H
Doc ID	1210881

### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
1	5829-5832	750 gals 15% HCL, 2045 bbls fresh Slickwater, 36106 TLTR	
1	5646-5649	750 gals 15% HCL, 2022 bbls fresh Slickwater, 38128 TLTR	
1	5460-5463	750 gals 15% HCL, 2018 bbls fresh Slickwater, 40146 TLTR	
1	5274-5277	750 gals 15% HCL, 2136 bbls fresh Slickwater, 42282 TLTR	
5	4606-4872	750 gals 15% HCL, 3658 bbls fresh Slickwater, 45940 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Marie 3306 2-26H
Doc ID	1210881

## Casing

	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Conductor	30	20	75	60	Edge Services 10 Sack Grout	8	none
Surface	12.25	9.63	36	592	O-Tex Lite Premium Plus 65/35; Premium Plus (Class C)	300	(6% gel) 2% calcium chloride, 1/4 pps Cello- Flake, .4% C-41P
Intermedia te	8.75	7	26	5200	O-Tex 50/50 Poz Premium/ Premium	340	4% Gel, .2% FL- 17, .1% C- 51, .2% C- 20, .1% C- 37, .4% C- 41P

#### **INVOICE**



DATE	INVOICE#
3/10/2014	4607

**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	3/8/2014	3508	LATSHAW 27	MARIE 3306 2-26H	Due on rec

#### Description

DRILLED 80' OF 30" CONDUCTOR HOLE

DRILLED 6' OF 76" HOLE

FURNISHED AND SET 6' X 6' TINHORN CELLAR

FURNISHED 80' OF 20" CONDUCTOR PIPE

FURNISHED WELDER AND MATERIALS

FURNISHED 8 YARDS OF 10 SACK GROUT FOR CONDUCTOR HOLE

FURNISHED 4 YARDS OF 10 SACK GROUT FOR MOUSE HOLE

DRILL MOUSE HOLE

FURNISHED 75' OF 16" CONDUCTOR PIPE

TOTAL BID \$17,000.00

**Sales Tax (6.15%)** 

\$154.80

**TOTAL** 

\$17,154.80

	J	OB SUM	MARY			sok3545			03/27/14			
Harper Ka	nsas	dridge Explor	ation &	Prod	uc	CUSTOMER REF	ince B	row	/n			
EASE NAME Marie 3306 2-26H	Well No. 2-26H	JOB TYPE Surfac	·			EMPLOYEE NAM	E Bryan I	חסוו	nlae			
EMP NAME	2011	Juliuc					Jiyani	504	gias			
Bryan Douglas	1 0			П				П				
Rocky Anthis	$\top$			$\Box$								
Flo Helkena				$\vdash$				$\vdash$				
Paul Thomas												
orm. Name	Type:			Callo		IOn Location		Llab	Charled	TI-L-O		
Packer Type	Set At	0	Date		ed Out 3/26/2014	On Location 3/26/2		1000	Started 3/27/2014		ompleted 27/2014	
Bottom Hole Temp. 80	Press		Date	١,	7/20/2014	0,20,2	0.4	l	0/2//2014	J 3"	21/2014	
Retainer Depth	Total		Time		1900	2100			0000	0	200	
Tools and Ac		es				Well [						
	Qty	Make			New/Used	Weight	Size G	rade	From	То	Max. Allow	
Auto Fill Tube	0	IR	Casing			36#	9 5/8		Surface	600	1,500	
nsert Float Val	0	IR IR	Liner									
