

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1104480

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:			Sec	TwpS. R	East West
Address 2:			F6	eet from North /	South Line of Section
City:	State: Z	ip:+	Fe	eet from East /	West Line of Section
Contact Person:			Footages Calculated from I	Nearest Outside Section C	Corner:
Phone: ()			□ NE □ NW	V □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:	W	/ell #:
	e-Entry	Workover	Field Name:		
	_		Producing Formation:		
☐ Oil ☐ WSW ☐ D&A	☐ SWD	∐ SIOW □ SIGW	Elevation: Ground:	Kelly Bushing:	:
	GSW	Temp. Abd.	Total Vertical Depth:	Plug Back Total C	Depth:
CM (Coal Bed Methane)	dow	Temp. Abd.	Amount of Surface Pipe Se	et and Cemented at:	Feet
☐ Cathodic ☐ Other (Co	ore, Expl., etc.):		Multiple Stage Cementing	Collar Used? Yes	No
If Workover/Re-entry: Old Well I			If yes, show depth set:		Feet
Operator:			If Alternate II completion, c	cement circulated from:	
Well Name:			feet depth to:	w/	sx cmt.
Original Comp. Date:					
Deepening Re-perf	•	NHR Conv. to SWD	Drilling Fluid Managemer	nt Plan	
☐ Plug Back	Conv. to G		(Data must be collected from the		
Commingled	Pormit #:		Chloride content:	ppm Fluid volume	e: bbls
Dual Completion			Dewatering method used: _		
SWD			Location of fluid disposal if	hauled offsite	
☐ ENHR			1		
GSW	Permit #:		Operator Name:		
_ _			Lease Name:	License #:_	
Spud Date or Date R	eached TD	Completion Date or	Quarter Sec	TwpS. R	East _ West
Recompletion Date		Recompletion Date	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	SandRidge Exploration and Production LLC
Well Name	Lori 3510 3-2H
Doc ID	1104480

All Electric Logs Run

Boresight	
Resistivity	
Nuclear	
Final Mud Log	

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Operator	SandRidge Exploration and Production LLC
Well Name	Lori 3510 3-2H
Doc ID	1104480

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	11796-12128	4290 bbls of water, 36 bbls acid, 75M lbs sand, 4326 TLTR	
5	11130-11571	4273 bbls of water, 36 bbls acid, 75M lbs sand, 8879 TLTR	
5	10689-11031	4276 bbls of water, 36 bbls acid, 75M lbs sand, 13401 TLTR	
5	10142-10582	1138 bbls of water, 36 bbls acid, 76M lbs sand, 18107 TLTR	
5	9477-9977	4267 bbls of water, 36 bbls acid, 76M lbs sand, 22611 TLTR	
5	8928-9381	4250 bbls of water, 36 bbls acid, 75M lbs sand, 27099 TLTR	
5	8384-8787	4221 bbls of water, 36 bbls acid, 75M lbs sand, 31532 TLTR	
5	7902-8300	4302 bbls of water, 36 bbls acid, 75M lbs sand, 36037 TLTR	
5	7311-7723	4224 bbls of water, 36 bbls acid, 75M lbs sand, 40419 TLTR	
5	6693-7149	4180 bbls of water, 36 bbls acid, 75M lbs sand, 44807 TLTR	

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Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	6245-6544	4188 bbls of water, 36 bbls acid, 74 lbs sand, 49574 TLTR	
5	5799-6097	3862 bbls of water, 36 bbls acid, 74M lbs sand, 53531 TLTR	
5	5276-5712	4279 bbls of water, 36 bbls acid, 75M lbs sand, 57885 TLTR	

Form	ACO1 - Well Completion
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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 Conductor grout	10	none
Surface	12.25	9.63	36	920	O-Tex Lite Premium Plus 65/ Premium Plus (Class C0	520	(6% gel) 2% Calcium Chloride, 1/4 pps Cello- Flake, .5% C-41P
Intermedia te	8.75	7	26	5298	50/50 Poz Premium/ Premium	265	4% Gel, .4% C-12, .1% C-37, .5% C- 41P, 2 lb/sk Phenoseal
Production Liner	6.12	4.5	11.6	9999	50/50 Premium Poz	560	(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

December 11, 2012

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

Re: ACO1 API 15-077-23969-01-00 Lori 3510 3-2H Sec.-S-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

