Form 3160	-4		11	ş														
	,		DE	UN PARTMI REAU OF	VITED STAT ENT OF THI F LAND MA	FES E IN NA	ITERIOR GEMENT		(110	OCD I	Hobb OC	s D			FORM OMB N Expires: (I APPR IO. 100 October	OVED 4-0137 31, 2014	
	W	/ELL C	OMPLET	ION OR	RECOMPLE	ETIC		RT /	MU AND LO	OG ୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦୦	0 21	113	5.	Lease Se	rial No. 06531A			
a. Type of	Well	<u>N</u> oi	l Well	Gas Well	Dry		ther			<u>0 4</u>			6.	If Indian	, Allottee or	Tribe N	lame	
b. Type of	Completior	n: M Ne Oti	ew Well L	Work Ove		P!	ug Back	Diff	f. Resvr.,	REC	EIVE	D	7.	Unit or C NM709	A Agreeme 76X, Lea	ent Nam Unit Bo	e and No. ne Sprin	
2ame of	Operator	egacy R	eserves Op	perating LF	·/								8.	Lease Na Lea Un	ime and We it #30H	ll No.	/	
3. Address	P	O Box 1084	18, Midland, T)	K 79702			3a. Pho 432	one 1 2-68	No. <i>(inclu</i> 89-5200	de are	a code)	9.	API Wel 30-025	l No. -40698		/	
Location	of Well (R	Report loc	ation clearly	and in acco	rdance with Fede	ral re	equirements)*						10.	Field ar Lea: B	id Pool or E one Sprin	Explorate a	ory	
At surfac	^{ce} UL:M; \$	Sec. 12,	T20S; R34	E. 170' FS	L & 785' FWL								11.	Sec., T. Survey	, R., M., on or Area	Block a	nd	
At ton pro	od interval	reported l	nelow UL:D	: Sec. 13: 1	T20S: R34E, 9	63' F	- 	WL					12	County	or Parish	. 12, T20	S, R34E	
n top pr		1. Sec. 1	3. T205. B	34F 330		- 7	16/11	2					12.	Lea	01 I al Isil	N	IM .	
At total d 14. Date Sp	oudded		15. Dat	e T.D. Reach	ied		16. Date C	Comp	pleted 11	/06/2	012		17.	Elevatio	ons (DF, RI	KB, RT,	GL)*	
08/14/201 8. Total D	epth: ME	0 15,70	10/05/)2'	2012 19. P	lug Back T.D.:	MD	D & 15,695'	λA	√ Re 2	eady to 20. De	Prod. pth Br	idge Plu	ng Set:	3650' MD 1	<u>GL</u> N/A			
21. Type E	TV	D 10.97	77' nical Logs Ri	in (Submit c	opy of each)	TVI	0 10,977'		2	2. W	as well	cored?		TVD	V/A Yes (Subn	ut analys	is)	
Triple	Combo								ſ	W. Di	as DST rection	run? al Surve			Yes (Subr Yes (Subr	nit report nit conv))	
23. Casing	and Liner I	Record (H	Report all str	ings set in w	ell)		Stage Cement	or		f Ske	8	Shur				<u>т т ру</u>	·····	
Hole Size	Size/Gr	rade V	Vt. (#/ft.)	Top (MD)	Bottom (MI)) 	Depth		Type o	of Cem	ent	(B	BL)	Cerr	ent Top*		Amount P	illed
<u>17 1/2"</u> 12 1/4"	13 3/8" 9 5/8"	<u> </u>	4.5 SI	urf. urf	5530'	-+	N/A 3537'		1250 s	x				Surf-C	Circ Circ			
8 3/4"	5 1/2"	17	7 Si	urf.	15,702'		N/A		2190 s>	×			<u> </u>	Surf-C	Circ			
						-									<u> </u>			
24. Tubing Size	Record Depth	Set (MD)	Packer D	epth (MD)	Size		Depth Set (MI	5)	Packer D	epth (N	(D)	S	ze	Dept	th Set (MD)	F	acker Dep	th (MD)
25 Produci	ing Interval						6 Perforati	on F	Record					<u> </u>				
	Formatio	n	_	Тор	Bottom		Perforate	d In	terval		S	ize	No.	Holes	<u> </u>	Perf	Status	
A) Bone S B)	Spring		11,5	48' MD	15,518' MD	_	11,548'-15,51	18 N	MD		N/A		300					
C)														·				
D)																		
27. Acid, Fi	Depth Inter	val	ement Squee	ze, etc.			· · · · · · · · · · · · · · · · · · ·	A	mount ar	nd Typ	e of M	aterial						
11,548'-15	5,518' MD		A./24	,000 gals.	F./36,511 BW	+ 2,	018, 400# SI	D							TT A TO	TA T	E ANT	
														<u>88 3' 8</u> 4 - 7 1 8			17	
De De dua	in Intern	-1.4												UNU I.		<u></u>		
Date First	Test Date	Hours	Test	Oil	Gas	Wate	er Oil C	Grav	vity	Gas	·.	Pro	duction I	Method				
11/06/12	11/13/12	l ested	Production	1664	MCF 1731	BBL	Corr	. AP	1	Grav	/ity 4	FI	owing					
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Wate	er Gas/	Oil		Weil	Statu	s						
26/64	SI N/A	rress.		BBL	1724	BRL) Л		Flo	ز ا wing;		T PT	ED I	ENR F	RECI	ngn	
28a. Produc	tion - Interv	val B		1004	1731	023			·····			* * * * * * * * *		5			JND	<u> </u>
Date First Produced	Test Date	Hours Tested	Test Production	Oil n BBL	Gas MCF	Wate BBL	er Oil C Corr	Grav . AP	PI	Gas Grav	vity	Pro	duction I	Method EB 1	8 201	3		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Wate BBL	er Gas/ Ratio	Óil D		Well	Statu	5	4	fm	nd			
*(See instr	uctions and	spaces fo	r additional of	data on page	2)				/		2	BU	REXU	OF LAN SBAD I	ID MANA	GEME FICE	NT	
									K	50		\checkmark	M	1AY	232	013]	ch

