Form 3160-5 (August 2007)	UNITED STATES	NTERIOR HOB	BS OCD FORM	I APPROVED NO. 1004-0135	
SUNDE	BUREAU OF LAND MANA	GEMENT RTS ON WELLS APP	2 8 2014 5. Lease Serial No. NMI C055546	: July 31, 2010	
Do not use abandoned	this form for proposals to well. Use form 3160-3 (APL	drill or to re-enter an ) for such proposals.	6. If Indian, Allottee	or Tribe Name	
SUBMIT IN 1	RIPLICATE - Other instruc	tions on reverse side.	7. If Unit or CA/Agr	eement, Name and/or N	
1. Type of Well	Other: INJECTION	· · · · · · · · · · · · · · · · · · ·	8. Well Name and No LANGLIE JAL U	NIT 47	
2. Name of Operator LEGACY RESERVES OPE	Contact:   ERATING LIE-Mail: mstaelens@	MARTIN STAELENS @legacylp.com	9. API Well No. 30-025-23883	9. API Well No. 30-025-23883	
3a. Address PO BOX 10848 MIDLAND, TX 79702		3b. Phone No. (include area code Ph: 281-465-8387 Ext: 224	) 10. Field and Pool, o LANGLIE MAT	r Exploratory TIX;7RVRS-Q-G	
4. Location of Well <i>(Footage, Sec</i> Sec 5 T25S R37E SENW	c., T., R., M., or Survey Description) 1980FNL 1885FWL		11. County or Parish LEA COUNTY,	and State	
12. CHECK AI	PPROPRIATE BOX(ES) TO	INDICATE NATURE OF	NOTICE, REPORT, OR OTHE	ER DATA	
TYPE OF SUBMISSION		ТУРЕ О	F ACTION	· · · · · · · · ·	
<ul> <li>☑ Notice of Intent</li> <li>☐ Subsequent Report</li> <li>☐ Final Abandonment Notice</li> </ul>	<ul> <li>Acidize</li> <li>Alter Casing</li> <li>Casing Repair</li> <li>Change Plans</li> <li>Convert to Injection</li> </ul>	<ul> <li>Deepen</li> <li>Fracture Treat</li> <li>New Construction</li> <li>Plug and Abandon</li> <li>Plug Back</li> </ul>	<ul> <li>Production (Start/Resume)</li> <li>Reclamation</li> <li>Recomplete</li> <li>Temporarily Abandon</li> <li>Water Disposal</li> </ul>	<ul> <li>Water Shut-O</li> <li>Well Integrity</li> <li>Other</li> </ul>	
following completion of the invol testing has been completed. Fina determined that the site is ready f	Viced operations. If the operation res I Abandonment Notices shall be file or final inspection.)	ults in a multiple completion or rec ed only after all requirements, inclu	Completion in a new interval, a Form 31 ding reclamation, have been completed,	60-4 shall be filed once and the operator has	
SEE ATTACHE CONDITIONS	D FOR OF APPROVAL	RECLAM	ATION PROCEDURE ATTACHED		
		• •			
14. I hereby certify that the foregoin	g is true and correct. Electronic Submission #2 For LEGACY RES Committed to AFMS: N STAELENS	240833 verified by the BLM We SERVES OPERATING LP, sen S for processing by JIM AMOS	Il Information System t to the Hobbs S on 04/24/2014 () UCTION ENCINEER	ateren	
Signatura (Flagtra)		Data 04/02/			
	THIS SPACE FO	PR FEDERAL OR STATE	OFFICE USE		
Amround Pu	$\sim P Q_{11}$	Title SE	P 5	. 4-2. Date	
Conditions of approval, if any, are atta certify that the applicant holds legal or which would entitle the applicant to co	iched. Approval of this notice does requitable title to those rights in the ponduct operations thereon.	not warrant or subject lease	- <i>o</i>	Dat	
Title 18 U.S.C. Section 1001 and Title States any false, fictitious or fraudul	43 U.S.C. Section 1212, make it a ent statements or representations as	crime for any person knowingly and to any matter within its jurisdiction	d willfully to make to any department o	r agency of the United	
** OPER	ATOR-SUBMITTED ** O	PERATOR-SUBMITTED	** OPERATOR-SUBMITTED	) **	