Oklahoma City, OK. 73102

Ordered By

Date	Invoice #	
11/21/2012	1570	

Drilling Rig

\$16,940.00

Invoice

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

Terms

	-				3							
	Parker	Net 45		11/21/2012	1/21/2012 Lori 3510 3-2H, Barber Cnty, KS Unit 9							
	Item	Quantity			Description							
20" P Mous 16" P Cellar 6' X 6 Mud a Trans Grout Grout Welde Dirt R	e Hole ipe Hole Tinhorn and Water port Truck - Conductor & Trucking Pump er & Materials Lemoval		90 80 80 1 1 1 1 10 1 1 1	Drilled 80 ft. mo Furnished 80 ft. of Drilled 6' X 6' ce Furnished and se Furnished mud a Transport mud ar Furnished grout of Furnished welder	of 20 inch conductor pipe use hole of 16 inch mouse hole pipe llar hole t 6' X 6' tinhorn and water and water to location comp and trucking to location comp and materials and equipment for dirt removal	710 2 011						
					Subtotal	\$16,940.00						
					Sales Tax (0.0%)	\$0.0						

Date of Service

Lease Name/Legal Desc.

Total

	JOB SUMMARY								SOK 2156			11/26/12		
COUNTY	COMPANY						CUSTOMER REP			11120112				
Barber	r Kai	isas		Sandridge Exploration & Production				Ron Savage						
LEASE NAME Lori 3	3510	Wel N 3-2H		Surface			EMPLOYEE NAME LOUIS ARNEY							
EMP NAME									LUUIS A	IKIM				
LOUIS ARNE)		T	T			T	T				
JASON JONE		П			\top					+				
MARCOS QU														
GALE WOMA	- Allendaria de la companya della companya della companya de la companya della co													
Form. Name		Турє	e:		-									
Packer Type	•	Set 7	At 0	Date	Ca	alled	Out 26/2012	On Location 11/26/2			tarted /26/2012	Job Co	ompleted	
Bottom Hole	Temp. 80		sure	Date	1	• • • • •	20/2012	11/20/2	2012		1/20/20 12	111	26/2012	
Retainer Dep			Depth 950'	Time		07	00	1200		1	14:30	1	6:30	
Tuno	Tools and Acc							Well [
Auto Fill Tube		ty	Make IR	Cacin	-		New/Used New	Weight 36#	Size Gra		From	То	Max. Allow	
Insert Float V		1	IR	Casing Liner	4	_	IVEW	36#	9 5/8	+	Surface		1,500	
Centralizers			İR	Liner					_	+			_	
Top Plug)	IR	Tubing	q				0	+				
HEAD)	IR	Drill P										
Limit clamp Weld-A		} +	IR IR	Open					12 1/4"		Surface	950'	Shots/Ft.	
Texas Pattern			IR IR	Perfor Perfor						+				
Cement Bask	et (İR	Perfor	ation	ns				+				
Marie Trees	Materials WBM Der			Hours	On	Loca	tion	Operating	Hours		Descrip	tion of Job		
Mud Type Disp. Fluid	Fresh Water Der	sity_	9 Lb/Gal 8.33 Lb/Gal	Dat 11/2			lours	Date	Hours	\exists	Surface			
Spacer type	resh Wate BBL.	20		11/2	20	\vdash	4.5	11/26	2.0	-				
Spacer type	BBL.					\vdash				\dashv				
Acid Type Acid Type	Gal.		_%											
Surfactant	Gal. Gal.		_%	_		\vdash				-				
NE Agent	Gal.		ln			\vdash				\dashv				
Fluid Loss	Gal/Lb		In							\exists				
Gelling Agent Fric. Red.			_ln											
MISC.	Gal/Lb		_In	Total		-	4.5	Total	2.0	-				
	-			rotar		_	7.0	Iotal	2.0	_				
Perfpac Balls		Qty.		ar telephone				Pre	essures					
Other ——				MAX		1	,500	AVG.	150					
Other				MAX		R	врм	Average I	Rates in B	PM				
Other				141/1/	Cement Left in Pipe									
Other				Feet		47	7 FT		SHOE JO					
Stage Sacks	Cement		T	Additive		ent D	ata				T			
1 360	TEX Lite Premium	Plus 6	65 (6% Gel) 2% Cald	ium Chlo	ride	- 1/Ar	ons Cello-F	Flake - 5% C	-41P		W/Rq.		Lbs/Gal 12.70	
2 160	Premium Plus (CI	ass C) 2% Calcium Chlo	ride - 1/4	ops (Cello	-Flake	Take576 O	-411		6.32	1.32	14.80	
3 0	0									0		0.00	0.00	
				-										
				_										
Preflush		Гуре:		Sui	mma		lush:	вы	10.00		1	F	141-1	
Breakdown		IXAN	MUM					Gal - BBI	N/A		Type: Pad:Bbl	Fresh -Gal	N/A	
		ost F	Returns-N			Exce	ess /Returi		36		_Calc.Dis	p Bbl 6	7.71BBLS	
Average		actua Bumn	I TOC Plug PSI:	800		Calc	i. TOC: l Circ.	PSI:	Surfac 275	e	Actual D	isp. 6	7.71BBLS	
		O Mi					ent Slurry		155.3BE	ILS	ומם.מפוט			
							l Volume	BBI	#VALU	E!				
		L						/	/					
011075	IPD DEFE					/	1/	1	. ~					
CUSTON	IER REPRESEN	TAT	IVE		_/		10	nda	Vaz					
								SIGNATURE						

