

Confidentiality Requested:

Yes No

#### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1102202

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:	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:			
	Lease Name: Well #:			
Designate Type of Completion:	Field Name:			
New Well Re-Entry Workover	Producing Formation:			
☐ Oil ☐ WSW ☐ SWD ☐ SIOW	Elevation: Ground: Kelly Bushing:			
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW	Total Vertical Depth: Plug Back Total Depth:			
☐ OG ☐ GSW ☐ Temp. Abd.				
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet			
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?			
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet			
Operator:	If Alternate II completion, cement circulated from:			
Well Name:	feet depth to:w/sx cmt.			
Original Comp. Date: Original Total Depth:				
☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD	Drilling Fluid Management Plan			
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)			
	Chloride content: ppm Fluid volume: bbls			
Commingled Permit #:	Dewatering method used:			
Dual Completion Permit #:				
SWD Permit #:	Location of fluid disposal if hauled offsite:			
☐ ENHR         Permit #:           ☐ GSW         Permit #:	Operator Name:			
GSW Permit #:	Lease Name: License #:			
Could Date out Date Decembed TD Counted from D. 1	Quarter Sec TwpS. R			
Spud Date or Date Reached TD Completion Date or Recompletion Date  Recompletion Date				

#### **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 N	Name: _			Well #:		
Sec Twp	S. R	East	West	County	:					
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in pres o surface test, along	sures, whethe with final cha	er shut-in pre art(s). Attach	essure reac n extra shee	hed stati t if more	c level, hydrosta space is neede	itic pressures, bot d.	tom hole temp	erature, fluid re	ecovery,
Final Radioactivity Lo files must be submitte						ogs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electr	ronic log
Drill Stem Tests Taker (Attach Additional		Yes	☐ No				on (Top), Depth ar		Sampl	
Samples Sent to Geo	logical Survey	Yes	□No		Nam	е		Тор	Datum	1
Cores Taken         ☐ Yes         ☐ N           Electric Log Run         ☐ Yes         ☐ N										
List All E. Logs Run:										
				RECORD	Ne					
	2	1				ermediate, product		T	I	
Purpose of String	Size Hole Drilled		Casing n O.D.)	Weig Lbs. /		Setting Depth	Type of Cement	# Sacks Used	Type and Pe Additive	
			ADDITIONAL	CEMENTIN	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Type of	Cement	# Sacks	# Sacks Used Type and Percent Additives					
Perforate Protect Casing	100 20111111					_				
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, ski	ip questions 2 ar	nd 3)	
Does the volume of the t							= :	p question 3)		
Was the hydraulic fractur	ring treatment information	on submitted to	the chemical	disclosure re	gistry?	Yes	No (If No, fill	out Page Three	of the ACO-1)	
Shots Per Foot		ION RECORD Footage of Eac					cture, Shot, Cement			epth
	open,					,,				
TUBING RECORD:	Size:	Set At:		Packer A	t:	Liner Run:				
							Yes No			
Date of First, Resumed	Production, SWD or Ef	NHR.   F	Producing Met	hod: Pumpin	a	Gas Lift 0	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat			Gas-Oil Ratio	Gra	avity
	1									
	ON OF GAS:		en Hole	METHOD OF			mmingled	PRODUCTION	ON INTERVAL:	ļ
Vented Solo	I Used on Lease bmit ACO-18.)		en noie _	Perf.	(Submit		mmingled mit ACO-4)			

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Yazel 1-3H
Doc ID	1102202

# All Electric Logs Run

Spectral Density Dual Spaced Neutron Gamma Ray Memory Log
Array Induction Gamma Ray Memory Log
ML 5 in MD Final
Boresight

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Yazel 1-3H
Doc ID	1102202

# Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8655-9040	4225 bbls water, 36 bbls acid, 76M lbs sd, 4261 TLTR	
5	8175-8561	4345 bbls water, 36 bbls acid, 77M lbs sd, 8597 TLTR	
5	7696-8082	4116 bbls water, 36 bbls acid, 75M lbs sd, 12749 TLTR	
5	7217-7602	4217 bbls water, 36 bbls acid, 75M lbs sd, 17002 TLTR	
5	6738-7123	4212 bbls water, 36 bbls acid, 75M lbs sd, 21250 TLTR	
5	6258-6622	4328 bbls water, 36 bbls acid, 75M lbs sd, 25614 TLTR	
5	5779-6165	4235 bbls water, 36 bbls acid, 74M lbs sd, 30418 TLTR	
5	5300-5685	4204 bbls water, 36 bbls acid, 74M lbs sd, 34680 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Yazel 1-3H
Doc ID	1102202