### PROCEDURE TO PLUG AND ABANDON Langlie Jal Unit #47 Langlie Mattix (7-Rivers, & Queen) Field Lea County, New Mexico 3/25/14

### **GENERAL WELL DATA**

- 8-5/8" – 20# surface csg @ 820', cmt'd w/475 sx. TOC @ surf (circ'd)

- 4-1/2" – 9.5# & 10.5# prod. csg @ 3598', cmt'd w/1500 sx. TOC @ surf (circ'd)

- TD @ 3,720'
- PBTD @ 3,151'
- 7-Rivers perfs: 3,402'-3,405'
- Queen perfs: 3,410'-3,720'

**OBJECTIVE:** Plug and Abandon Well.

#### PROCEDURE

1. Hold Safety Meeting. High concentrations of H2S may be present. MIRU plugging equipment.

2. Dig out cellar. Kill well if necessary and ND WH, remove any tubing joints, and NU BOP.

3. PU work string and RIH and tag CIBP @ 3151\*.

4. Circulate well with mud.

5. Spot 30 sxs of cement on top of CIBP (3151 WOC 1520 - 1420 Spot plug 25 sx min. from woc 6. PU to 1020' and spot 55 sxs of cement @ 1020' - 300'.

7. POOH with work string.

- Pump 5.23 bbls of mud through the Bradenhead in an attempt to squeeze 25 sxs of cement into the leak area 832' 816'. WOC.
- 9. RIH with work string and tag TOC. Should be around 620' if the squeeze in the previous step was successful.
- 10. PU to 400' and spot 30 sxs of cement @ 400'-surface. Note, if the previous plug squeeze resulted in a TOC level less than 400', simply fill the remaining part of the hole with cement.

11. POOH with work string.

12. RDMO plugging equipment.

13. ND BOP.

14. Cut off well head and weld on dry hole marker.

PREPARED BY: APPROVED BY:

DATE:

DATE:

## Langlie Mattix (7-Rivers & Queen)

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Field:

LJU #47

		-					Reservoir:	Langlie Mattix
	Location:						Well ID Info	: LJU #47
Footage:	1980 FNL & 1885 FWL	]		Wellbore	Diagr	am	ÁPI No:	30-025-23883
Section:	5, T - 25S, R - 37E	4		<u></u>			Spud Date:	10/2/1971
Block:	····	1		58	T			· · · · · · · · · · · · · · · · · · ·
Survey:		]					Hole Size:	12-1/4"
County:	Lea	4		- 848			Surf. Csg:	8-5/8" - 20#
Lat		4			1 1		Set @	820' 475 ava Class (Cl 29/ apol
Long	Flevations:	4					Cement W/	Yes
GL:	Elevations	1		制造			TOC	Surface
DF:	3,242'							
KB Calc:						3 <b>1</b> 3		
ck w/log?	n/a	]		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				
Data	luiata a							
	5/19/1990 Washed iron sulfide fill 3327-3710	(383) circ and c	lean: return				'	
4-3011-30	to inication	(305) Girc and c			IE			7.7.05
10501	New Market Market						Hole Size:	(-//8"
1-001-91	New operator effective date			2		B	Prod. Csg:	4 1/2" - 9.5# and 10.5#, J-55
4-Dec-92	MIRU coil tubing unit, RIH with hydroblast tool	on 1 1/4" coil lut	oing. Clean				Set @:	3598'
	out nil from 3340' to 3720'. POOH with coil tubi	ng and repositio	n jets to				Cement w/:	1500 sxs Class C.
	shool outward. RIH with hydroblast tool on coil	lubing and was	h casing:			:	TOC:	Surface
	from 3340' to 3720'. POOH and RDMO coil tut	oing. Return wel	ll to				Circ:	Yes
	injection. Collect all cleanout water in frac tank	and dispose of	off lease.					
	After injection stabalizes, run injection profile.							
17-Dec-92	MIRU NOWH, NU BOP RLS, PKR, POOH, LD,	PKR, PU BIT ,	DC AND			Yates @ 2775		
	TBG RIN, TAG FILL @3451' CLEAN OUT. BIT	PLUGGED PO	OH UNPLUG					
	BIT, RIN TO 3,200 SDFD							
18-Dec-92	FINISH TH, TAG FILL, CLEAN OUT 3790 CIP	C HOLE CLEAR	N, POOH,					
19-Dec-92	PUPKR TH TEST TBG NO BOP NI WH C		SET			7.8 (0) 2088		
13-000-02	PKR@ 3148', Ran H-5 Good lest RDMO	10,11,11,2012	·, 000.					
5-Apr-96	On or about April 16, 1996, squeeze perfs 3340	)' - 3385' add pe	rfs 3440'-					
	3530' stimulate RTI			31				
28-Jun-05	RU dig out around wellhead; found hole 4 1/2 *	casing; repaired	l leak;			:		
÷ • • • •	pressured up to 325 psi, held for 30 minutes; w	itnessed by Bud	dy Hill with		1 1	EOT at 3,258		
·····	DCD. Restored to injection. Please and attack	ied chart. Corre			L	22461-33501		
30-100-05	Dig out around wellhead for inspection: Repair	weilhead leak a	ftër visual	- (3)	Ĩ		•	
	and/or pressure testing. Conduct MIT and rest	ore well to inject	ion	- 31	10	3380'-3386"		•
				一個	Į	i Martin da sera		
					ē	3402 000000 00 2405	ċ	
				(2)	l.	3410'-3417'		
<u> </u>					ľ			
	Tubing Detail (top to bottom)				. 5	3423'-3429'		
Joints	Description	Footage	Depth	3	Į:	:		
103	2-3/8", 4.7#, 8rd J-55 (bg	3;258.00	3,258.00		8	3440-3530		
	Packer	0.00	3,258.00	<b>当</b>	<u>I</u>	25211	•	
· • •		<b> </b>			2	เสียงการเป็นเป็น	32 Hotes attorether	
				1	ŀ	Shoe @ 3598	an cining outside (10)	
	······································				ľ	-		
					;	OH: 3-7/8"		
	Red Detail (tes to better)	r	<u></u> 1					
Rods	Description	Footage	Deoth.					
11003		- · · · · · · · · ·						
		<u> </u>						
	L	1		ł				
					· 1			
D								

