

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1097393

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				
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.xxxxxx) (e.gxxx.xxxxxx)				
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84				
Purchaser:	County:				
Designate Type of Completion:	Lease Name: Well #:				
New Well Re-Entry Workover	Field Name:				
□ Oil □ WSW □ SHOW □ 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:				
GSW Permit #:	Cuerter See Two S R Total West				
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:				

Page Two



Operator Name:				_ Lease I	Name: _			Well #:	
Sec Twp	S. R	East	West	County	:				
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in press o surface test, along v	ures, whe	ther shut-in pre chart(s). Attach	ssure reac extra shee	hed stati	c level, hydrosta space is neede	tic pressures, b d.	ottom hole temp	erature, fluid recov
Final Radioactivity Lo files must be submitte						ogs must be ema	alled to kcc-well-	logs@kcc.ks.go	v. Digital electronic
Drill Stem Tests Taker (Attach Additional		Y	es No			J	on (Top), Depth		Sample
Samples Sent to Geo	logical Survey	Y	es No		Nam	е		Тор	Datum
Cores Taken Electric Log Run			es No						
List All E. Logs Run:									
				RECORD	Ne				
	0: 11.1					ermediate, product		" 0 1	T 15
Purpose of String	Size Hole Drilled		ze Casing t (In O.D.)	Weig Lbs.		Setting Depth	Type of Cement	# Sacks Used	Type and Percer Additives
			ADDITIONAL	CEMENTI	NG / SQL	JEEZE RECORD			
Purpose:	Depth Top Bottom	Туре	of Cement	# Sacks	Used		Type and	Percent Additives	
Perforate Protect Casing	Top Dottom								
Plug Back TD Plug Off Zone									
1 lug 0 li 20 lio									
Did you perform a hydrau	ulic fracturing treatment	on this well	?			Yes	No (If No, s	skip questions 2 a	nd 3)
Does the volume of the t			-		-			skip question 3)	
Was the hydraulic fractur	ing treatment informatio	n submitted	to the chemical of	disclosure re	gistry?	Yes	No (If No, i	ill out Page Three	of the ACO-1)
Shots Per Foot			RD - Bridge Plug Each Interval Perl				cture, Shot, Ceme	nt Squeeze Recor	rd Depth
						(* *			200
TUBING RECORD:	Size:	Set At:		Packer A	t·	Liner Run:			
		0017111				[Yes N	o	
Date of First, Resumed	Production, SWD or EN	HR.	Producing Meth	nod:	g 🗌	Gas Lift (Other (Explain)		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat	er B	bls.	Gas-Oil Ratio	Gravity
DIODOCITI	01.05.040			4ETUOD 05	. 00145/	TION:		DDOD! ICT!	
DISPOSITION Solo	ON OF GAS: Used on Lease		N Open Hole	∥ETHOD OF Perf.			mmingled	PRODUCTION	ON INTERVAL:
	bmit ACO-18.)		Other (Specify)		(Submit		mit ACO-4)		

Form	ACO1 - Well Completion		
Operator	andRidge Exploration and Production LLC		
Well Name	VC 3120 2-14H		
Doc ID	1097393		

All Electric Logs Run

Final Boresight Depiction
5in MD ML HRZ
Induction
Porosity
DPC r1d2 Spectral Gamma

Form	ACO1 - Well Completion		
Operator	andRidge Exploration and Production LLC		
Well Name	VC 3120 2-14H		
Doc ID	1097393		

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8978-9318	4164 bbls water, 36 bbls acid, 75M lbs sd, 4200 TLTR	
5	8635-8896	4174 bbls water, 36 bbls acid, 75M lbs sd, 8711 TLTR	
5	8124-8510	4023 bbls water, 36 bbls acid, 75M lbs sd, 12886 TLTR	
5	7733-8047	4204 bbls water, 36 bbls acid, 75M lbs sd, 17217 TLTR	
5	7328-7649	4517 bbls water, 36 bbls acid, 76M lbs sd, 21850 TLTR	
5	6865-7262	4151 bbls water, 36 bbls acid, 75M lbs sd, 26100 TLTR	
5 6520-6794		4491 bbls water, 36 bbls acid, 75M lbs sd, 30667 TLTR	
5	6125-6422		
5	5648-5950	4165 bbls water, 36 bbls acid, 75M lbs sd, 39214 TLTR	
5	5240-5540	4134 bbls water, 36 bbls acid, 75M lbs sd, 43394 TLTR	

Form	ACO1 - Well Completion		
Operator	andRidge Exploration and Production LLC		
Well Name	VC 3120 2-14H		
Doc ID	1097393		