28b. Prod	uction - Inte	erval C							
Date First	Test Date	Hours	Test	Öil	Gas	Water	Oil Gravity	Gas	Production Method
Produced		Tested	Production	BBL	MCF	BBL	Corr. API	Gravity	
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water	Gas/Oil	Well Status	
Size	Flwg.	Press.	Rate	BBL	MCF	BBL	Ratio		
	SI								
				<u> </u>					
28c. Produ	uction - Inte	rval D							
Date First	Test Date	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method
Produced		Tested	Production	BBL	MCF	BBL	Corr. API	Gravity	
			\rightarrow						
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water	Gas/Oil	Well Status	
Size	Flwg.	Press.	Rate	BBL	MCF	BBL	Ratio		
	SI				1	1			
		L							· · · · · · · · · · · · · · · · · · ·

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

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30. Summary of Porous Zones (Include Aquifers):
 31. Formation (Log) Markers
 31. Formation (Log) Markers
 31. Formation (Log) Markers

		_			Тор	
Formation	Тор	Bottom	Descriptions, Contents, etc.	Name	Meas. Depth	
				Rustler Top-Salt	1600' 1960'	
				BTM-Salt Yates	3400' 3450'	
				7-RVRS/Capitan Queen	3650' 4620'	
				Delaware Bone Spring	5150' 8150'	
				Wolfcamp	11,000'	

32. Additional remarks (include plugging procedure):

Electrical/Mechanical Logs (1 full set req'd.)	Geologic Report	DST Report	Directional Survey	
Sundry Notice for plugging and cement verification	Core Analysis	Other:		
4. I hereby certify that the foregoing and attached informat	ion is complete and correct as c	letermined from all availa	able records (see attached instructions)*	
Name (please print) D. Patrick Darden, P.E.	Title	Operations Engine	ering Manager	
		04/00/0010		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Last Fracture Date	10/30/2012
State:	New Mexico
County:	Lea
API Number:	30-025-40698
Operator Name:	Legacy Reserves Oper
Well Name and Number:	Lea Unit 30H
Longitude:	-103.5192
Latitude:	32.58074
Long/Lat Projection:	
Production Type:	Oil
True Vertical Depth (TVD):	10,977
Total Water Volume (gal)*:	· ARV: A1,533,462