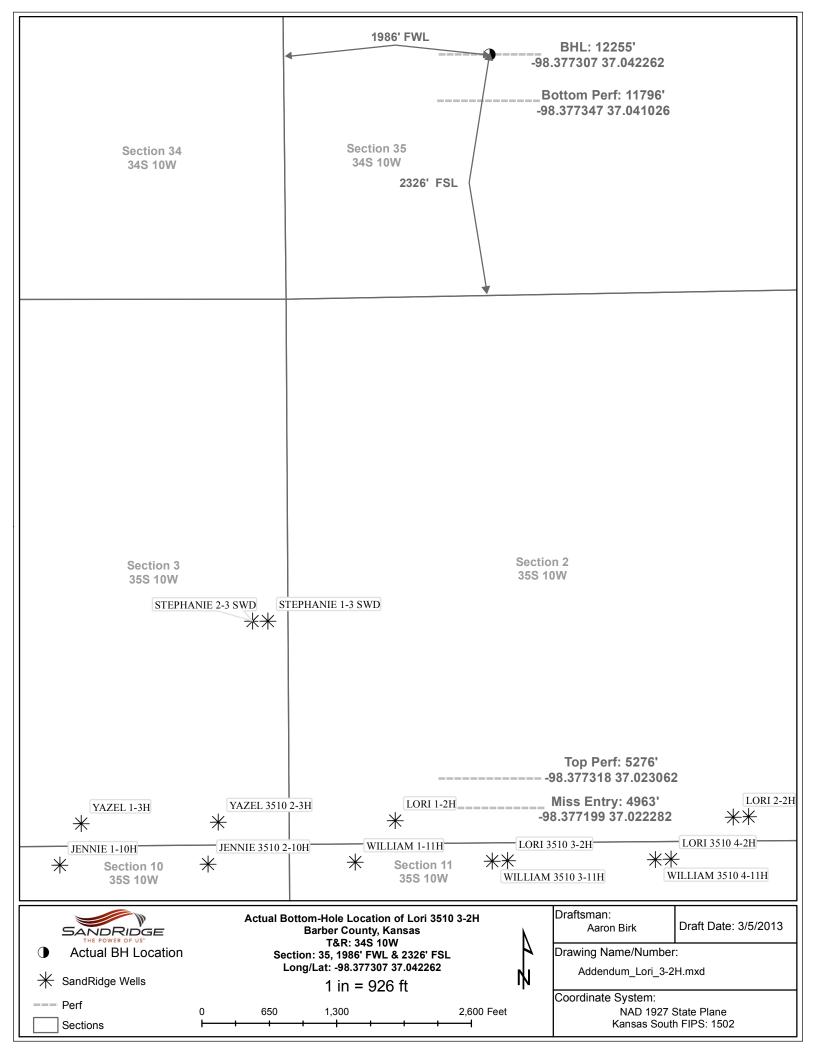
				IOD CLIM	BAAD	\ /			PROJECTNOMB		T	TICKET DATE		
COUNTY	,	51	ale	JOB SUM	MAK	<u>Y</u> _			SOK 2178 12/01/12					
LEASEN	Barber		Kansas		oration & Pr	oduc	tion		Ron Savage					
	Lori 3	510	Well 1 3-2F		Intermediate				Billy Taff					
EMP NAM	Œ				aidto				L DINY FAIT					
Billy T				Kevin Johnson		T	T				T			
	Brock													
	ce Berry													
	Settlem													
Form.	Name	•	Тур	e:		10								
Packe	r Type		Set	At 3,897	Date	Cal	12/	Out 1/2012	On Location 12/1/2			Started 12/1/2012		ompleted
	n Hole T	emp. 15		ssure	Date	1	12.1	1/2012	12/1/2	012		12/1/2012	12	/1/2012
Retain	er Depti	h	Tota	al Depth 5308	Time		7:0	00am	10:00	am		1:00pm	3:	:00pm
	7	Tools and	Accesso	ries					Well [
	ill Tube	nd Size	Qty 0	Make	Carina			New/Used	Weight		rade	From	То	Max. Allow
	Float Va		0	IR IR	Casing		-		26#	7"	-	Surface		5,000
Centra			0	İR	Liner		-							
Top Pl			0	İR	Tubing	1				0	-			
HEAD			0	İR	Drill Pi					-	\dashv			
Limit c	lamp		0	IR	Open I					8 3/4	"	Surface	5,308	Shots/Ft.
Weld-			0	IR	Perfora	ation	s							Stiots/14.
		Guide Shoe	0	IR	Perfora									
Cemer	nt Baske	Mater	0 into	IR	Perfora			A!	0					
Mud T	vpe	WBM	Density	9 Lb/Gal	Hours Date	On I	oca	lours	Operating Date	Hours Hour		Descrip	tion of Job	
Disp. F		Fresh Water	Density		12/			5.0	12/1	2.0	5	Interme	diate	