Centralizers	0	IR IR	Liner		-		-					
Top Plug	0	IR IR	Tubing				0	_				
HEAD Limit clamp	0	IR IR	Open F				121/4	<del> </del>	Surface	600	Cholatel	
Weld-A	0	İR	Perfora				12/4	-	Surface	000	Shots/Ft.	
Texas Pattern Guide Shoe	0	İR	Perfora						-		<b>-</b>	
Cement Basket	0	İR	Perfora								<b>†</b>	
Material:			Hours	On Lo		Operating			Descript	ion of Job		
	nsity	9 Lb/Gal	Date		Hours	Date	Hour		Surface			
Disp. Fluid Fresh Water De Fresh Water BBL.	10	8.33 Lb/Gal 8.33	3/26	<del>`</del>	5.0	3/27	2.0	$\dashv$				
Spacer type BBL.		- 0.00						$\dashv$	-			
Acid Type Gal.		%		-				-				
Acid Type Gal,		%										
SurfactantGal.		_in										
NE Agent Gal.	-	-in		-				$\dashv$				
Fluid Loss Gal/Lt Gelling Agent Gal/Lt		-ln						$\dashv$				
Fric. Red. Gal/Lt		In		$\dashv$			ļ	$\dashv$	-			
AISC. Gal/Lt		in	Total	$\neg$	5.0	Total	2.0					
Perfpac Balls	_Qty.						essures			5-2-3-2-		
Other			MAX		1,500 PSI		20					
Other			MAX		6 BPM	Average AVG		4 4	M			
Other			IVIAA		O DI W		Left in					
Other			Feet		46	Reason						
										27 - 600-000		
Stage Sacks Cement		Γ	Additive	S	t Data				W/Rg.	Yield	Lbs/Gal	
1 160 FEX Lite Premiun	Plus 6	6 (6% Gel) 2% Cald	ium Chlor	ide - 1	Apps Cello-Fla	ake4% C-	41P		11.11		12.40	
2   140   Premium Plus (0	Class C)	2% Calcium Chlo	oride - 1/4 pr	s Cel	lo-Flake				6.32	1.32	14.80	
3 *100 Premium Plus (	lass C)	*2% Calcium Chl	oride on s	ide to	use if necess	агу			*6.32	*1.32	*14.8	
Preflush 10	Type:	Fre	Sut sh Water	nman	/ Preflush:	BBI	10	.00	Type	Eroch	Water	
	TIYPO.	AUM TIE	1,500 PSI		oad & Bkdn:	Gal - BBI	N	/A	Type: Pad:Bbl	-Gal	N/A	
reakdown	MAXIN		NO/FULL	E	xcess /Return	BBI	30 4	0=	Calc.Dis	p Bbl	43	
Breakdown		eturns-N					SURI	4 4 5			43.00	
	Lost R Actual	eturns-N	SURFACE	ç	alc. TOC:	DCI.						
verage	_Lost R _Actual _Bump	eturns-N TOC Plug PSI:	700	F	inal Circ.	PSI:	20	00	Actual D Disp:Bbl		43.00	
	Lost R Actual	eturns-N TOC Plug PSI:	700	F	inal Circ. ement Slurry:	BBI	20 90	00				
verage	_Lost R _Actual _Bump	eturns-N TOC Plug PSI:	700	F	inal Circ.	PSI: BBI BBI	20 90	00				
verage	_Lost R _Actual _Bump	eturns-N TOC Plug PSI:	700	F	inal Circ. ement Slurry:	BBI	20 90	00				
werage SIP5 Min	Lost R Actual Bump 10 Min	eturns-N TOC Plug PSI: 15 M	700	F	inal Circ. ement Slurry:	BBI	20 90	00				
verage	Lost R Actual Bump 10 Min	eturns-N TOC Plug PSI: 15 M	700	F	inal Circ. ement Slurry:	BBI	20 90	00				