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	Operator	Carriero to sel consector	Water	7732-18-5	100.00%	83.76184%	计 建碱 建可加油油
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Hydrochloric Acid	7647-01-0	15.00%	0.32913%	
A Shink with Marth	1	میں میں اور	Water water and the second second	7732-18-5	85:00%	1.86506%	Carl a la consta Carda de la
Activator, 330 gal tote	Baker Hughes	Activator	Alcohols, C12-14-Secondary, Ethoxylated	84133-50-6	70.00%	0.01276%	
2 3 8 1 3 8 1 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1. N. 18	THE AND LEADER FOR	Methanols 2011 2011 and a second	67-56-1	50.00%	0.00912%	ちゅうせい いさくだん くみがりょう
GBW-5	Baker Hughes	Breaker	Ammonium Phosphate	7727-54-0	100.00%	0.00265%	SmartCare Product
CI-14	Baker Hughes	Corrosion Inhibitor	Fatty Acids	Trade Secret	10.00%	0.00033%	
			Olefin	Trade Secret	5.00%	0.00017%	
Print print, and	1997 St. 5	CARL CONTRACTOR	Polýoxyalkylenes	Trade Secret	30.00%	0.00100%	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
			Propargyl Alcohol	107-19-7	5.00%	0.00017%	a a second a constant
XLW-10A	Hughes	Crosslinker	Ethylene Glycol	107-21-1	30.00%	0.02590%	SmartCare Product
			Sodium Hydroxide	1310-73-2	10.00%	0.00863%	
N R. 52 - 20		 State of the state of the state	Sodium Tetraborate	1330-43-4	·····30.00%······	<u>× 0.02590% o</u>	<u>, Manako kuto mateko in</u>
GW-4LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60.00%	0.25290%	SmartCare Product
a the production of the Solar	17 - Print - P	an en fan de fan de Fan de fan de	Paraffinic Petroleum Distillate	64742-55-8	60.00%	0:25290%	- 名法で (がの) (75%) かっ
			Petroleum Distillate	64/42-4/-8	60.00%	0.25290%	and the second states and
Ferrotrol 280L	Baker Hughes	Iron Control	2-Mercaptoethanol	60-24-2	100.00%	0.00625%	
			Ammonium Hydroxide	1336-21-6	5.00%	0.00031%	. 4
the south to but wet		the production to the product of a	Cupric Chloride	/447-39-4	5.00%	0.00031%	an in di setter e filia etter se Timori
NE-23	Baker Hughes	Non-emulsifier	Isopropanol	67-63-0	30.00%	0.00059%	
Sand, White, 20/40	Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00%	10.48194%	
SB Excel 20/40	Baker Hughes	Proppant	Quartz (SiO2)	14808-60-7	100.00%	2.62180%	
Flo-Back 40	Baker Hughes	Surfactant	Amphoteric Surfactant	Trade Secret	40.00%	0.01879%	SmartCare Product
inprediente skown	eboveeces	Degno en Ofti Vinuti2	00(1) and appear on Maladal Salaly U	osie Siecis (MSOS). Inc	pedients shown bei	ow are Non-MSDS.	
and the state of the second	1. 15 8. 19	[3] (Phillipson and Charles and Char	Formaldehyde	50-00-0/2	State of the State	0.0000332474%	La Maria La regarda
			Hydrochloric Acid	7647-01-0	C. L	0.0000332474%	
<u>, 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 1989 - 198</u>	West and The Parks	"一家有了死亡"。我们也知道	Methanol of Markey Asia and Asia	67-56-1		0.0033247404%	the tradition of share the state of the
with the cost of the second		a car and a second and the	Involuted Inforea Polymer	0002/-49-1	and the second	0.0140045367%	م تشهر الرواف م مرتب اليور الوو
na sina na sina na tang atang sina dina dina dina dina dina dina dina d		<u>સાચ્ય ટેલ્ટ્રેલ્ટ ગયા પંચી તેવે.</u> 	Water	7732-18-5	1	0.0509367693%	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.

* 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%

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.