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	32	20	75	130	Koda Services, Inc. Grout	15	none
Surface	17.5	13.37	68	325	O-Tex Lite "Class C' 65/3 and Class "C"	370	(6% Gel) 2% Calcium Chloride, 1/4 pps Cello- Flake, .5% C-41P
Intermeida te	12.5	9.63	36	1011	O-Tex Lite Premium Plus/ Premium Plus	960	6% Gel, 2% Caluim Chloride, 1/4 pps Cello- Flake, .5% C-41P
Intermedia te 2	8.75	7	26	5534	50/50 Poz premium/ Premium	250	4% Gel, .4% C-12, .1% C-37, .5% C- 41P, 2 lb/sk Phenoseal

Form	ACO1 - Well Completion		
Operator	SandRidge Exploration and Production LLC		
Well Name	VC 3120 2-14H		
Doc ID	1097393		

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Liner	6.12	4.5	11.6	9432	50/50 Poz Premium	4% gel, .4% C12, .1% C37, .5% C- 41P, 2 lb/sk Phenoseal

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/

Sam Brownback, Governor

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

October 15, 2012

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

Re: ACO1 API 15-033-21668-01-00 VC 3120 2-14H NE/4 Sec.14-31S-20W Comanche 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 Conductor and Rat Hole Drilling, Landfill Gas Drilling and Well Construction Nationwide

	T. H. Market
Date	Invoice #
10/9/2012	10129

Bill To	
Sandridge Energy Accounts Payable P O Box 1748 Oklahoma City, OK 73102	

Legal Description	Ord	ered By	Terms	Field Ticket	Lease Name	Drill Rig				
	Саг	l Miller	Net 30	7620	VC 3120 214H	Lariat 45				
Item		C	luantity	Description						
Conductor 20" Pipe Ream Hole 72" X 6' Dirt Removal Mud/Water Welder Grout Deliver Grout Equipment Mouse 16" pipe Cover Plate			130 1 80 80	Code: Y 2 c	tor pipe Int for dirt removal and clacking Sh Include Pipe $VC = 3120$ $VC = $					
Thank you for your bu	siness.				Subtotal	\$27,050.00				
A A HILLAND CO. Market Again, Joseph Again,	***************************************	***************************************			Sales Tax (6.3	3%) \$733.95				
			Total \$27,78							

		OB SUMI				PROJECTNOMB		TIC	KETDATE			
		1921		0	9/25/12							
Comanche	Kansas	dridge Explora			luc	CUSTOMER REP	Tommy Whitlow					
LEASE NAME	Wel No.	JOB TYPE Surfac				EMPLOYEE NAME Robert Burris						
VC	1120 2-12	ij Sunac	e	-			Robert	bum	.5			
Robert Burris	1 10			T	CHARLES THE			_				
	U			\vdash				-				
Bryan Douglas David Thomas												
Jessie McClain				\vdash				+			$\overline{}$	
Form. Name	Type:											
Form. Name				Call	ed Out	On Location	n I	Job St	arted	Job Co	mpleted	
Packer Type	Set At		Date		9/25/2012	9/25/2			26/2012	9/2	26/2012	
Bottom Hole Temp.	80 Press				40.00		. 1		4.80			
Retainer Depth		Depth 300	Time		19:30	23:00		<u>U-</u>	4:50	1 08	5:34	
Type and Size	ols and Accessorie Qty	es Make			New/Used	Well [Size Gra	dal	From	To	Max. Allow	
Auto Fill Tube	0	IR	Casing		I INGW/OSEG	68#	13 3/8		urface	327	1,500	
Insert Float Val	0	İR	Liner				10 010	+	andoc		1,000	
Centralizers	0	İR	Liner					+				
Top Plug	0	IR	Tubing				0					
HEAD	0	IR	Drill Pi	oe _								
Limit clamp	0	IR	Open I				17 1/2'	S	urface	325	Shots/Ft,	
Weld-A	0	IR	Perfora									
Texas Pattern Guide	Shoe 0	IR IR	Perfora					_				
Cement Basket	Materials		Perfora Hours			Operating	Houre		Description	n of lob		
Mud Type W	BM Density	9 Lb/Gal	Date		Hours	Date	Hours			II OL JOD		
Disp. Fluid Fresh	Water Density	8.33 Lb/Gal	9/2		7.5	9/26	0.8		Surface			
	Vate BBL. 10	8.33										
Spacer type	BBL											
Acid Type	Gal	_%		-								
Acid Type Surfactant	Gal Gal	_% In	-	\dashv				_	-			
NE Agent	Gal.	in		\dashv				\dashv				
Fluid Loss	Gal/Lb	ln .						_				
Gelling Agent	Gal/Lb	_In						_				
Fric. Red.	Gal/Lb	_in										
MISC.	Gal/Lb	_ln	Total	L	7.5	Total	0.8					
Dorfnon Pollo	Otv					D						
Perfpac Balls	Ωιγ.		MAX		1,500 PSI	AVG.	essures 225	5				
Other Other Other			IVIAA		1,000 1 01	Average	Rates in F	SPM				
Other			MAX		6 BPM	AVG	4	J, 10,				
						Cement	Left in Pi	ipe				
Other			Feet		42	Reason	SHOE J	OINT				
- In . I					t Data							
Stage Sacks	Cement	1/00/ 0-11/00/ 0-1-	Additive	S	4/4 6.11. E	1.1. 50/ 0	445		W/Rq.	Yield	Lbs/Gal	
1 250 D-TEX	Class "C"	6% Gel) 2% Calc 1% Calcium Chlo	ium Chior	ide -	1/4pps Cello-F	lake5% C	-41P		10.88	1.84	12.70	
3 0	0	1% Calcium Chio	ride - 1/4p	ps G	епо-гаке			0	6.32 0.00	1.32	14.80	
3 0									0.00	0.00	0,00	
										1		
		•	Sur	nmar	v					-		
Preflush	Type:				reflush:	BBI	10.0	0	Type:		Water	
Breakdown	MAXIN	ЛUМ1	,500 PSI			Gal - BBI	N/A		Pad:Bbl -C		N/A	
	Lost R Actual		VO/FULL URFACE	<u>-</u>	Excess /Return	BBI	SURFA	(AE	Calc.Disp	Bbl —	43	
Average		Plug PSI:	800	— F	Calc. TOC: Final Circ.	PSI:	250		Actual Dis Disp:Bbl	р	43.00	
1SIP 5 Min	10 Min			=	Cement Slurry:		110.		1	-		
				1	Total Volume	BBI	163.0	10				
							-4					
+ ,												
CUSTOMER R	EPRESENTATI	VE				SIGNATURE						
						CICIAMIUNE						

