UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

HOEB Hobbs

FORM APPROVED OMB NO. 1004-0137 Expires: October 31, 2014

JUN 19 2013

5. Lease Serial No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOGAY 2 0 2013

													NMN	M 011	35			_
a. Type of V	/ell	Z Oil V	Vell 🔲	Gas Well	Dry L	Oth	ner			BI	CEIV	ED	6. If I	ndian,	Allottee or Tr	ibe Name		_
o. Type of C	completion:		Well 🔲		Deepen D	_ Plu	g Back 🔲 1 —	Oiff, Res	svr.,				7. Un	it or CA	Agreement	Name and	No.	_
. Name of C Apache Co	perator poration	(873)						,					Lusk	34 Fe	ne and Well N deral #1H(_
. Address	303 Veterans Midland, TX 7		Ste. 3000				3a. Pho (432) 8			le area	code)			Nell \\ 25-407				
			on clearly ar	nd in accord	lance with Fede	ral red	1 ' '								Pool or Exp	loratory	•	_
At surface		90' FNL 8	360' FWL	UL:D	Sec:34 T	:19S	R:32E						11. S	ec., T.,	R., M., on Blor Area UL:D	ock and Sec:34 T	:19S R:32E	 :
At top pro	d. interval re	eported be	n/1/N	_a, 60	13/w									County o	or Parish	13. Sta	ate	_
At top prod. interval reported below A 47 / N 4 693/N At total depth BHL: 293-PSL & 673-FWL											Lea		(DE DVD	NM	·			
4. Date Spt 10/27/2012	iadea Z		13. Date 1	T.D. Reache 012	d		16. Date C			ady to I	Prod.		3561		ns (DF, RKB	, K1, GL)	•	
8. Total De	pth: MD TVE	13,807 9,498'	1	19. Ph	ug Back T.D.:		13,734' 9,495'	•	20	Dep	th Bridg	ge Plug S		MD VD				_
21. Type El			cal Logs Run	(Submit co	py of each)				22		s well co		□ No		Yes (Submit			
CN/BHC/H					· · · · · · · · · · · · · · · · · · ·						s DST n				Yes (Submit Yes (Submit			
	1		port all strin				Stage Cement	r ()	Vo. of	Sks. 8	<u>, </u>	Slurry V	Iol I					
Hole Size	Size/Gra			Top (MD)	Bottom (M	D)	Depth	T	ype of	f Ceme		(BBL	.)		ent Top*	Amo	ınt Pulled	
36"	20"		5.5#		1010'					C&H				Surface				
17-1/2" 12-1/4"	13-3/8" 9-5/8"	68# 36#			3136' 4500'	-				C&H Class	 -			Surfac Surfac				
7-7/8"	5-1/2"	17#			13,787'	\dashv				Class				Suriac				
1-110	0 1/2				10,707		_ 	- '	10 31	Olas	-					···		
															-			
24. Tubing			2 1 2	7.00			5 10 0						·····					
Size 2-7/8"	9102'	Set (MD)	Packer De 9102'	pth (MD)	Size	\dashv	Depth Set (MI) Pac	ker De	epth (M	ID)	Size		Dept	h Set (MD)	Packe	r Depth (MI	<u>)) </u>
25. Producii			3102			2	6. Perforat	on Reco	ord									
4) = =	Formation	1		Тор	Bottom		Perforate		al		Siz		No. H	loles		Perf. Stat	us	
A) Bone S B)	prings		7441'	-			9,889'-13,682	<u>'</u>		- 5	SPF		495		Producing			
C)										-+			·					
D)										-								
27. Acid, Fr	acture, Trea	atment, Ce	ment Squeez	e, etc.							_	l	*******					
	Depth Inter	val	2000		0.004.4444		-1 0700 bbl -				of Mat							
9,889'-13,6	02		38281	DDI 15# XL	., 2,091,111#	sand	3, 2720 DDI a	cia, 70	וממ ו	10# 11	near g	eı	HOR	701	· · · · · · · · · · · · · · · · · · ·	TT () 2	-	
															AMA	HUP	-	_
													D	JE,	1:20	2/	7	
28. Producti			hr	10:1		har .	lou	- ·		<u> </u>		6 .						
Date First Produced		Hours Tested	Test Production	Oil BBL	Gas MCF	Wate BBL		Gravity . API		Gas Grav	ity	Flow	ction M vina	ethod				
02/22/13	04/22/13	24		203	305	187	7 37.	6					1.16					
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Wat	er Gas	Oil		Well	Status		· · ·					
Size	Flwg. SI	Press.	Rate	BBL	MCF	BBL	Rati			Pro	ducing	۸۲	CEP	TFI	FOR	REC	ORD^1	l
28a. Produc										1		Liv	ULL	1 1 1 1				\vdash
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Wat BBL		Gravity . API		Gas Grav	ity	Produ	ction M		4 5 4	010		
Choke	Гbg. Press.	Csg.	24 Hr.	Oil	Gas	Wat	er Gas	'Oil		Wall	Status	Ц	-	MAY	15 2	บเว		1
Size		Press.	Rate	BBL	MCF	BBL				VV.EII	Status			1	no	ALA OFA	ENT	
*(See instr	uctions and	spaces for	additional d	lata on page	2)								BUKE	<u>AU OF</u> ARISE	LAND MA	OFFICE	EN I	+
											-	ı	/ U	HILLOL	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			