Space	r type	resh Wate BBI	L. 20								\neg			
Space	r type	Caustic BBI	L10											
Acid I	Acid Type Gal. %													
Surfac	id Type Gal. % In					-								
NE Ag		Gal		In							\dashv			
Fluid L	oss	Gal		In —		_					-			
Gelling	Agent	Gal		In							\neg			
Fric. R MISC.			/Lb			\Box								
			/Lb	In	Total	L		5.0	Total	2.0				
Perfpa	c Balls		Qty.						Pre	essures				
Other					MAX		5,00	00 PSI	AVG.	40	0			
									Average I					
Other Other					MAX		81	BPM	AVG	5				
Other					C			0.4	Cement			_		
Other					Feet			81	Reason	SHOE	IOIN	I		
					C	amai	nt Da	ata						
Stage	Sacks	Ceme			Additive	S						W/Rq.	. Yield	Lbs/Gal
1	165	50/50 POZ P	REMIUM		-12 - 0.1% C	2-37	- 0.5	% C-41P - 2	lb/sk Phen	oseal		6.77	1.44	13.60
2	100	Premi	um	0.4% C-12 - 0.1%	C-37		7.7					5.20	1.18	15.60
3	0	0										0.00	0.00	0.00
					Cum									
Preflus	h I	10	Туре		Caustic	nma		lush:	вві і	30.0	10	Tuna	MEICH	TED CD
Breakd	own				5,000 PSI			l & Bkdn:		N//		Type: Pad:Bbl	WEIGH	N/A
					NO/FULL		Exce	ess /Return		N/A	4	Calc.Dis		200
Average	ъ .			al TOC o Plug PSI:	2,240 1,000			. TOC:	DOI: -	2,24		Actual D	isp.	200.00
ISIP	5 N	lin.	10 M					Circ. ent Slurry:	PSI:	1,00		¬Disp:Bbi		200.00
				1310				Volume		293.				
									1		Ī			
					,	Care and	- (1					
CU	STOM	ER REPRES	ENTAT	IVE	ſ.		,	MA	/nin	ec.				
							1	Cura.	SIGNATURE	1				