## 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	106	Mid- Continent Conducto r, LLC Grout	10	none
Surface	12.25	9.63	36	873	O-Tex Lite Premium Plus/ Premium Plus (Class C)	620	(6% gel) 2% Calcium Chloride, 1/4 pps Cello- Flake, .5% C-41P
Intermedia te	8.75	7	26	5272	O-Tex 50/50 Poz Premium/ Premium	260	4% gel, .4% C-12, .1% C-37, .5% C- 41P, 2 lb/sk Phenoseal
Production Liner	6.12	4.5	11.6	9161	O-Tex 50/50 Premium Poz	460	(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

November 21, 2012

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

Re: ACO1 API 15-007-23965-01-00 Yazel 1-3H SE/4 Sec.03-35S-10W Barber 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



P.O. Box 1570

Woodward, OK 73802

Phone: (580)254-5400 Fax: (580)254-3242

Date	Invoice #		
11/2/2012	1543		

Invoice

Bill To	
SandRidge Energy, Inc.	
Attn: Purchasing Mgr.	
123 Robert S. Kerr Avenue	
Oklahoma City, OK. 73102	

Ordered By Ten		ns D	ate of Service	Lease Name/Legal Desc.		Drilling Rig		
	Parker	ker Net 45		11/2/2012 Yazel 1-3		H, Barber Cnty., KS	Unit 9	
Item Quantity						Description		
20" P. Mous 16" P. Cellar 6' X 6 Mud a Mud, Grout Grout Welde	e Hole ipe ' Hole ' Tinhorn and Water Water, & Trucking & Trucking Pump or & Materials emoval Plate		90 80 80 1 1 1 1 10 1 1	Drilled 90 ft. con Furnished 90 ft. con Furnished 80 ft. con Furnished 80 ft. con Furnished and set Furnished mud at Transport mud at Furnished 10 yard Furnished grout pr Furnished welder Labor & Equip. ft Furnished cover pr Furnished cover premits	of 20 inch conducts hole.  of 16 inch mouse hole.  of 16 inch mouse hole.  to 6x6 tinhorn.  and water.  did water to location of the comp.  and materials.  or dirt removal.  olates.  AFE    Well    Code  Amou  Co. M  Notes  Subto	on. vicking to location.  Number: 42 Name: 436 Int: 18306 Ian; Pon	50	
					Cales	I GA (0.070)	\$300.30	
						Total	\$18,300.50	