	J	OB SUMI	WAR'	Y				3582		TICKET DATE	04/04/14		
СОUNTY SIBLE Ka	nsas	Sandridge Explora			tion			ince B	row	'n			
	Well No. 2-26H	JOB TYPE Intermedi	iate				EMPLOYEE NAME	OUIS	AR	NEY			
EMP NAME									, ,				
Louis Arney	0								Ш				
Vontray Watkins									$\square$				
Randall Irvin	+-			-					$\vdash$				
Ron Derry													
Form. Name	Type:												
	<del></del>		n .	Cal	led Ou		On Location 4/4/20		Job	Started		ompleted	
Packer Type Bottom Hole Temp. 145	_Set At		Date		4/3/2	714	4/4/20	114		4/4/2014	4/	4/2014	
Bottom Hole Temp. 145 Retainer Depth	Press		Time		2200		0800			0933	1 1	200	
Tools and Ac			111110		LLUU		Well D	Data		0000			
	Qty	Make		_	Ne	w/Used	Weight		rade	From	То	Max. Allow	
Auto Fill Tube	0	IR	Casing				26#	7"		Surface		5,000	
Insert Float Va	0	IR	Liner										
Centralizers	0	IR	Liner										
Top Plug	0	IR	Tubing					0					
HEAD	0	IR	Drill Pi										
Limit clamp	0	IR	Open I					83/4"		Surface	5,254'	Shots/Ft.	
Weld-A	0	IR	Perfora						_				
Texas Pattern Guide Shoe	0	IR	Perfora										
Cement Basket Materials	0	IR	Perfora Hours			<u> </u>	Operating	Hours		Docario	tion of Job		
	nsity	9 Lb/Gall	Date		Hou		Date	Hour	S			,	
Disp. Fluid Fresh Water De	nsity	8.33 Lb/Gal	4/4		4.0		4/4	1.5		Interme	diate		
Spacer type resh Wate BBL.	20	8.33											
Spacer type Caustic BBL.	10	8.40											
Acid TypeGal.		%		$\dashv$					_				
Acid Type Gal. Surfactant Gal.		-%				_			$\dashv$				
Surfactant Gal.  NE Agent Gal.		-in —	-	$\neg$				<b></b>	-				
Fluid Loss Gal/Lt	,	in		$\neg$									
Gelling Agent Gal/Lb		In						<b></b>		-			
Fric. Red Gal/Lh		In							100				
MISCGal/Lt		In	Total		4.0		Total	1.5					
Perfpac Balls			LANY		5,000	DEL		essures	0.0				
Other			MAX		ບບບ,ເ	PSI	AVG. Average	Pates in	00 N B P	M			
Other			MAX		8 BF	M	AVG	ivaics ii	5	141			
Other			IVI OC				Cemen			3			
Other			Feet		86		Reason						
			C	eme	nt Data	3							
Stage Sacks Cement			Additive	S						W/Rd	. Yield	Lbs/Gal	
1 240 50/50 POZ PRE		4% Gel - 0.2% FL-						4% C-41	P	6.93		13.60	
2 100 Premium	)	0.2% FL-17 - 0.1%	C-51 - 0.1	% C	-20 - 0.	1% C-41	Р			5.19		15.60	
3 0 0										0 0.00	0.00	0,00	
<del></del>					-								
ļ		1									L	L	
Preflush 10	Type:		Sui	nma	ary Preflus	eh:	BBI	30	.00	Type:	Calc	Spacer	
Breakdown	MAXIN	ALIM .	5.000 PSI				Gal - BBI		/A	Pad:Bb		N/A	
			NO/FULL	_		s /Retur			/A	Calc.D		196	
	Actual	TOC			Calc.	TOC:		3,1	100	Actual	Disp.	195.00	
Average		Plug PSI:	1,200		Final (		PSI:		30	Disp:B	bl		
ISIP5 Min	_10 Mir	115 Mi	ın			nt Slurry		82					
					Total	/olume	BBI	307	7.00				
		1	1										
2			12										
CUSTOMER REPRESE	NTATI	/E//	116	_			00011-011						
		<del>-// `</del>					SIGNATURE						
		V											

## **Hydraulic Fracturing Fluid Product Component Information Disclosure**

5/5/2014	Job Start Date:
5/6/2014	Job End Date:
Kansas	State:
Harper	County:
15-077-22028-00-00	API Number:
SandRidge Energy	Operator Name:
Marie 3306 2-26H	Well Name and Number:
-97.93092084	Longitude:
37.13943384	Latitude:
NAD27	Datum:
NO	Federal/Tribal Well:
4,403	True Vertical Depth:
1,913,545	Total Base Water Volume (gal):
0	Total Base Non Water Volume:







#### **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	94.59847	None
Sand (Proppant)	Archer	Proppant					
			Silica Substrate	NA	100.00000	4.46768	None
Hydrochloric Acid (15%)	Archer	Acidizing					
			Hydrochloric Acid	7647-01-0	15.00000	0.12720	None
			Methyl Alcohol	67-56-1	80.00000	0.00108	None
			thiourea-formaldehyde copolymer	68527-49-1	15.00000	0.00020	None
AIC	Archer	Liquid Acid Iron Control					
			Acetic Acid	64-19-7	50.00000	0.00184	None
			Citric Acid	77-92-9	30.00000	0.00110	None
Chemflush	Archer	Enviro-Friendly Chemical Flush					
			Hydrotreated Petroleum Distillate	64742-47-8	99.00000		
			Alcohol Ethoxylate Surfactants	NA	10.00000	0.00014	None
Ingredients shown ab	ove are subject to 29 CF		pear on Material Safety Data She	eets (MSDS). Ingredie	nts shown below are	Non-MSDS.	
		Other Chemicals					
			Water	7732-18-5		0.04135	

	Aliphatic Hydrocarbon	64742-47-8	0.02068	
	Anionic Polymer	N/A	0.02068	
	Water	7732-18-5	0.00943	
	Oxyalkylated Alcohol	68002-97-1	0.00345	
	,	N/A	0.00345	
	Acrylic Polymer	28205-96-1	0.00157	
	Sodium Salt of Phosphate Ester	68131-72-6	0.00157	
		7732-18-5	0.00129	
	Polyglycol Ester	N/A	0.00069	
	Alcohol Ethoxylate Surfactants	N/A	0.00020	
	n-olefins	N/A	0.00011	
	Propargyl Alcohol	107-19-7	0.00008	
	Tetrasodium Ethylenediaminetetraacetate	64-02-8	0.00007	
		7732-18-5		
	Surfactant	N/A		
	TRADE SECRET	N/A		
	ISOPROPANOL	67-63-0		
	Buffer	N/A		
	METHANOL	67-56-1		
	Acetic Acid	64-19-7		
	Water	7732-18-5		
	Cinnamic Aldehyde	104-55-2		

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)

<sup>\*</sup> 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%



## Survey Report

DRT Job #: DR1403056

Company: Well Name: Legals: Sandridge Marie 3306 2-26H Sec: 26 Township: 33S Range: 06W Harper KS Latshaw 27