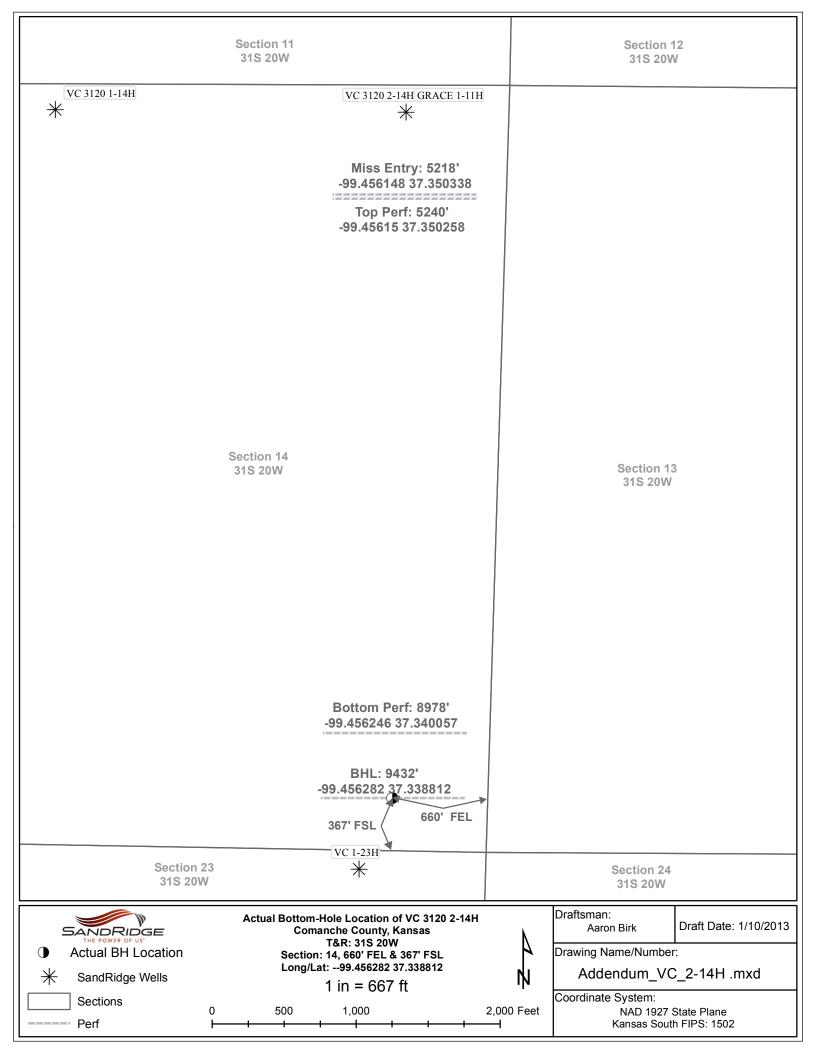
JOBSUMMARY SOK 1932 09/29/12 COUNTY STATE COMPANY CUSTOMER REP												
COUNTY	CUSTOMER REP			- 00	123112							
	Kansas	dridge Explora			duc	TO!	mmy Wh	itlow				
LEASE NAME VC	1120 2-1		e			Daniel Wells						
LI EMP NAME												
Derek Lewis	TI	aniel Wells					T	T				
Arthur Setzar	-			_								
Mike Chalfant												
Kevin Johnson												
Form. Name	Туре	:										
				Cal	led Out	On Locatio		b Starte			mpleted	
Packer Type	Set A		Date		9/28/2012	9/28/2	012	9/29/2	012	9/2	9/2012	
Bottom Hole Temp86 Retainer Depth		Depth 1000'	Time		0500	1200		0225		11	00	
Tools and			Tittle		0000	Well E)ata	ULLU			00	
Type and Size	Qty	Make			New/Used		Size Grad	e Fro	m	To	Max. Allow	
Auto Fill Tube	0	IR	Casing			36#	9 5/8"	Surfa		1,012	1,500	
Insert Float Val	0	IR	Liner									
Centralizers	0	IR	Liner									
Top Plug	1	IR	Tubing				0					
HEAD	1	IR	Drill Pi									
Limit clamp	0	IR	Open F				12 1/4"	Surfa	ice	1,020	Shots/Ft.	
Weld-A	0	IR	Perfora					-				
Texas Pattern Guide Shoe	0	IR IR	Perfora Perfora					-	-			
Cement Basket Mate					ocation	Operating	Hours	De	scription	of Joh		
Mud Type WBM	Density	9 Lb/Gal	Date		Hours	Date	Hours			101000		
Disp Fluid Fresh Water	Density	8.33 Lb/Gal	9/28	3	34.0	9/29	4.0	_ Su	rface			
Spacer type resh Wate BE	L. 10	8.33										
Spacer typeBE	L.											
Acid Type Ga	ıl	_%										
Acid Type Ga		%		-			 					
Surfactant Ga	ļ	in		_								
Fluid Loss Ga	I/Lb	- In		_								
	I/Lb	- In						7 -				
Fric. Red Ga	1/Lb	In] =				
MISCGa	ıl/Lb	In	Total		34.0	Total	4.0					
Perfpac Balls	Oh			_		Dre	essures					
Other	Giy.		MAX		1,500 PSI	AVG.						
Other			140.47		1,000,00		Rates in B					
Other			MAX		6 BPM	AVG	4					
Other						Cemen	Left in Pip	эе				
Other			Feet		47	Reason	SHOE JO	DINT				
					nt Data				AUD	1 37 -1-1	1110.1	
Stage Sacks Cen 1 300 -Tex Lite Pres	nent	"//CO/ Col\ 20/ C-1-	Additive	ida	1/Appe Calle P	lako - Eo/ C	-/1D		W/Rq. 10.88	Yield 1.84	Lbs/Gal 12.70	
1 300 -Tex Lite Pres	nium Pius) 1% Calcium Chlo	rido - 1/4r	ne (Collo-Flake	Take0% C	,-41F		6.32	1.32	14.80	
2 160 Premium Plu 3 500 Premium Plu	e (Class C) *2% Calcium Chl	oride on s	ide	to use if necess	arv			*6.32	*1.32	*14.8	
3 300 Fremuin Fic	is [Oillas (7 Z /6 Galcidiii Gili	oriuc ori s	iuc	o dae ii necesa	ury		_	0.02	1.02	14.0	
			Sui	nma	ary							
Preflush	Туре				Preflush:	BBI	10.00		pe:		Water	
Breakdown	MAX	IMUM	1,500 PSI		Load & Bkdn:		N/A		d:Bbl -G		N/A	
	Lost		NO/FULL SURFACE		Excess /Returi Calc. TOC:	u ppi	SURFA		ılc.Disp tual Disi		74 74.00	
Average	—— Actu	p Plug PSI:	1,000		Final Circ.	PSI:	300		sp:Bbl	·	74.00	
ISIP5 Min	10 M				Cement Slurry		136.0					
					Total Volume	BBI	220.0	0				
		1.	,									
CUSTOMER REPRE	SENTA	TIVE <u>AM</u>	25	10	m-							
The second secon		7	-			SIGNATURE						