JOB SUMMARY									SOK 2093			11/09/12					
BARBER KANSAS dridge Exploration & Produc										CUSTOMER REP DWAYNE BURT							
LEASE NAME				IO, JOB TYPE						_	EMPLOYEE NAM	LOUIS ARNEY					
EMPHAME																	
LOUIS A	RNEY			DAN TEWELL			T	T				T	T				
JASON J	ONES					-		$\vdash$					十	-			
MARCOS	QUINT	ANA	$\vdash$			_		$\vdash$					十				
GALE WO													十				
Form. Na	ame _		Typ	e:													
Packer T	wno	-	Set	At 0		ate	Ca	lled 44	Out /9/2012	-	On Locatio 11/9/2	n .		Started 11/9/2012		ompleted /9/2012	
Bottom H	lole Tem	p. 80		ssure	١٦	ale	1	••	1012012		111312	210		113/2012	''	1312012	
Retainer I			Tota	al Depth 900	Time 7:30				:30		13:00		4	19:31	2	21:30	
		Tools and Acc	cesso		_						Well D	ata					
	ype and		2ty	Make					New/Use	d	Weight			From	To	Max. Allow	
Auto Fill			0	<u>IR</u>		asing	1			_	36#	9 5/8"	$\perp$	Surface		1,500	
Insert Flo			0	IR		ner											
Centralize			0	IR.		iner				_			$\rightarrow$				
Top Plug			0	IR IR		ubing						0					
HEAD			0 1	IR IR		rill Pi				_		46 4141	+				
Limit clam Weld-A	np		0	IR IR		pen l						12 1/4'	-	Surface	900	Shots/Ft.	
Texas Pa	ttorn Cu		0	IR IR		erfora				_			+				
Cement B			0	İR		erfora							+				
O STITUTE C	BUOKOL	Materials	_		H	ours	On	oca	ation	_	Operating I	Hours		Descrin	tion of Job		
Mud Type	e	WBM De	nsity	9 Lb/Gal	Γ.	Date Hours Date Hours											
Disp. Flui	id F	resh Water De	nsity			11/	9		8.5		11/9	2.0	$\neg$	Surface			
Spacer ty		sh Wate BBL.	10	8.33													
Spacer ty		BBL.															
Acid Type	e	Gal.		_% <u> </u>	-			_		- 1			$\dashv$				
Surfactan		Gal. Gal.			-		_	-					$\dashv$				
NE Agent		Gal.		in	-	-		$\vdash$					$\dashv$				
Fluid Loss	s —	Gal/Lb		ln									$\dashv$	-			
Gelling Ag	gent	Gal/Lb		ln									$\dashv$				
Fric. Red.		Gal/Lb		In													
MISC.		Gal/Lb		In	T	otal			8.5	- 6	Total	2.0					
Dorfnan D	Palla	-	- Otu		_					_							
Other	oans		QIV.		NA	AX		15	00 PSI			essures					
Other _					IVI	^^		1,0	00 731	_	AVG. Average F	200					
Other _					M	AX		6	BPM		AVG		31-101				
Other												Left in P	pe				
Other					Fe	eet			47'		Reason			Γ			
-								nt E	Data								
Stage Sa	acks	Cement	-		Ac	lditive	5							W/Rq	. Yield	Lbs/Gal	
	360 FEX	Lite Premium	Plus	65 (6% Gel) 2% Cal	cium	Chlor	ide -	1/4	pps Cello	)-F	lake5% C	-41P		10.88	1.84	12.70	
	160 Pr	emium Plus (C	lass	C) 1% Calcium Chl	oride	- 1/4p	ps C	ello	o-Flake	_				6.32	1.32	14.80	
3 "	100 Pr	emium Pius (C	lass	C) *2% Calcium Ch	loride	on s	ide t	o us	se if nece	SS	ary			*6.32	*1.32	*14.8	
	_													-			
						C				_							
Preflush			Туре			Sur	nma		fluch:		DDI F	40.0	5	7	P=. 1	101-1	
Breakdowi	'n L		MAX	IMUM	1.500	PSI			flush: d & Bkdn		BBI [ Gal - BBI	10.0 N/A		Type:		Water	
					NO/F				ess /Retu			23		Pad:Bbl Calc.Dis		N/A 64	
			Actu	al TOC	SURF	ACE		Cal	c. TOC:			SURFA		Actual D		63.00	
Average	C Mie			p Plug PSI:	85	0		Fina	al Circ.		PSI:	250		Disp:Bb			
ISIP	_5 Min.	-	10 M	lin15 M	iin				nent Slun			155.					
			_			-		1 Ota	al Volume	_	BBI	228.0	U				
				71				_		_							
0110-		. DEDE===					K	/	1							l	
CUST	OMER	REPRESE	VIA	TIVE _K/11	111	RL.	Si	13	4								
					1		/_				SIGNATURE						