JOB S	SOK 2210 12/11/12									
COUNTY SILIE COMPANY		CUSTOMER REP								
Barber Kansas dridge E	Exploration & Produc	Dwayne Burt								
Lori 3510 3-2H	Liner	Robert	Burris							
EMP NAME										
Robert Burris 0.00										
Wesley Truex Dustin Odom										
Rocky Anthis										
Form. NameType:										
	Called Out		Job Started	Job Co	mpleted					
Packer Type Set At 5,290 Bottom Hole Temp, 150 Pressure	Date 12/11/2012	12/11/2012	12/11/2012	12/	11/2012					
Bottom Hole Temp. 150 Pressure Retainer Depth Total Depth 1	2255 Time 15:00	16:30	21:01	24	:30					
Tools and Accessories	Time 10.00	Well Data	21.01							
Type and Size Qty Make	New/Used		ade From	To	Max. Allow					
Auto Fill Tube 0 Weatherf		11.6 4 1/2	4815	12,255						
Insert Float Val 0 Centralizers 0	Liner Tool		2.450	1016						
Top Plug 0	HWDP Drill Pipe	3 1/2"	3,460 Surface	4,815 3,460						
HEAD 0	Drill Collars	0 112	Juliace	3,400						
Limit clamp 0	Open Hole	6 1/8"	Surface	12,255	Shots/Ft.					
Weld-A 0	Perforations									
Texas Pattern Guide Shoe 0 Cement Basket 0	Perforations									
Materiale	Perforations Hours On Location	Operating Hours		on of Joh						
Mud Type WBM Density 9.1 LI	o/Gal Date Hours	Date Hours	Liner	011 01 000						
	o/Gal 12/11 8.7	12/11 2.8								
Spacer type BBI	,,,									
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 Gal/Lb In	Total 8.7	Total 2.8								
MISC Gal/Lb In	10tai	Total 2.8								
Perfpac BallsQty.		Pressures								
Other	MAX 5000 PSI	MAX 5000 PSI AVG. 975								
OtherOther	MAX 6 BPM	Average Rates in I								
Other	WWX SSI III	Cement Left in P								
Other	Feet 94	Reason SHOE J								
Stage Sacks Cement	Cement Data Additives		LAME	1						
	.4% C121% C37 - 0.5% C-41P - 2 I	h/Sk Phenoseal	W/Rq. 6.77	Yield 1.44	Lbs/Gal 13.60					
2 0 0		EDIOR FILLIOSCUI	0 0.00	0.00	0.00					
3 0 0			0 0.00	0.00	0.00					
	0									
Preflush Type:	Summary Preflush:	BBI 30.0	Type:	8.59#SF	PACER					
BreakdownMAXIMUM	5000 PSI Load & Bkdn:	Gal - BBI N//	Pad:Bbl -	Gal	N/A					
Lost Returns-N Actual TOC	NO/FULL Excess /Retur		Calc.Disp	Bbl	158					
AverageActual TOC AverageBump Plug PSI:	4,697' Calc. TOC: 1,775 Final Circ.	PSI: 4,69		SD.	156.00 134.00					
Average Bump Plug PSI: 10 Min	15 Min Cement Slurn	: BBI 144	.0							
	Total Volume	BBI 330.	00							
CUSTOMED DEDDESCRITATIVE										
CUSTOMER REPRESENTATIVE		SIGNATURE								