County/State: Harper KS Rig Name: Latshaw 2 Customer Rep Position

Directional Driller

Clark Summers Jon Ferguson **MWD Operator** 

Dallas Detweiler Ryan Brand Chris Cooper

<b>对对抗</b>					Ma	irie 2-2	6H Survey	S				
Туре	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
ielnPoint	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
Survey	619.00	0.10	278.30	619.00	0.08	-0.53	0.13	0.02	0.02	13.20	278.58	0.54
Survey	1132.00	0.40	191.60	1132.00	-1.61	-1.33	-1.47	0.08	0.06	16.90	219.56	2.09
Survey	1595.00	0.20	234.80	1594.99	-3.66	-2.32	-3.42	0.06	0.04	9.33	212.37	4.33
Survey	2067.00	0.40	270.90	2066.98	-4.11	-4.64	-3.64	0.06	0.04	7.65	228.47	6.20
Survey	2257.00	2.50	183.90	2256.92	-8.23	-5.59	-7.65	1.32	1.11	45.79	214.19	9.95
Survey	2351.00	4.80	179.60	2350.72	-14.21	-5.70	-13.59	2.46	2.45	4.57	201.86	15.31
Survey	2446.00	7.70	175.90	2445.15	-24.53	-5.22	-23.91	3.08	3.05	3.89	192.01	25.08
Survey	2541.00	8.10	209.90	2539.30	-36.69	-8.10	-35.74	4.87	0.42	35.79	192.45	37.57
Survey	2636.00	9.10	245.60	2633.30	-45.60	-18.29	-43.63	5.62	1.05	37.58	201.86	49.13
Survey	2731.00	8.90	271.20	2727.17	-48.55	-32.48	-45.19	4.19	0.21	26.95	213.78	58.41
Survey	2826.00	10.00	282.70	2820.89	-46.58	-47.88	-41.75	2.29	1.16	12.11	225.79	66.80
Survey	2920.00	10.60	281.00	2913.37	-43.14	-64.33	-36.74	0.72	0.64	1.81	236.15	77.46
Survey	3014.00	10.20	277.20	3005.83	-40.44	-81.07	-32.44	0.84	0.43	4.04	243.49	90.60
Survey	3110.00	10.30	277.90	3100.30	-38.20	-98.01	-28.58	0.17	0.10	0.73	248.71	105.19
Survey	3205.00	12.00	279.30	3193.50	-35.44	-116.17	-24.08	1.81	1.79	1.47	253.03	121.46
Survey	3299.00	10.40	279.40	3285.71	-32.47	-134.18	-19.39	1.70	1.70	0.11	256.40	138.05
Survey	3394.00	11.60	282.50	3378.96	-29.00	-151.97	-14.22	1.41	1.26	3.26	259.20	154.71
Survey	3489.00	13.50	280.80	3471.69	-24.85	-172.19	-8.14	2.04	2.00	1.79	261.79	173.97
Survey	3583.00	11.80	279.60	3563.40	-21.20	-192.44	-2.56	1.83	1.81	1.28	263.71	193.60
Survey	3678.00	11.80	276.00	3656.39	-18.56	-211.68	1.93	0.77	0.00	3.79	264.99	212.49
Survey	3772.00	12.60	278.70	3748.27	-16.00	-231.37	6.37	1.05	0.85	2.87	266.04	231.92
Survey	3867.00	16.00	281.90	3840.31	-11.74	-254.44	12.83	3.67	3.58	3.37	267.36	254.71
Survey	3898.00	18.70	284.20	3869.90	-9.64	-263.44	15.79	8.98	8.71	7.42	267.90	263.62
Survey	3930.00	21.20	287.60	3899.98	-6.63	-273.93	19.80	8.61	7.81	10.63	268.61	274.01
Survey	3961.00	22.60	292.40	3928.74	-2.67	-284.78	24.79	7.33	4.52	15.48	269.46	284.79
Survey	3993.00	24.40	296.50	3958.09	2.62	-296.38	31.17	7.60	5.62	12.81	270.51	296.39
Survey	4024.00	26.70	299.60	3986.05	8.92	-308.17	38.58	8.58	7.42	10.00	271.66	308.30
Survey	4056.00	28.90	302.40	4014.36	16.62	-320.95	47.47	7.99	6.88	8.75	272.96	321.38
Survey	4087.00	31.00	305.10	4041.22	25.23	-333.81	57.28	8.05	6.77	8.71	274.32	334.76
Survey	4118.00	32.30	307.90	4067.61	34.90	-346.88	68.17	6.33	4.19	9.03	275.75	348.63
Survey	4150.00	33.90	312.60	4094.42	46.20	-360.19	80.70	9.45	5.00	14.69	277.31	363.14
Survey	4182.00	35.40	317.00	4120.75	59.02	-373.09	94.70	9.11	4.69	13.75	278.99	377.73
Survey	4213.00	37.00	321.10	4145.77	72.85	-385.07	109.62	9.36	5.16	13.23	280.71	391.90
Survey	4245.00	38.60	325.30	4171.06	88.55	-396.80	126,38	9.47	5.00	13.13	282.58	406.56
Survey	4277.00	39.40	329.20	4195.93	105.49	-407.69	144.29	8.07	2.50	12.19	284.51	421.12
Survey	4308.00	41.50	332.70	4219.52	123.07	-417.44	162.72	9.98	6.77	11.29	286.43	435.20
Survey	4339.00	43.30	336.00	4242.42	141.91	-426.47	182.35	9.23	5.81	10.65	288.41	449.46
Survey	4370.00	44.90	339.10	4264.68	161.85	-434.70	202.99	8.66	5.16	10.00	290.42	463.85
Survey	4402.00	45.70	342.60	4287.19	183.33	-442.16	225.09	8.17	2.50	10.94	292.52	478.66
Survey	4434.00	46.80	346.40	4309.32	205.60	-448.32	247.85	9.24	3.44	11.87	294.64	493.22
Survey	4465.00	48.60	350.10	4330.19	228.04	-452.98	270.63	10.56	5.81	11.94	296.72	507.14



## Survey Report

DRT Job #:

					Ma	rie 2-2	6H Survey	S				
Туре	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	4497.00	50.90	353.20	4350.87	252.20	-456.52	295.02	10.31	7.19	9.69	298.92	521.55
Survey	4528.00	52.40	355.90	4370.10	276.39	-458.82	319.32	8.37	4.84	8.71	301.06	535.64
Survey	4560.00	54.80	357.70	4389.09	302.11	-460.25	345.06	8.76	7.50	5.62	303.28	550.55
Survey	4591.00	58.40	358.60	4406.16	327.97	-461.08	370.88	11.86	11.61	2.90	305.42	565.83
Survey	4623.00	61.80	359.70	4422.11	355.70	-461.49	398.52	11.03	10.63	3.44	307.62	582.66
Survey	4654.00	65.40	0.20	4435.89	383.47	-461.51	426.16	11.70	11.61	1.61	309.72	600.03
Survey	4685.00	68.70	1.10	4447.98	412.01	-461.18	454.53	10.98	10.65	2.90	311.78	618.42
Survey	4717.00	72.10	1.70	4458.71	442.14	-460.45	484.45	10.77	10.63	1.88	313.84	638.36
Survey	4748.00	75.00	1.90	4467.49	471.85	-459.52	513.94	9.38	9.35	0.65	315.76	658.64
Survey	4779.00	78.20	2.00	4474.67	501.98	-458.49	543.83	10.33	10.32	0.32	317.59	679.85
Survey	4811.00	81.50	2.60	4480.31	533.45	-457.23	575.03	10.48	10.31	1.88	319.40	702.59
Survey	4842.00	85.00	2.70	4483.95	564.20	-455.80	605.50	11.29	11.29	0.32	321.07	725.31
Survey	4874.00	88.20	2.90	4485.85	596.10	-454.24	637.10	10.02	10.00	0.63	322.69	749.45
Survey	4906.00	89.50	3.30	4486.49	628.05	-452.51	668.73	4.25	4.06	1.25	324.23	774.09
Survey	5001.00	90.80	3.20	4486.24	722.89	-447.12	762.61	1.37	1.37	0.11	328.26	849.99
Survey	5096.00	92.00	3.50	4483.92	817.70	-441.57	856.45	1.30	1.26	0.32	331.63	929.31
Survey	5174.00	90.60	2.10	4482.15	895.58	-437.76	933.60	2.54	1.79	1.79	333.95	996.84
Survey	5244.00	91.00	1.90	4481.17	965.53	-435.32	1002.99	0.64	0.57	0.29	335.73	1059.13
urvey	5289.00	90.90	2.10	4480.42	1010.50	-433.75	1047.60	0.50	0.22	0.44	336.77	1099.66
urvey	5384.00	89.70	1.30	4479.92	1105.45	-430.93	1141.83	1.52	1.26	0.84	338.70	1186.47
urvey	5479.00	90.30	1.00	4479.92	1200.43	-429.02	1236.19	0.71	0.63	0.32	340.33	1274.79
urvey	5573.00	90.30	0.40	4479.43	1294.42	-427.87	1329.63	0.64	0.00	0.64	341.71	1363.30
urvey	5668.00	91.20	0.00	4478.19	1389.41	-427.54	1424.14	1.04	0.95	0.42	342.90	1453.70
urvey	5762.00	91.30	359.20	4476.14	1483.38	-428.20	1517.74	0.86	0.11	0.85	343.90	1543.95
urvey	5857.00	92.00	359.10	4473.40	1578.33	-429.61	1612.38	0.74	0.74	0.11	344.77	1635.75
urvey	5951.00	92.50	358.90	4469.71	1672.24	-431.25	1706.02	0.57	0.53	0.21	345.54	1726.95
urvey	6046.00	91.60	358.40	4466.31	1767.15	-433.49	1800.70	1.08	0.95	0.53	346.22	1819.54
urvey	6141.00	90.80	358.20	4464.32	1862.09	-436.31	1895.47	0.87	0.84	0.21	346.81	1912.52
urvey	6258.00	91.00	357.70	4462.48	1979.00	-440.49	2012.24	0.46	0.17	0.43	347.45	2027.43
urvey	6352.00	91.60	358.90	4460.35	2072.93	-443.28	2106.00	1.43	0.64	1.28	347.93	2119.80
urvey	6448.00	90.80	359.40	4458.34	2168.90	-444.70	2201.66	0.98	0.83	0.52	348.41	2214.02
urvey	6542.00	91.30	359.40	4456.62	2262.88	-445.68	2295.30	0.53	0.53	0.00	348.86	2306.35
urvey	6637.00	92.00	359.90	4453.88	2357.84	-446.26	2389.87	0.91	0.74	0.53	349.28	2399.70
urvey	6732.00	91.60	1.60	4450.90	2452.78	-445.02	2484.25	1.84	0.42	1.79	349.72	2492.82
urvey	6827.00	91.30	1.50	4448.50	2547.71	-442.45	2578.49	0.33	0.32	0.11	350.15	2585.84
urvey	6922.00	90.60	1.00	4446.92	2642.67	-440.38	2672.81	0.91	0.74	0.53	350.54	2679.11
urvey	7016.00	90.60	0.30	4445.94	2736.66	-439.31	2766.26	0.74	0.00	0.74	350.88	2771.70
urvey	7111.00	90.30	359.80	4445.19	2831.66	-439.23	2860.81	0.61	0.32	0.53	351.18	2865.52
urvey	7206.00	90.80	359.20	4444.28	2926.65	-440.06	2955,44	0.82	0.53	0.63	351.45	2959.55
urvey	7300.00	90.80	0.20	4442.97	3020.64	-440.55	3049.04	1.06	0.00	1.06	351.70	3052.60
urvey	7396.00	90.10	359.90	4442.22	3116.64	-440.47	3144.58	0.79	0.73	0.31	351.96	3147.61
urvey	7491.00	90.30	358.30	4441.89	3211.62	-441.96	3239.26	1.70	0.21	1.68	352.16	3241.89
urvey	7586.00	90.60	356.50	4441.14	3306.52	-446.27	3334.14	1.92	0.32	1.89	352.31	3336.50
urvey	7681.00	90.70	356.80	4440.06	3401.35	-451.82	3429.06	0.33	0.11	0.32	352.43	3431.23
urvey	7776.00	90.20	359.70	4439.31	3496.29	-454.72	3523.84	3.10	0.53	3.05	352.59	3525.74
urvey	7871.00	91.60	1.70	4437.82	3591.27	-453.56	3618.26	2.57	1.47	2.11	352.80	3619.80
urvey	7966.00	90.70	0.70	4435.91	3686.23	-451.57	3712.59	1.42	0.95	1.05	353.02	3713.79
urvey	8061.00	92.40	2.30	4433.34	3781.16	-449.08	3806.84	2.46	1.79	1.68	353.23	3807.73