	SOK	SOK 2112			11/15/12							
Barber	Kansas	OB SUMI COMPANY Sandridge Explor	100		tion		wayne	Buri	t			
LEASE NAME Yazel 3510	Well No. 1-3H	JOB TYPE Intermed	iate			EMPLOYEE NAME LOUIS ARNEY						
EMP WAKE												
LOUIS ARNEY	0											
MIKE CHALFANT												
VONTRAY WATKINS												
JAYSON												
Form. Name	Type:											
				Ca	lled Out	On Location			started	Job Co	mpleted	
Packer Type	Set At		Date		11/15/2012	11/15/	2012	1	1/15/2012	11/	15/2012	
	55 Press				0.00	10.00	. 1		40.44			
Retainer Depth		Depth 5292	Time		9:00	12:00			15:11	1 17	7:30	
	d Accessorie				New/Used	Well I			Fuene I	Τ.	IA4 All	
Type and Size	Qty	Make	Capina		New/Usea	26#	Size Gr		From	То	Max. Allow	
Auto Fill Tube	0	IR ID	Casing			20#	1	-	Surface		5,000	
Insert Float Val	1 0	IR IR	Liner			<b>-</b>	_	+				
Centralizers Top Plug	0	IR IR	Liner Tubina	_			0	-				
HEAD	0	IR IR	Drill Pi				14	$\dashv$		-		
Limit clamp	1 0	IR IR	Open I				8 3/4'	-	Surface	5,292	Shots/Ft.	
Weld-A	0	İR	Perfora				0 014	-	Juriace	0,232	Shois/Ft.	
Texas Pattern Guide Shoe		İR	Perfora					$\dashv$				
Cement Basket	0	İR	Perfora				<b>†</b>	+				
Mat	erials		Hours	On	Location	Operating	Hours		Descrip	tion of Job		
Mud Type WBM	Density	9 Lb/Gal	Date Hours Date Hours Intermediate									
Disp. Fluid Fresh Water	Density	8.33 Lb/Gal	11/1	5_	5.5	11/15 2.3 Intermediate						
Spacer type resh Wate B		8.33						_				
Spacer type Caustic B	BL. 10	% 8.40					-	-	-			
	al	-% 	_	_				-				
	al.	-ín		_			+	$\dashv$	-			
	al.	In						$\neg$	-			
	al/Lb	ln							•			
	al/Lb	ln										
	al/Lb	In								-		
MISCG	ial/Lb	_In	Total		5.5	Total	2.3					
Perfpac Balls						D.:				-		
Other			MAX		5,000 PSI	AVG.	essures 50	n				
Other			IVIAA		0,000 1 31	Average						
Other			MAX		8 BPM	AVG	5					
Other						Cemen	t Left in F	ipe		V.		
Other			Feet		90	Reason	SHOE J	OINT	•			
			C	eme	ent Data							
	ment		Additive						W/Rq	Yield	Lbs/Gal	
	PREMIUM	4% Gel - 0.4% C-1		2-37	-0.5% C-41P -	2 lb/sk Phe	noseal		6.77	1.44	13.60	
	mium	0.4% C-12 - 0.1%	C-37						5.20	1.18	15.60	
3 0	0								0.00	0.00	0.00	
			-									
Preflush 10	Time	C	Sur austic	nma	-	001	507	10	7-	MEIOU	TED 00	
Breakdown	Type:		,000 PSI	-	Preflush: Load & Bkdn:	BBI Cal BBI	30.0 N//		Type: Pad:Bbl		TED SP.	
Dicandown			NO/FULL		Excess /Retur		N/A		_ Pad.Bbi _ Calc.Dis		N/A 189	
	Actual	TOC			Calc. TOC:	., 55,	3,08		Actual D		188.00	
Average	Bump	Plug PSI:	1,400		Final Circ.	PSI:	80	0	Disp:Bb			
ISIP5 Min	10 Min	15 Mi	n		Cement Slurry		62.		1			
-					Total Volume	BBI	280.	00				
						, ,						
CUSTOMER REPRI	ESENTATI	ve/	)was	N	ne Bin	3/						
				1	- Comment	SIGNATURE						