Directional	Measured	Sub-Sea	Vertical	True Vert	Northings (+)	Eastings (+)	Vert	DLS				
Survey	Depth	Incl.	Azim.	Depth	Southings (-)	Westings (-)	Section	deg/100'				
Calculations	(ft)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	FNL	FSL	FWL	FEL
SHL	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5474	-200	2132	3205
BHL	12255	93.80	1.60	4736.02	7782.17	-175.88	7783.10	0.00	-2310	7584	1965	3379
Miss Entry	4963	62.34	347.09	4750.57	511.84	-136.53	512.67	8.39	4961	313	1996	3341
Top Perf	5310	89.63	353.66	4837.00	841.09	-175.23	842.14	6.91	4631	643	1958	3380
Bottom Perf	12140	93.06	1.32	4743.03	7667.43	-178.86	7668.38	1.21	-2195	7469	1962	3382

1	Measured	Sub-Sea	Vertical	True Vert	Northings (+)	Factings (1)	Vert	DLS				
	Depth	Incl.	Azim.	Depth	Southings (+)	Eastings (+) Westings (-)	Section	deg/100'				
	(ft)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	FNL	FSL	FWL	FEL
	0	0.0	0	0	0	0	0	0	5474	-200	2132	3205
	970	0.40	256.80	969.99	-1	-3	-0.75	0.04	5475	-201	2128	3208
	1433	0.60 0.40	272.00	1432.97	-1 1	-7 -10	-1.01 0.69	0.05	5475 5474	-201 -199	2125 2122	3212 3215
	1910 2387	0.40	344.20 84.20	1909.96 2386.95	2	-10	2.50	0.13 0.15	5474	-199	2122	3213
	2864	0.60	164.20	2863.93	0	-6	0.29	0.15	5474	-200	2126	3211
	3339	0.70	164.50	3338.90	-5	-4	-4.91	0.02	5479	-205	2127	3209
	3817	0.50	123.40	3816.88	-9	-2	-8.89	0.10	5483	-209	2130	3207
	3848	0.90	151.20	3847.88	-9	-2	-9.18	1.66	5484	-209	2130	3207
	3912 3943	0.80 2.20	5.10 352.60	3911.87 3942.86	-9 -8	-1 -1	-9.17 -8.37	2.54 4.61	5484 5483	-209 -208	2130 2130	3206 3206
	3975	4.00	350.10	3974.82	-7	-2	-6.66	5.64	5481	-207	2130	3207
	4007	5.90	347.50	4006.69	-4	-2	-3.95	5.98	5478	-204	2130	3207
	4039	7.80	343.60	4038.46	0	-3	-0.25	6.11	5475	-200	2129	3208
	4071	9.70	346.50	4070.09	4	-4	4.46	6.09	5470	-195	2127	3210
	4102 4134	11.30 12.90	348.30 348.20	4100.57 4131.86	10 17	-6 -7	9.98 16.55	5.27 5.00	5464 5458	-190 -183	2126 2125	3211 3212
	4166	14.40	347.60	4162.95	24	-9	23.95	4.71	5450	-176	2123	3214
	4197	16.40	348.00	4192.84	32	-10	32.00	6.46	5442	-168	2121	3215
	4229	18.40	347.70	4223.37	41	-12	41.37	6.26	5433	-159	2119	3217
	4261 4292	20.50 22.40	346.90 346.70	4253.55 4282.40	52 63	-15 -17	51.78 62.83	6.61 6.13	5423 5411	-148 -137	2117 2115	3220 3222
	4324	25.20	346.60	4311.67	75	-17	75.41	8.75	5399	-124	2113	3225
	4356	28.00	345.10	4340.28	89	-24	89.32	9.00	5385	-111	2108	3229
	4384	30.70	344.60	4364.69	102	-27	102.59	9.68	5372	-97	2104	3232
	4419	32.40	344.10	4394.51	120	-32	120.25	4.91	5354	-80	2100	3237
	4450 4478	34.90 37.30	344.90 345.20	4420.32 4442.94	137 153	-37 -41	136.83 152.79	8.19 8.59	5337 5321	-63 -47	2095 2091	3242 3246