28h Produ	uction - Inte	rval C									
Date First	Test Date	Hours	Test	Oil	Gas	Water	Oil G		Gas	Production Method	
Produced		Tested	Production	BBL	MCF	BBL	Corr.	API	Gravity		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/C Ratio		Well Status		
	uction - Inte			10.1		537-4	Oil G		lo	Des dustion Made of	
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Corr.	-	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/C Ratio		Well Status		
29. Dispo Sold	sition of Ga	s (Solid, u	sed for fuel, ve	ented, etc.,)				<u> </u>		
30. Sumr	nary of Porc	us Zones	(Include Aqu	ifers):					31. Format	ion (Log) Markers	
Show includi	ing depth in	t zones of terval test	porosity and c	contents the	nereof: Cored ool open, flow	intervals and al	l drill-ster pressures	m tests, and			
For	mation	Top Bottom			De	Descriptions, Contents, etc.				Name	Top Meas. Depth
									Rustler Salt		920' 1388'
									B/Salt Yates		2640' 2772'
									Capitan Res Delaware	ef	3194' 4369'
									Bone Spring 1st BSPG S		7441' 8593'
									2nd BSPG S	Sand	9165'
32 Addi	tional remar	ks (includ	e plugging pro	ocedure).				· · · · ·			
52. 1144		(e brassins bra								
									-		
33. Indic	ate which it	ems have	been attached	by placin	g a check in the	ne appropriate bo	oxes:				
✓ Electrical/Mechanical Logs (1 full set req'd.)☐ Sundry Notice for plugging and cement verification						☐ Geologic Repo ☐ Core Analysis		DST R		☑ Directional Survey C-102, C-104, Frac Disclosure	۵
					····-					records (see attached instructions)	
			atima Vasq			-F-130 and con			ory Tech I	. coords (see atmented monderons)	
	Signature	9						04/24/20			
Title 18 U	U.S.C. Sectivitions or fro	on 1001 a	nd Title 43 U.s	S.C. Secti	on 1212, mak	e it a crime for a matter within its	iny persor	knowingly	y and willfully t	o make to any department or agenc	y of the United States any
	ed on page 3		acomonio or to	p. coomuti	ons as to arry	ttor within its	, jui isuicii	<u></u>			(Form 3160-4, page

2013-01-28 Fracture Date State: New Mexico County: Lea API Number: 30-025-40797 APACHE CORP Operator Name: Well Name and Number: Lusk 34 Federal 1H Longitude: -103.761 32.623 Latitude:

Hydraulic Fracturing Fluid Product Component Information Disclosure

NAD27

Oil

8,220

2,683,980

Hydraulic Fracturing Fluid Composition:

Long/Lat Projection:

True Vertical Depth (TVD):

Total Water Volume (gal)*;

Production Type:

Hydraulic Fracturi							 -
Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**		Comments
WHILE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00%		
SAND - PREMIUM BROWN	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00%	72.54385%	
CRC SAND	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00%	16.74522%	
			Hexamethylenetetramine	100-97-0	2.00%	0.33490%	
			Phenol / formaldehyde resin	9003-35-4	5.00%	0.83726%	
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-8	10.00%	0.01078%	
CLA-WEB™	Halliburton	Additive	Ammonium salt	Confidential Business Information	50.00%		
FDP-S1007-11	Halliburton	Surfactant	Citrus, extract	94266-47-4	10.00%	0.06519%	
			Isopropanol	67-63-0	30.00%	0.19557%	<u>.</u>
MO-67	Halliburton	pH Control Additive	Sodium hydroxide	1310-73-2	30.00%	0.00971%	
FR-66	Halliburton	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8	30.00%		
BC-140 X2	Halliburton	Initiator	Ethylene glycol	107-21-1	30.00%	ļ	
WG-36 GELLING			Monoethanolamine borate	26038-87-9	100.00%	0.06577%	
AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100.00%	<u> </u>	
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100.00%		
OptiKleen-WF™ OPTIFLO-HTE	Halliburton	Concentrate	Sodium perborate tetrahydrate	10486-00-7 14808-60-7	100.00%		
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica, quartz Walnut hulls	Mixture	100.00%		
Decree Chard at Hallacille] - -	 කරුතු මතුරු ල්ගික (මාණි)	omposition Provided by Halliburion (<i>an</i>
			2,7-Naphthalenedisulfonic acid, 3- hydroxy-4-[(4-sulfor-1-naphthalenyl) azo] -, trisodium salt	915-67-3			
			Alcohols, C12-16, ethoxylated	68551-12-2			
			Amine Salts	Confidential Business			
			Amine Salts	Confidential Business Information			
			Ammonium chloride Bentonite, benzyl(hydrogenated tallow alkyl) dimethylammonium stearate complex	12125-02-9			***
	1		C.I. Pigment Red 5	6410-41-9			
			Crystalline Silica, Quartz	14808-60-7			
			Cured Acrylic Resin	Confidential Business Information			
			Cured Acrylic Resin	Confidential Business Information			
	<u> </u>		Enzyme	Confidential Business Information			
			Polyacrylamide Copolymer	Confidential Business Information			
			Quaternary Amine	Confidential Business Information			
			Quaternary Amine	Confidential Business Information			
			Quaternary Amine	Confidential Business Information			
			Silica gel	112926-00-8			
			Sodium Chloride	7647-14-5			
	<u> </u>		Sodium sulfate	7757-82-6			
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6			
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8			
1			Surfactant Mixture	Confidential Business Information			

Surfactant Mixture	Confidential Business Information		_	
Tall oil acid diethanolamide	68155-20-4			
Water	7732-18-5			

^{*} Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.