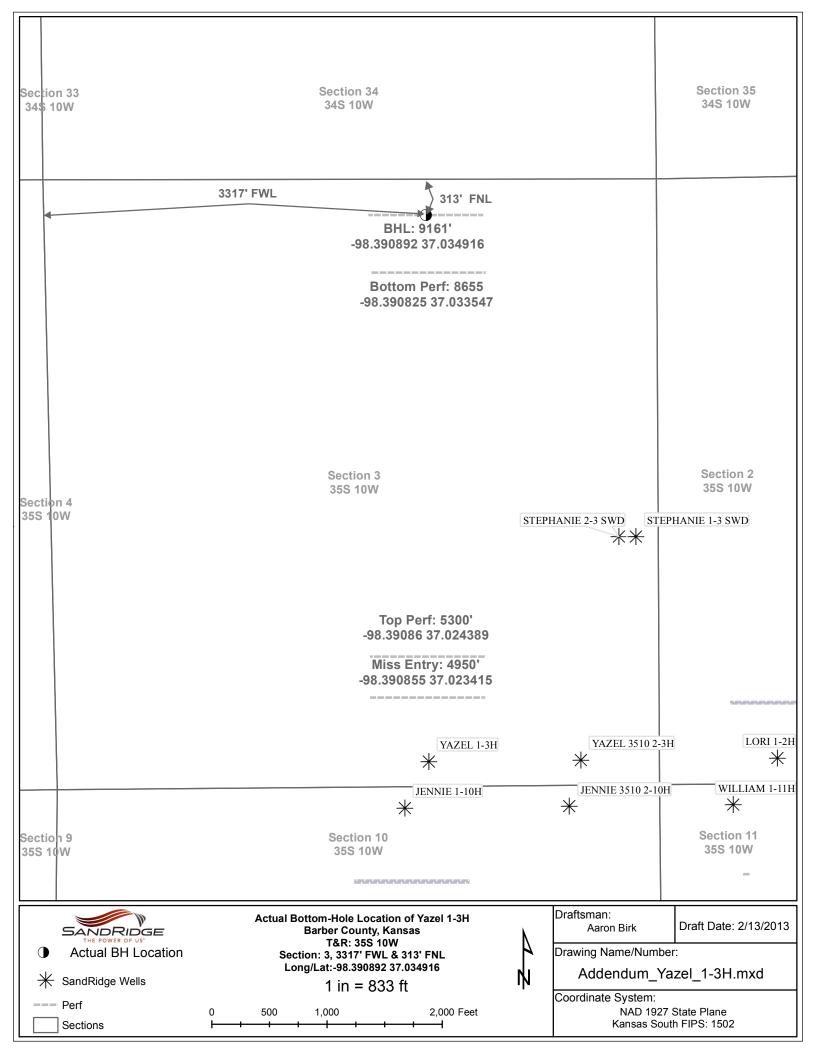
JOB SUMMARY								SOK	HCKET DAT	11/20/12					
	arber	State Kai	nsas	dridge Explor			du	c		Owayne	Bu	irt			
LEASE NAM	azel 3	510	Well No.	JOB TYPE Liner	r			Jest 100 100 100 100 100 100 100 100 100 10	EMPLOYEE NAM	Derek	Lei	wis			
EMP NAME												1410			
Derek L			0.0	00		T									
Jared G											$\Box$				
Rory Mo						T									
Emmit E			TL			L									
Form. N	Vame		Type:			_	_								
Packer			Set At		Date		lled 11/	Out /20/2012	On Location 11/20/2	on 2042		Started 11/20/20		Job Co	mpleted (20/2012
Bottom		emp. 150	Pressi		Date		• ••	20/20 12	11/20	2012	1	11/20/20	114	1.17.	20/20 12
Retaine		1	_Total [	Depth 0	Time		04	400	0800			1442		17	700
		Tools and Acc	cessorie	es					Well [	Data					
			Qty	Make				New/Used	1 1 1 1 1 1 1 1 1 1		rade	From	1	To	Max. Allow
Auto Fil			0 \	Weatherford	Casir				11.6	4 1/2					
Insert F			0		Liner						-				
Centrali Top Plu			0		HWD			<del>  </del>		0.4/20	-		-		
Top Plu HEAD	ıg		0		Drill F		_	<del>                                     </del>	-	3 1/2"	-				
Limit cla	-mn		0			Collars				6 1/8	<del>n  </del>	Curfac	-		
Weld-A			0			n Hole oration				0 170	+	Surfac	e	0	Shots/Ft.
Teyas F	Pattern		0			oration				<del> </del>	+		-		
Cement	Baske	t Julius Griss	0		Perfo	ration	ıs			-	-		+		-
		Materials	5		Hours	s On I	Loca	ation	Operating	Hours_		Des	cription	n of Job	
Mud Ty		WBM Det	nsity	9.1 Lb/Gal	Da	ate		Hours	Date	Hour		Line		I UI V	
Disp. FI		Fresh Water Der	nsity	8.33 Lb/Gal	11/	/20		9.0	11/20	3.0		Line	:r 		
Spacer		resh Wate BBL.	20	8.33											
Spacer		Caustic BBL.	10	% 8.40			<u> </u>				-				
Acid Ty		Gal. Gal.		-%	-		$\vdash$			-	-				
Surfacta		Gal.		In			-			-	-	-			
NE Age		Gal.		in							$\neg$		-		
Fluid Lo		Gal/Lb		In								•			
Gelling A		Gal/Lb		ln								•			
Fric. Re	.d.	Gal/Lb		_In											
MISC.		Gal/Lb		_ln	Total			9.0	Total	3.0					
Dorfnan	Delle	-	- Oh.						D.,						
Other	Balls		_ Qιγ.		MAX			5000	AVG.	essures					
					IVIMA			0000	Average	Pates in	RPI	A			
Other					MAX		6	BPM	AVG	Males III	Di is	п			
Other										t Left in F	Pipe				
Other					Feet			93	Reason			IT			
						Ceme	ent E	Data							
Stage		Cement			Additiv	ves							//Rq.	Yield	Lbs/Gal
1	460	50/50 Premium	Poz	(4%Gel)4% C12	21% C	37 - 0	.5%	C-41P - 21	Lb/Sk Pheno	seal			5.77	1.44	13.60
2	0	0											0.00	0.00	0.00
3	0	0										0 0	0.00	0.00	0.00
	$\overline{}$														
Preflush	. 1	30	Type:	C		umma		eflush:	DDI	30	.00	Tune		8.59#\$1	DACED
Breakdo		- 00	MAXIN		3,500 PSI			ad & Bkdn:		N/.		Type	e: :Bbl -G		N/A
Diodice					NO/FULL			cess /Retur		N/		Calc	Disp E	Rbl —	112
			Actual	TOC	4,697		Cal	lc. TOC:		. 4,69	97'	Actu	ial Disp		112.00
Average		0		Plug PSI:	1,820		Fina	al Circ.	PSI:	71		Disp			112.00
ISIP	5 M	in	10 Min	115 Mi	in			ment Slurry		118					
			$\overline{}$				100	al Volume	BBI	260	.00				
						/			1						
014						,	3	ace/	avage	_					
COS	STOM	ER REPRESEN	VITATI	VE		بلسي	26	WALL VO	SIGNATURE	-					
						_			SIGNATITIZE						