	4513	40.50	345.80	4470.17	174	-41	174.10	9.21	5300	-47	2085	3252
	4545	43.20	345.40	4494.01	194	-52	194.81	8.48	5279	-5	2080	3257
	4576	45.70	345.30	4516.14	216	-58	215.85	8.07	5258	16	2075	3263
	4608	48.40	345.80	4537.94	238	-63	238.56	8.51	5235	39	2069	3268
Top of Tangent @ 4656'	4656 4671	51.80 51.70	345.60 346.00	4568.72 4578.01	274 285	-72 -75	274.29 285.73	7.09	5200 5188	75 86	2060 2057	3277 3280
@ 4030	4766	50.40	344.40	4637.73	357	-94	357.27	2.20 1.89	5117	158	2037	3299
Btm of Tangent	4798	49.70	343.70	4658.28	380	-101	380.90	2.76	5093	181	2031	3306
@ 4798'	4830	51.50	343.70	4678.59	404	-108	404.67	5.62	5069	205	2024	3313
	4859	53.80	344.40	4696.18	426	-114	426.88	8.16	5047	227	2018	3319
	4894 4926	57.20 59.70	344.90 345.30	4716.00 4732.75	454 480	-122 -129	454.74 481.13	9.79 7.88	5019 4992	255 282	2010 2003	3327 3334
	4957	62.10	346.70	4747.82	507	-135	507.45	8.69	4966	308	1997	3340
	4989	63.40	348.80	4762.48	534	-141	535.28	7.11	4938	336	1991	3346
	5021	64.80	351.10	4776.45	563	-146	563.66	7.81	4910	364	1986	3351
	5053 5084	67.00	352.20	4789.52	592	-151	592.58	7.56	4881	393	1982 1978	3356
	5116	70.20 73.30	353.60 354.50	4800.83 4810.85	620 651	-154 -157	621.24 651.48	11.15 10.05	4852 4822	422 452	1975	3359 3362
	5148	76.20	355.50	4819.27	681	-160	682.25	9.55	4791	483	1972	3365
	5180	78.80	355.10	4826.19	712	-163	713.40	8.22	4760	514	1970	3368
	5212	81.80	354.90	4831.58	744	-165	744.83	9.40	4729	546	1967	3370
	5242 5260	85.30 87.20	354.70 354.20	4834.95 4836.13	774 791	-168 -170	774.53 792.42	11.69 10.91	4699 4681	575 593	1965 1963	3373 3375
	5334	90.80	353.40	4837.42	865	-178	866.01	4.98	4607	667	1955	3383
	5429	91.40	352.70	4835.60	959	-189	960.36	0.97	4513	761	1944	3394
	5524	90.50	357.30	4834.02	1054	-198	1055.01	4.93	4418	856	1935	3402
	5620	92.20	0.10	4831.76	1150	-200	1150.95	3.41	4322	952	1933	3405
	5714 5810	92.20 90.70	1.80 1.30	4828.15 4825.72	1244 1340	-198 -196	1244.86 1340.77	1.81 1.65	4228 4132	1046 1142	1935 1938	3403 3400
	5904	91.40	0.90	4824.00	1434	-190	1434.72	0.86	4038	1236	1940	3399
	6000	92.10	0.90	4821.07	1530	-192	1530.66	0.73	3943	1332	1941	3397
	6095	89.50	0.30	4819.74	1624	-191	1625.63	2.81	3848	1426	1942	3396
	6191	89.10	0.50	4820.91	1720	-191	1721.61	0.47	3752	1522	1943	3395
	6287 6382	90.10 91.70	0.90 1.30	4821.58 4820.09	1816 1911	-189 -188	1817.59 1912.54	1.12 1.74	3656 3561	1618 1713	1944 1946	3394 3392
	6477	90.00	359.30	4818.68	2006	-187	2007.52	2.76	3466	1808	1947	3392
	6574	91.30	359.60	4817.58	2103	-188	2104.51	1.38	3369	1905	1946	3393