		A A DV	,		PROJECT NOMBE		TICKET DATE					
COUNTY State	JOB SUMN	IAK				SOK1959 10/05/12						
Comanche Kansas	Sandridge Explorat			ion		nmy Whi	itlow					
VC J120 2-	No. JOB TYPE 14 Intermedia	ate				LOUIS ARNEY						
EMP NAME												
	DUSTIN ODOM											
JASON JONES												
BILLY TAFF												
MARCOS QUINTANA												
Form. NameTyp	e:											
	At		Call	led Out 10/5/2012	On Locatio 10/6/20		b Started 10/6/2012		Completed 10/6/2012			
Packer Type Set Bottom Hole Temp. 155 Pre	ssure	Date		10/5/20 12	10/0/20	712	10/0/2012	•	10/0/2012			
Bottom Hole Temp. 155 Pre Retainer Depth Tota		Time		20:30	00:00		2:41		3:52			
Tools and Access					Well_D							
Type and Size Qty	Make			New/Used		Size Grad		To	Max. Allow			
Auto Fill Tube 0	<u>IR</u>	Casing			26#	7"	Surface	 	5,000			
Insert Float Val 0	IR IR	Liner						-				
Centralizers 0 Top Plug 0	IR.	Liner				0	+	+				
HEAD 0	IR IR	Tubing Drill Pip	20			-		 	_			
HEAD 0	IR IR	Open H				8 3/4"	Surface	5,539	Shots/Ft.			
Weld-A 0	İR	Perfora						1				
Texas Pattern Guide Shoe 0	IR	Perfora										
Cement Basket 0	IR	Perfora						1				
Materials	0 11.70-11	Hours (On L	ocation	Operating		Descr	Description of Job				
Mud Type WBM Density Disp Fluid Fresh Water Density		Date 10/6		Hours	Date 10/6	Hours	Intern	nediate				
Disp. Fluid Fresh Water Density Spacer type resh Wate BBL. 2		10/0			10/0		1					
Spacer type Caustic BBL. 1	0 8.40						1					
Acid Type Gal	%											
Acid TypeGal	%											
SurfactantGal	In		-									
NE Agent Gal Fluid Loss Gal/Lb	In		-					***************************************				
Gelling Agent Gal/Lb												
Fric. Red Gal/Lb							- 10		1			
MISC. Gal/Lb	In	Total		0.0	Total	0.0						
Perfpac BallsQty		MAX		5,000 PSI		essures 1000	.					
Other		IVIAA		0,000101		Rates in B						
Other		MAX		8 BPM	AVG	6						
Other						Left in Pi						
Other		Feet		90'	Reason	SHOE JO	DINT					
				nt Data			1 1311	5- TV	La Tallación			
Stage Sacks Cement	M 4% Gel - 0.4% C-1	Additive	2.27	-0.5% C-41D	- 2 lh/ek Dha	leazor	6.7					
1 150 50/50 POZ PREMIU 2 100 Premium	0.4% C-12 - 0.1%		2-01	- 0.0 /8 0~411	Z IDISK FIRE	ioacai	5.2					
3 0 Premium	U.T/0 U-12 - U.1/0 V						0 0.0					
			nma									
Preflush 10 Typ		austic		Preflush:	BBI	20.00			GHTED SP.			
		,000 PSI		Load & Bkdn Excess /Retu		N/A N/A		Bbl-Gal Disp Bbl	N/A 205			
Act	ual TOC			Calc. TOC:	411 001	3,350	Actua	Disp.	204.00			
Average Bur	mp Plug PSI:	2,000		Final Circ.	PSI:	1,500	Disp:					
	Min 15 Mi	n		Cement Slur		60.0						
				Total Volume	e BBI	284.0	1					
		_										
AUGTOMED DEDDEOSTIT	TIVE											
CUSTOMER REPRESENTA	ATIVE		4		SIGNATURE							