Survey Points	NW Corne	r XY Coord	2028615	134398			X	Y	North	Line slope	0.00843012	
			X	Υ							m	
Bottom Perf	9040	90.25	359.04	4762.59	4621.21	-22.99	4621.23	2.57	451	4822	3339	1999
Top Perf	5300	91.19	359.42	4829.91	884.04	-11.55	884.05	1.81	4188	1084	3344	1991
Miss Entry	4950	54.77	358.85	4749.34	552.00	-9.85	552.01	8.84	4520	752	3345	1990
BHL	9161	91.10	358.60	4760.82	4742.16	-25.67	4742.19	0.00	330	4943	3337	2001
SHL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5072	200	3354	1981
Calculations	(ft)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	FNL	FSL	FWL	FEL
Survey	Depth	Incl.	Azim.	Depth	Southings (-)	Westings (-)	Section	deg/100'				
Directional	Measured	Sub-Sea	Vertical	True Vert	Northings (+)	Eastings (+)	Vert	DLS				

| X Y | Morth Line slope | 0.00974695 | SE Corner XY Coord | 203959 | 129173 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope | 0.0017055 | West Line slope |

Γ	Measured	Sub-Sea	Vertical	True Vert	Northings (+)	Eastings (+)	Vert	DLS				
	Depth	Incl.	Azim.	Depth	Southings (-)	Westings (-)	Section	deg/100'				
Į	(ft)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	FNL	FSL 200	FWL 3354	FEL 1981
	0 972	0.0 0.30	0 29.10	972.00	0 2.22	0 1.24	0 2.22	0.03	5072 5070	203	3356	1980
	1434	0.40	48.30	1433.99	4.35	3.03	4.35	0.03	5068	205	3357	1978
	1910	0.40	46.50	1909.98	6.60	5.48	6.60	0.00	5066	207	3360	1975
	2385	0.40	77.30	2384.96	8.11	8.30	8.10	0.04	5064	208	3363	1972
	2860	0.60	53.40	2859.95	9.96	11.91	9.94	0.06	5062	210	3366	1969
	3334	1.00	31.60	3333.90	14.96	16.07	14.94	0.10 0.17	5058 5052	215 221	3370 3372	1965 1963
	3812 3907	0.60 1.90	338.10 338.70	3811.86 3906.83	20.83 22.76	17.32 16.56	20.81 22.74	1.37	5052	223	3371	1964
	3939	2.90	9.40	3938.81	24.05	16.50	24.04	4.98	5048	224	3371	1964
	3970	4.20	14.20	3969.75	25.93	16.91	25.91	4.30	5047	226	3371	1964
	4002	5.60	12.40	4001.63	28.59	17.53	28.57	4.40	5044	229	3372	1963
	4033	7.40	8.70	4032.43	32.04	18.16	32.02	5.96	5040	232	3373	1963
High DLS	4065	9.80	7.20	4064.07 4095.49	36.78 42.76	18.81 19.51	36.76 42.74	7.53 6.59	5036 5030	237 243	3373 3374	1962 1961
Please RIH at a speed	4097 4129	11.90 13.60	6.10 4.60	4126.70	49.79	20.16	49.77	5.41	5023	250	3375	1961
no greater than	4160	15.30	3.20	4156.72	57.51	20.68	57.49	5.60	5015	258	3375	1960
16.5' per min	4192	17.00	3.20	4187.46	66.40	21.17	66.38	5.31	5006	267	3376	1960
and hook up	4224	18.90	3.80	4217.90	76.24	21.78	76.22	5.97	4996	276	3376	1959
weight line	4256	21.10	2.90	4247.97	87.17	22.41	87.14	6.94	4985	287	3377	1958
in order to	4287	23.40	0.60	4276.66	98.90 112.22	22.76 22.71	98.87 112.19	7.93 7.78	4974 4960	299 312	3377 3377	1958 1958
see any dragging	4319 4350	25.80 29.00	359.00 358.40	4305.75 4333.27	126.48	22.38	126.45	10.36	4946	327	3377	1958
aragging	4382	31.90	359.10	4360.85	142.69	22.03	142.66	9.13	4930	343	3377	1959
	4414	34.90	359.80	4387.57	160.30	21.86	160.28	9.45	4912	360	3377	1959
	4445	37.80	0.40	4412.53	178.67	21.90	178.65	9.42	4894	379	3377	1959
	4478	40.70	359.40	4438.08	199.55	21.86	199.53	8.99	4873	400	3377	1959