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
6669	90.90	359.30	4815.76	2198	-189	2199.49	0.53	3274	2000	1945	3394
6765	91.70	0.40	4813.58	2294	-189	2295.46	1.42	3178	2096	1945	3394
6860	92.30	1.20	4810.27	2389	-188	2390.39	1.05	3083	2191	1947	3393
6954	92.70	0.50	4806.17	2483	-187	2484.28	0.86	2989	2285	1948	3391
7049	91.60	0.10	4802.60	2578	-186	2579.20	1.23	2894	2380	1949	3391
7144	89.90	359.70	4801.36	2673	-186	2674.19	1.84	2799	2475	1949	3391
7240 7335	88.40 89.90	0.00 358.90	4802.78 4804.19	2769 2864	-186 -187	2770.17 2865.16	1.59 1.96	2703 2608	2571 2666	1949 1948	3391 3392
7432	89.40	0.20	4804.19	2961	-188	2962.15	1.44	2511	2763	1947	3393
7527	90.10	359.70	4805.20	3056	-188	3057.15	0.91	2416	2858	1947	3393
7622	88.90	0.50	4806.03	3151	-188	3152.14	1.52	2321	2953	1947	3392
7717	89.60	0.20	4807.27	3246	-187	3247.13	0.80	2226	3048	1948	3392
7813	91.10	0.40	4806.68	3342	-187	3343.12	1.58	2130	3144	1949	3391
7908	92.80	0.00	4803.45	3437	-187	3438.05	1.84	2035	3239	1949	3391
8004	91.00	359.60	4800.27	3533	-187	3534.00	1.92	1939	3335	1949	3391
8098	91.10	359.50	4798.55	3627	-188	3627.98	0.15	1845	3429	1948	3392
8194	90.40	359.30	4797.29	3723	-189	3723.97	0.76	1749	3525	1947	3393
8289	91.20	0.40	4795.96	3818	-189	3818.96	1.43	1654	3620	1947	3393
8384	90.60	1.00	4794.47	3913	-188	3913.93	0.89	1559	3715	1948	3392
8480 8576	89.60 90.60	1.60 1.20	4794.30 4794.14	4009 4105	-186 -183	4009.89 4105.84	1.21 1.12	1463 1367	3811 3907	1951 1953	3390 3388
8670	89.90	359.60	4794.14	4199	-183	4199.83	1.12	1273	4001	1953	3387
8766	90.70	0.60	4793.22	4295	-182	4295.82	1.33	1177	4097	1954	3387
8890	90.50	359.40	4791.92	4419	-182	4419.81	0.98	1053	4221	1954	3387
8983	90.70	0.40	4790.95	4512	-183	4512.80	1.10	960	4314	1954	3387
9077	90.50	1.80	4789.97	4606	-181	4606.77	1.50	866	4408	1956	3385
9171	91.30	1.80	4788.49	4700	-178	4700.69	0.85	773	4502	1959	3382
9266	90.30	1.30	4787.16	4795	-175	4795.62	1.18	678	4596	1962	3379
9361	91.40	1.30	4785.75	4890	-173	4890.57	1.16	583	4691	1964	3377
9456	90.90	1.10	4783.85	4985	-171	4985.52	0.57	488	4786	1966	3375
9550	90.50	0.50	4782.70	5079	-170	5079.49	0.77	394	4880	1968	3374
9644 9740	91.20 91.10	359.60 0.00	4781.30 4779.38	5173 5269	-170 -170	5173.48 5269.46	1.21 0.43	300 204	4974	1968	3374 3374
9835	90.10	359.50	4778.38	5364	-170	5364.45	1.18	109	5070 5165	1968 1967	3375
9930	91.30	0.80	4777.22	5458	-170	5459.44	1.86	14	5260	1968	3374
10025	90.80	359.90	4775.48	5553	-170	5554.41	1.08	-81	5355	1968	3374
10119	91.00	359.70	4774.01	5647	-170	5648.40	0.30	-175	5449	1968	3374
10214	90.40	359.20	4772.84	5742	-171	5743.39	0.82	-270	5544	1967	3375
10311	90.90	359.00	4771.74	5839	-172	5840.38	0.56	-367	5641	1966	3376
10406	90.10	358.40	4770.92	5934	-175	5935.36	1.05	-462	5736	1964	3379
10503	91.40	358.90	4769.65	6031	-177	6032.34	1.44	-559	5833	1962	3381
10598	90.40	358.00	4768.15	6126	-179	6127.30	1.42	-654	5928	1959	3383
10694	91.70	357.10	4766.39	6222	-184	6223.22	1.65	-750	6024	1955	3387
10790	91.90	356.40	4763.38	6318	-189	6319.05	0.76	-846	6120	1950	3393
10885 10979	90.20 90.10	358.50 0.50	4761.64 4761.39	6413 6507	-193 -194	6413.95 6507.95	2.84 2.13	-941 -1035	6215 6309	1946 1945	3397 3398
11075	90.20	0.30	4761.39	6603	-194	6603.94	0.43	-1035	6405	1945	3397
11169	89.90	359.80	4761.14	6697	-194	6697.94	0.45	-1225	6499	1946	3397
11234	89.40	359.60	4761.46	6762	-194	6762.94	0.83	-1290	6564	1946	3398
11329	90.10	0.00	4761.87	6857	-194	6857.94	0.85	-1385	6659	1945	3398
11424	90.80	0.80	4761.12	6952	-194	6952.92	1.12	-1480	6754	1946	3397
11518	91.30	0.30	4759.40	7046	-193	7046.90	0.75	-1574	6848	1947	3396
11614	90.70	0.70	4757.73	7142	-192	7142.87	0.75	-1670	6944	1948	3396
11708	91.20	1.80	4756.17	7236	-190	7236.82	1.29	-1764	7038	1950	3393
11804	91.30	1.70	4754.07	7332	-187	7332.73	0.15	-1860	7134	1953	3391
11899	91.40	1.40	4751.83	7427	-184	7427.65	0.33	-1955	7229	1956	3388
11994	91.90	1.40	4749.10	7522	-182	7522.57	0.53	-2049	7324	1958	3386



Remarks

Tiffany Golay 03/19/013 02:17 pm	Frac Disclosure uploaded to FracFocus
Tiffany Golay 02/26/013 09:00 am	Conductor weight- 106.5 lbs/ft Production Liner setting depth= 12,255'
Tiffany Golay 02/26/013 08:26 am	TD= 12,255' TVD= 4,736