JOB SUMMARY State COMPANY							1984		CKETOATE	10/13/12	
County State Commanche Kai	Claude Hallmark										
LEASE NAME		JOB TYPE		EMPLOYEE NAME							
EMP NAME	U Z-12	H Linei	Robert Burris								
Robert Burris	Fr	ank Reeves		Г				T			$\neg \neg \neg$
Jessie McClain											
Billy Taff											
Rocky Anthis											
Form. Name	_Type:			00	lad Out	IOn Leastie		lab C	Mankad	I I I I	
Packer Type ———	Set At	5,534	Date	Cal	led Out 10/13/2012	On Location 10/13/2			Started 0/13/2012	Jop Co	mpleted 13/2012
Bottom Hole Temp. 150	Press	ure	100.0					1.515		10	
Retainer Depth		Depth 9432	Time		11:30	15:00		;	20:10	2	1:24
Tools and Acc	cessorie Ity	Make Make			New/Used	Well [Size Gra	1.1	From I	То	IN4 All
	0 1	Weatherford	Casing		New/Osed	11.6	4 1/2	de	5084	9,432	Max. Allow
	0	reamonera	Liner T					+	5,065	5,084	
Centralizers	0		HWDP						3,682	5,065	
TOPTION	0		Drill Pip				3 1/2"		Surface	3,682	
TILL ID	0		Open F		<u> </u>		6 1/8"	+	Surface	9,432	Chatter
Cirrie Oldrig	0		Perfora		<u> </u>		0 1/0	+	Juliace	3,432	Shots/Ft.
Texas Pattern Guide Shoe	0		Perfora					\neg			
GOINGIN BUGNET	Ò		Perfora								
Mud Type WBM De	nsity	9.1 Lb/Gal	Hours O		ocation Hours	Operating Date	Hours Hours			tion of Job	
Disp. Fluid Fresh Water De	nsity	8.33 Lb/Gal	10/1		7.5	10/13	1.2	\neg	Liner		
Spacer type Gel BB	30	8.59									
Spacer type BBL.		%									
Acid Type Gal. Acid Type Gal.		-% 		\dashv				\dashv			
Surfactant Gal.	-	In						\neg			
NE Agent Gal.		_ln									
Fluid Loss Gal/Lb		ln	-	-				\dashv			
Gelling Agent Gal/Lb Fric. Red Gal/Lb		-ln		-			 	\dashv			
MISC Gal/Lb			Total		7.5	Total	1.2				
Perfpac Balls	Qty.		MAX		5000 PSI	AVG.	essures 876				
Other			IVIAA		3000131		Rates in E				
Other			MAX		6 BPM	AVG	4				
Other			F .		00		Left in P		-		
Other			Feet		88	Reason	SHUE J	OINI			
			C	ame	nt Data						
Stage Sacks Cement			Additive		n Data			-	W/Rq	. Yield	Lbs/Gal
1 450 50/50 Premium	Poz	(4%Gel)4% C12			.5% C-41P - 2 LI	b/Sk Pheno	seal		6.77	1.44	13.60
2 0 0									0.00	0.00	0.00
3 0 0									0.00	0.00	0.00
									-	_	
			Sun	nma	ry	***************************************					-
	Type:				Preflush:	BBI	30.0		Type:	15 P. Walter St. 10 St.	PACER
Breakdown	MAXIN		500 PSI		Load & Bkdn: Excess /Return		N/A N/A		Pad:Bbl Calc.Dis		N/A 112
	Actual	TOC	5,304		Calc. TOC:	וטטו	5,30	4	_ Calc.Dis		112.00
Average	Bump	Plug PSI:	1,300		Final Circ.	PSI:	750		Disp:Bb		
ISIP5 Min	10 Min	15 Mii	"		Cement Slurry: Total Volume	BBI	115. 257.4		_		
A						•	207.5	T			
CUSTOMER REPRESE	TATI	VE									
						SIGNATURE					