	4509 4540	43.10 44.80	357.80 356.10	4461.16 4483.47	220.24 241.72	21.35 20.20	220.22 241.70	8.47 6.67	4852 4831	420 442	3376 3375	1959 1960
	4572	46.60	355.10	4505.82	264.56	18.44	264.54	6.05	4808	465	3373	1962
Top of Tangent	4635	50.10	354.60	4547.68	311.43	14.21	311.42	5.59	4761	512	3369	1966
@ 4,638'	4699	50.30	353.90	4588.65	360.36	9.28	360.35	0.90	4712	561	3364	1971
	4762	49.50	353.00	4629.23	408.23	3.78	408.23	1.68	4664	609	3359	1977
Btm of Tangent	4825 4857	48.40	352.50 353.80	4670.60	455.36 479.34	-2.21 -5.09	455.36 479.34	1.85 4.84	4617 4593	656 680	3353 3350	1982 1985
@ 4,838'	4889	49.60 50.20	355.00	4691.60 4712.21	503.70	-7.48	503.70	3.43	4569	704	3348	1988
	4921	52.50	357.40	4732.20	528.63	-9.12	528.64	9.27	4544	729	3346	1989
	4953	55.00	359.00	4751.12	554.42	-9.93	554.43	8.79	4518	755	3345	1990
	4984	58.20	0.10	4768.18	580.29	-10.13	580.30	10.74	4492	781	3345	1990
	5016	61.50	0.30	4784.25	607.96	-10.03	607.97	10.33	4464 4436	808 837	3345 3346	1990 1990
	5048 5079	65.50 70.90	0.30 360.00	4798.53 4810.04	636.59 665.37	-9.88 -9.80	636.60 665.38	12.50 17.44	4407	866	3346	1990
	5111	75.80	359.60	4819.20	696.01	-9.91	696.02	15.36	4376	896	3346	1990
	5143	80.70	358.80	4825.72	727.33	-10.35	727.34	15.51	4345	928	3345	1990
	5174	85.30	359.70	4829.49	758.09	-10.75	758.10	15.12	4314	959	3345	1991
	5206	89.60	359.60	4830.92	790.05	-10.95	790.06	13.44	4282	990	3345	1991
	5244 5325	90.50 91.50	359.90 359.20	4830.88 4829.47	828.05 909.03	-11.11 -11.75	828.06 909.04	2.50 1.51	4244 4163	1028 1109	3345 3344	1991 1992
	5356	91.50	359.20	4829.47	940.02	-11.75	940.03	0.97	4132	1140	3344	1992
	5449	91.50	358.30	4826.22	1032.96	-14.54	1032.97	0.64	4039	1233	3342	1994
	5541	92.00	359.60	4823.41	1124.90	-16.22	1124.91	1.51	3947	1325	3340	1996
	5635	91.50	1.40	4820.54	1218.84	-15.40	1218.86	1.99	3853	1419	3341	1995
	5727	91.80	1.20	4817.89	1310.78	-13.31	1310.80	0.39	3761	1511	3343 3345	1993 1991
	5819 5911	92.00 92.50	0.60 0.30	4814.84 4811.23	1402.72 1494.65	-11.87 -11.15	1402.73 1494.66	0.69 0.63	3670 3578	1603 1695	3346	1990
	6004	91.00	1.20	4808.39	1587.59	-9.93	1587.60	1.88	3485	1788	3347	1989
	6095	91.10	1.10	4806.72	1678.56	-8.11	1678.56	0.16	3394	1879	3349	1987
	6188	90.10	0.10	4805.75	1771.54	-7.13	1771.55	1.52	3301	1972	3350	1986
	6281	90.90	0.90	4804.94	1864.54	-6.32	1864.54	1.22	3208	2065	3351	1985
	6379 6475	89.70 92.90	0.70 359.90	4804.43 4802.25	1962.52 2058.48	-4.95 -4.45	1962.53 2058.49	1.24 3.44	3110 3014	2163 2259	3353 3353	1984 1983
	6570	92.90	359.90	4802.25	2153.33	-4.45 -4.61	2153.33	0.84	2919	2354	3353	1983
	6665	92.20	359.10	4791.89	2248.19	-5.44	2248.20	1.79	2824	2449	3353	1984
	6759	90.90	358.70	4789.35	2342.14	-7.25	2342.14	1.45	2730	2543	3351	1985
	6854	91.20	358.30	4787.61	2437.09	-9.73	2437.10	0.53	2635	2637	3349	1988
	6951	89.60	359.30	4786.93	2534.06	-11.76	2534.07	1.95	2538	2734	3347	1990
	7046 7142	89.80 88.90	359.80 0.70	4787.43 4788.52	2629.06 2725.05	-12.51 -12.09	2629.07 2725.06	0.57 1.33	2443 2347	2829 2925	3346 3347	1990 1990
	7237	92.10	2.10	4787.69	2820.00	-9.77	2820.01	3.68	2252	3020	3349	1987
	100000			/ See String Comment	market something							