Updated;

PBTD <u>3720'</u> TD <u>3720'</u>

## Langlie Mattix (7-Rivers & Queen)

# LJU #47 PROPOSED

	Location:				
Footage:	1980 FNL & 1885 FWL				
Section:	5, T - 25S, R - 37E				
Block:					
Survey:					
County:	Lea				
Lat:					
Long:					
-	Elevations:				
GL:					
DF:	3,242				
KB Calc:					
als					

Date	History			
4-Jun-90	5/19/1990 - Washed iron sulfide fill 3327-3710' (383) circ and clean, return			
	to injection			
1-Oct-91	New operator effective date			
4-Dec-92	MIRU coil tubing unit, RIH with hydroblast tool on 1 1/4" coil tubing. Clean			
	out fill from 3340" to 3720'. POOH with coil tubing and reposition jets to			
	shoot outward. RIH with hydroblast tool on coil tubing and wash casing.			
-	from 3340' to 3720': POOH and RDMO coil tubing: Return well to			
	injection. Collect all cleanout water in frac tank and dispose of off lease.			
	After injection stabalizes, run injection profile.			
17-Dec-92	MIRU NDWH, NU BOP RLS, PKR, POOH, LD, PKR, PU BIT, DC AND			
	TBG RIN, TAG FILL @3451' CLEAN OUT, BIT PLUGGED POOH UNPLUG			
	BIT, RIN TO 3,200' SDFD			
18-Dec-92	FINISH TIH, TAG FILL, CLEAN OUT 3790' CIRC HOLE CLEAN, POOH,			
	LD DC & BIT, SDFD			
19-Dec-92	PU PKR, TIH TEST TBG, NO BOP, NU WH CIRC, PKR FLUID, SET			
	PKR@ 3148', Ran H-5 Good test RDMO			
5-Apr-96	On or about April 16, 1996, squeeze perfs 3340' - 3385' add perfs 3440'-			
	3530' stimulate RTI			
28-Jun-05	RU dig out around wellhead; found hole 4 1/2 " casing; repaired leak;			
	pressured up to 325 psi, held for 30 minutes; witnessed by Buddy Hill with			
	OCD. Restored to injection. Please find attached chart. Correction:			
	Pressure mis-stated.			
30-Jun-05	Dig out around wellhead for inspection. Repair wellhead leak after visual			
	and/or pressure testing, Conduct MIT and restore well to injection			
12-Feb-14	Casing leak found between 832' - 816'. CIBP set @ 3151.			