Directional	Measured	Sub-Sea	Vertical	True Vert	Northings (+)	Eastings (+)	Vert	DLS				
Survey Calculations	Depth (ft)	Incl. (deg)	Azim. (ft)	Depth (ft)	Southings (-) (ft)	Westings (-) (ft)	Section (ft)	deg/100' (deg)	FNL	FSL	FWL	FEL
SHL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	201	5102	4568	658
BHL	9432	89.80	181.60	5068.52	-4770.72	-92.74	4771.62	0.00	4972	330	4526	657 658
Miss Entry Top Perf	5218 5240	64.46 65.92	181.88 181.66	5009.08 5018.28	-569.20 -589.17	-10.51 -11.11	569.30 589.27	8.22 7.01	770 790	4533 4513	4564 4564	658
Bottom Perf	9318	88.95	181.30	5067.37	-4656.77	-89.84	4657.64	0.93	4858	444	4528	657
			X	Y							m	
Survey Points		r XY Coord	1717623	251158		Curface VV	X 1722189	Y 250926		ine slope	-0.006886 0.0196005	
		r XY Coord	1717567 1722851	245889 251122		Surface XY	1/22109	250926		_ine slope	-0.0140927	
		r XY Coord	1722747	245816						Charles of the state of the	0.0106282	
1	Measured	Sub-Sea	Vertical	True Vert	Northings (+)	Eastings (+)	Vert	DLS				
	Depth	Incl.	Azim.	Depth	Southings (-)	Westings (-)	Section	deg/100'	ENII T	FOL T	CVA/I	FEL
l	(ft) 0	(deg) 0.0	(ft) 0	(ft)	(ft) 0	(ft) 0	(ft)	(deg)	FNL 201	FSL 5102	FWL 4568	658
1	1236	0.90	192.30	1235.95	-9	-2	9.52	0.07	210	5093	4566	660
	1693	1.00	237.90	1692.89	-15	-6	15.23	0.16	216	5087	4562	664
	2150 2606	0.60 0.60	252.90 281.40	2149.85 2605.82	-18 -18	-12 -16	18.16 18.48	0.10 0.07	219 219	5084 5084	4557 4552	670 674
	3064	0.70	295.60	3063.79	-16	-21	16.89	0.04	217	5085	4547	679
	3521	0.30	340.30	3520.78	-14	-24	14.62	0.12	215	5088	4544	682
	3976 4098	0.00 0.30	137.60 62.00	3975.78 4097.77	-13 -13	-25 -24	13.50 13.35	0.07 0.25	214 214	5089 5089	4544 4544	683 682
	4131	0.20	57.30	4130.77	-13	-24	13.27	0.31	214	5089	4544	682
	4161	1.60	175.90	4160.77	-13	-24	13.66	5.68	214	5089	4544	682
	4191 4222	4.40 7.70	186.90 183.20	4190.73 4221.55	-15 -18	-24 -25	15.22 18.48	9.49 10.71	215 219	5087 5084	4544 4544	682 682
	4252	10.10	181.40	4251.19	-23	-25	23.12	8.05	223	5079	4544	682
	4283	10.90	180.80	4281.67	-28	-25	28.77	2.61	229	5074	4544	682
	4313 4344	12.30 14.30	178.80 176.40	4311.05 4341.22	-34 -41	-25 -25	34.80 41.91	4.86 6.69	235 242	5067 5060	4544 4544	682 682
	4374	16.80	175.70	4370.12	-49	-24	49.92	8.36	250	5052	4545	681
	4405	19.40	175.60	4399.58	-59	-23	59.50	8.39	260	5043	4546	680
	4435 4466	21.40 23.00	176.70 175.90	4427.70 4456.40	-69 -81	-23 -22	69.92 81.59	6.79 5.25	270 282	5032 5021	4547 4548	679 678
	4496	24.50	175.90	4483.86	-93	-21	93.62	5.00	294	5009	4549	677
	4527	25.80	177.10	4511.92	-106	-20	106.75	4.51	307	4995	4549	676
	4557 4588	26.50 27.20	176.70 177.60	4538.85 4566.51	-120 -134	-19 -19	119.93 133.90	2.41 2.61	320 334	4982 4968	4550 4551	675 674
	4618	28.60	177.40	4593.02	-148	-18	147.91	4.68	348	4954	4552	673