# Survey Report

DRT Job #:

					Ma	rie 2-2	6H Survey	S		days to the		
Туре	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	8156.00	92.80	2.60	4429.03	3875.97	-445.03	3900.82	0.53	0.42	0.32	353.45	3901.44
Survey	8250.00	91.90	1.80	4425.18	3969.82	-441.42	3993.88	1.28	0.96	0.85	353.66	3994.29
Survey	8346.00	91.90	1.60	4421.99	4065.72	-438.58	4089.06	0.21	0.00	0.21	353.84	4089.31
Survey	8441.00	93.30	1.20	4417.68	4160.59	-436.26	4183.27	1.53	1.47	0.42	354.01	4183.40
Survey	8536.00	93.70	0.10	4411.88	4255.41	-435.18	4277.54	1.23	0.42	1.16	354.16	4277.60
Survey	8631.00	91.70	358.00	4407.40	4350.28	-436.75	4372.12	3.05	2.11	2.21	354.27	4372.15
Survey	8726.00	91.30	357.70	4404.92	4445.18	-440.32	4466.92	0.53	0.42	0.32	354.34	4466.93
Survey	8755.00	91.30	357.20	4404.26	4474.15	-441.61	4495.88	1.72	0.00	1.72	354.36	4495.89
PrjCalcPnt	8808	91.3	357.2	4403.06	4527.07	-444.20	4548.81	0	0	0	354.40	4548.81