••	Tubing Detail (top to bottom)		
Joints	Description	Footage	Depth
103	2-3/8", 4.7#, 8rd J-55 tbg	3.258.00	3,258.00
	Packer	0.00	3,258.00

1992 B. 1992 B. 1993 B			
	Rod Detail (top to bottom)	1.11	
Rods	Description	Footage	Depth
			·· · · ·

Pumping Unit: Updated: 2/14/14 MLS

PROPOSED				Reservoir: Langlie Mattix		
				Well ID Info	: LJU #47	
Wellbore Diagram		API No:	30-025-23883			
				Spud Dale:	10/2/1971	
			30.şxs @ 400' - surface '30 sxs @ 1020' - 620'	Hole Size: Surf. Csg: Set @ Cement w/ Circ: TOC:	12-1/4* 8-5/8* - 20# 820: 475 sx5 Class 'C' 2% cacl Yes Surface	
T			Leak between 832 - 816	Hole Size:	(-//8 4.4/07 0.5# 40.5# 1'EE	
4		<u>دم</u>	25 per into took	ലാനം. പട്യാ: പേരം		
			20 585 1110 1988	Ger (@: Cement w <sup>1</sup>	1500 eve Class C	
				TOC	Surface	
		\$		Circ:	Yes	
					•	
					•	
		2	30 sxs @ 3151' - 2751'			
			Yates @/2775		1	
- 31						
			in a contra			
			YH C 7989.			
	XXXXXXXXXX		CIBP @ 3151'			
			- · ·	•		
- 31						
		ŕ	3346'-3350'			
			3200 2206			
			3300-3300			
			3402			
		<u> </u>	Quelon (g) 3466			
- 31			3410-3417' 32 Hotos	allonether		
		-	3423'-3429'	anagemen		
	(					
			3440-3530"			
			3521'			
	3	Š	Shoe @ 3598'			
			OH: 3-7/8*			

PBTD <u>3720'</u> TD <u>3720'</u>

Field:

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# BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

### Permanent Abandonment of Federal Wells Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

2. <u>Notification:</u> Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of water. Minimum nine (9) pounds per gallon.

5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in a cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. <u>Dry Hole Marker</u>: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. <u>Subsequent Plugging Reporting</u>: Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.** 

8. <u>Trash:</u> All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration conditions of approval will be developed and furnished to you.



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 1310

### Interim Reclamation Procedures

**Reclamation Objective:** Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses.

Interim reclamation consists of minimizing the footprint of disturbance by reclaiming all portions of the well site not needed for production operations. The portions of the cleared well site not needed for operational and safety purposes are recontoured to a final or intermediate contour that blends with the surrounding topography as much as possible. Sufficient level area remains for setup of a workover rig and to park equipment. Topsoil is respread over areas not needed for all-weather operations. Production facilities should be clustered to maximize the opportunity for interim reclamation. In order to inspect and operate the well or complete workover operations, it may be necessary to drive, park, and operate on restored, interim vegetation within the previously disturbed area. This is generally acceptable provided damage is repaired and reclaimed following use.

To reduce final reclamation costs; maintain healthy, biologically active topsoil; and to minimize habitat, visual, and forage loss during the life of the well, all salvaged topsoil should be spread over the area of interim reclamation, rather than stockpiled.

- 1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
- 2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). Interim reclamation is to be completed within 6 months of well completion.
- 3. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with interim reclamation as per approved APD or Sundry Notice. If you have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.
- 4. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
- 5. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos Supervisory Environmental Protection Specialist 575-234-5909 (Office), 575-361-2648 (Cell)

Linda Denniston Environmental Protection Specialist 575-234-5974

Jennifer Van Curen Environmental Protection Specialist 575-234-5905

Mike Burton Environmental Protection Specialist 575-234-2226

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Jeffery Robertson Natural Resource Specialist

Solomon Hughes Natural Resource Specialist 575-234-5951

Douglas Hoag Civil Engineering Technician 575-234-5979

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