	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
	7332	92.90	2.10	4783.54	2914.85	-6.29	2914.85	0.84	2157	3115	3353	1984
	7426	90.90	1.90	4780.43	3008.73	-3.02	3008.73	2.14	2064	3209	3357	1980
	7521	91.00	3.50	4778.85	3103.61	1.46	3103.61	1.69	1969	3304	3361	1976
	7616	91.60	3.20	4776.70	3198.42	7.01	3198.41	0.71	1874	3399	3367	1970
	7711	92.20	2.10	4773.55	3293.27	11.40	3293.25	1.32	1779	3493	3371	1966
	7807	91.50	0.40	4770.45	3389.19	13.49	3389.18	1.91	1683	3589	3374	1963
	7902	91.20	358.70	4768.21	3484.16	12.75	3484.14	1.82	1588	3684	3373	1964
	7997	91.80	359.10	4765.72	3579.11	10.92	3579.09	0.76	1493	3779	3371	1966
	8092	91.00	358.40	4763.40	3674.06	8.85	3674.04	1.12	1398	3874	3370	1968
	8187	93.30	358.70	4759.84	3768.95	6.45	3768.94	2.44	1303	3969	3367	1970
	8283	91.30	358.80	4755.98	3864.85	4.36	3864.84	2.09	1208	4065	3365	1972
	8378	89.10	358.50	4755.65	3959.81	2.12	3959.81	2.34	1113	4160	3363	1974
	8473	88.80	358.40	4757.39	4054.76	-0.45	4054.76	0.33	1018	4255	3361	1977
	8568	90.60	359.10	4757.89	4149.73	-2.52	4149.73	2.03	923	4350	3359	1979
	8662	89.70	357.40	4757.65	4243.69	-5.39	4243.69	2.05	829	4444	3356	1981
	8758	89.80	357.30	4758.06	4339.58	-9.83	4339.59	0.15	733	4540	3352	1986
	8854	88.40	356.70	4759.57	4435.44	-14.86	4435.45	1.59	637	4636	3347	1991
	8948	88.80	357.10	4761.87	4529.27	-19.94	4529.29	0.60	543	4730	3342	1996
	9043	90.30	359.10	4762.61	4624.21	-23.09	4624.23	2.63	448	4825	3339	1999
	9111	91.10	358.60	4761.78	4692.19	-24.45	4692.21	1.39	380	4893	3338	2000
TD	9161	91.10	358.60	4760,82	4742.16	-25.67	4742.19	0.00	330	4943	3337	2001



### Remarks

Tiffany Golay am

Fluid Mgmt: 13,260 bbls soil farmed by Mudslingers LLC. 7-27N-11W and 29-28N-11W

Tiffany Golay 02/04/013 02:10 TVD= 4,760' pm

Tiffany Golay pm

02/04/013 02:09 conductor weight= 106.5 lbs/ft