	4648	31.30	177.40	4619.01	-163	-17	162.85	9.00	363	4939	4553	672
	4679 4709	33.90 34.10	177.90 177.20	4645.13 4670.00	-179 -196	-17 -16	179.52 196.26	8.43 1.47	380 397	4923 4906	4554 4555	671 670
	4740	35.20	176.80	4695.50	-214	-15	213.84	3.62	414	4888	4556	669
	4770	37.00	177.10	4719.74	-231	-14	231.47	6.03	432	4871	4557	668
	4799 4829	39.10 41.90	176.70 176.90	4742.57 4765.38	-249 -269	-13 -12	249.29 268.72	7.29 9.34	450 469	4853 4833	4558 4559	666 665
Top of Tangent	4860	45.20	177.10	4787.85	-290	-11	290.02	10.66	490	4812	4561	663
@ 4890'	4890	47.90	178.40	4808.48	-312	-10	311.75	9.53	512	4790	4562	662 661
	4921 4951	48.20 47.90	178.90 179.10	4829.20 4849.26	-335 -357	-10 -9	334.79 357.08	1.54 1.12	535 558	4767 4745	4562 4563	660
	4982	48.00	179.10	4870.02	-380	-9	380.08	0.32	581	4722	4564	660
Btm of Tangent	5012	48.80	178.90	4889.94	-402	-8	402.50	2.71	603	4700 4676	4564 4565	659 658
@ 5073'	5043 5073	48.60 48.60	179.30 179.80	4910.40 4930.24	-426 -448	-8 -8	425.78 448.27	1.17 1.25	626 649	4654	4565	657
	5104	51.60	180.60	4950.12	-472	-8	472.04	9.88	673	4630	4566	657
	5134	55.60	181.30	4967.92	-496	-8	496.18	13.47	697	4606	4565 4565	657 657
	5164 5195	59.60 62.70	181.70 181.80	4983.99 4998.95	-521 -549	-9 -10	521.51 548.65	13.38 10.00	722 749	4581 4553	4564	657
	5225	65.00	181.90	5012.17	-575	-11	575.58	7.67	776	4527	4564	658
	5256	66.90	181.40	5024.80	-604	-12	603.88	6.30	804	4498	4563	658
	5286 5316	68.90 72.40	182.30 182.90	5036.09 5046.02	-632 -660	-12 -14	631.67 659.97	7.22 11.82	832 860	4470 4442	4563 4562	658 659
	5347	75.50	183.30	5054.59	-690	-15	689.73	10.08	890	4412	4560	660
	5377	78.10	183.70	5061.44	-719	-17	718.91	8.76	919	4383	4559	661 662
	5408 5438	79.90 82.20	183.40 183.30	5067.36 5072.03	-749 -779	-19 -21	749.31 778.92	5.88 7.67	950 979	4353 4323	4557 4556	664
	5469	85.90	183.30	5075.24	-809	-22	809.73	11.94	1010	4292	4555	665
	5483	87.00	182.90	5076.11	-823	-23	823.69	8.36	1024	4278	4554	665
	5579 5672	90.10 89.70	182.90 181.40	5078.53 5078.70	-919 -1012	-28 -32	919.60 1012.58	3.23 1.67	1120 1213	4183 4090	4550 4548	668 670
	5765	89.50	180.90	5079.35	-1105	-33	1105.58	0.58	1306	3997	4547	670
	5857	89.30	180.60	5080.31	-1197	-35	1197.57	0.39	1398	3905	4547	669
	5949 6041	88.90 90.00	179.90 180.60	5081.76 5082.64	-1289 -1381	-35 -35	1289.55 1381.53	0.88 1.42	1490 1582	3813 3721	4547 4548	668 667
	6134	90.50	180.80	5082.23	-1474	-36	1474.52	0.63	1675	3628	4548	665
	6226	90.80	180.30	5081.19	-1566	-37	1566.50	0.33	1767	3536	4548	664
	6318 6410	90.00 90.40	180.70 180.70	5080.55 5080.23	-1658 -1750	-37 -39	1658.49 1750.49	0.97 0.44	1859 1951	3444 3352	4549 4548	663 662
	0410	30.40	100.70	5000.23	-1750	-33	1100.40	0.44	1001	3032	7040	002

Measured	Sub-Sea	Vertical	True Vert	Northings (+)	Eastings (+)	Vert	DLS				
Depth	Incl.	Azim.	Depth	Southings (-)	Westings (-)	Section	deg/100'				
(ft)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	FNL	FSL	FWL	FEL
6502	90.00	180.30	5079.90	-1842	-39	1842.48	0.62	2043	3260	4549	661
6594	89.10	180.10	5080.63	-1934	-40	1934.47	1.00	2135	3168	4549	660
6686 6778	89.50 90.20	180.40 180.40	5081.75 5081.99	-2026 -2118	-40 -41	2026.45 2118.44	0.54 0.76	2227 2319	3076	4550 4550	659
6871	90.20	180.40	5081.99	-2118	-41 -41	2211.43	0.76	2412	2984 2891	4550	657 656
6968	90.10	180.70	5080.75	-2308	-42	2308.42	0.60	2509	2794	4551	655
7064	90.40	181.40	5080.33	-2404	-44	2404.42	0.79	2605	2698	4550	655
7160	89.60	181.80	5080.33	-2500	-47	2500.41	0.93	2701	2602	4548	656
7255	88.70	180.90	5081.74	-2595	-49	2595.40	1.34	2796	2507	4547	656
7351	88.00	180.40	5084.50	-2691	-50	2691.35	0.90	2892	2411	4547	656
7448	88.60	179.70	5087.38	-2788	-50	2788.29	0.95	2989	2314	4548	654
7543 7640	90.10 91.70	179.70 179.90	5088.46 5086.94	-2883 -2980	-50 -49	2883.25 2980.21	1.58	3084 3181	2219 2122	4549 4551	651
7735	92.70	179.90	5083.29	-3075	-49	3075.11	1.66 1.05	3276	2027	4552	649 647
7832	92.70	179.80	5078.72	-3172	-49	3171.98	0.10	3373	1930	4553	645
7927	91.60	180.60	5075.16	-3267	-49	3266.90	1.43	3467	1835	4554	643
8023	91.50	180.20	5072.56	-3363	-50	3362.85	0.43	3563	1739	4554	642
8119	90.60	181.90	5070.80	-3458	-52	3458.83	2.00	3659	1643	4554	642
8215	91.10	182.20	5069.38	-3554	-55	3554.81	0.61	3755	1547	4551	644
8310	90.90	182.20	5067.72	-3649	-59	3649.78	0.21	3850	1452	4548	645
8406 8502	90.90 90.50	181.70 181.40	5066.21	-3745	-62	3745.75	0.52	3946	1356	4546	647
8597	89.70	182.10	5065.04 5064.87	-3841 -3936	-65 -68	3841.74 3936.73	0.52 1.12	4042 4137	1260 1165	4545 4543	647 649
8693	89.70	181.90	5065.37	-4032	-71	4032.72	0.21	4233	1069	4540	650
8788	90.10	181.10	5065.54	-4127	-73	4127.72	0.94	4328	974	4539	651
8882	90.10	181.40	5065.38	-4221	-75	4221.71	0.32	4422	880	4538	651
8979	89.90	182.20	5065.38	-4318	-78	4318.71	0.85	4519	783	4536	652
9073	90.60	182.30	5064.97	-4412	-82	4412.69	0.75	4613	689	4533	654
9167	89.60	182.10	5064.80	-4506	-86	4506.67	1.09	4707	595	4531	656
9263 9358	88.60	181.30	5066.31	-4602	-89	4602.65	1.33	4803	499	4529	657
9382	89.20 89.80	181.30 181.60	5068.13 5068.34	-4697 -4721	-91 -91	4697.63 4721.62	0.63 2.80	4898 4922	404 380	4528 4527	657 657
9432	89.80	181.60	5068.52	-4771	-93	4771.62	0.00	4972	330	4527	657
		101100	0000.02		00	4771.02	0.00	201	5102	4568	658
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				0	0			201 201	5102 5102	4568 4568	658 658
				0	0			201	5102	4568	658
				0	0			201	5102	4568	658
				0	0			201	5102	4568	658
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				0	0			201	5102	4568	658
				0	0			201	5102	4568	658
				0	0			201	5102	4568	658



Tiffany Golay 01/10/013 10:28 am

Additional Fluid Mgmt Information: 560 bbls hauled to Weinett Disposal LLC, NW/4 Section 1079 Block 43, Lipscomb, TX, 10-0992 and 420 bbls hauled to Gray Mud Disposal, SW/4 15-24N-7W, Garfield, OK, 323003