Form 3 160-5 (March 2012)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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FORM APPROVED OMB No. 1004-0137

Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Serial No 112 UM D 36452 6! If Indian, Allottee or Tribe Name

abandoned well. Use Form 3160-3 (APD) for suc		->=\/E		
SUBMIT IN TRIPLICATE – Other instructions or	າ page 2.		<del>-</del>	nent, Name and/or No.
Type of Well     ☐ Gas Well     ☐ Other		8. 7	NGLIE JAL UNIT- I Well Name and No. NGLIE JAL UNIT #	
2. Name of Operator LEGACY RESERVES OPERATING LP			API Well No. -025-11644	
	(include area code) 200	10.	Field and Pool or Ex	xploratory Area RIVERS-QUEEN-GRAYBURG
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) 990' FNL & 330' FEL, UNIT LETTER A, SEC. 17, T25S, R37E		ĺ	County or Parish, Sta EA CO., NM	ate
12. CHECK THE APPROPRIATE BOX(ES) TO IND	ICATE NATURE O	F NOTICE, I	REPORT OR OTHE	R DATA
TYPE OF SUBMISSION	ТҮРЕ	OF ACTION	l	
	en [ ure Treat   Construction [	Production Reclamat		Water Shut-Off Well Integrity Other
	and Abandon Back	Tempora	rily Abandon sposal	
Attach the Bond under which the work will be performed or provide the Bond of following completion of the involved operations. If the operation results in a metating has been completed. Final Abandonment Notices must be filed only after determined that the site is ready for final inspection.)  OBJECTIVE: Plug and Abandon Well  Hold Safety Meeting. High concentrations of H2S may be present. MIRU of tubing, and NU BOP. PU work string and RIH to tag cement plug at 2 2510'-2350'-POOH with work string. MIRU WL. Pick up perf gun and per Pump & squeeze 55 sxs of cement into perfs at 1170' and flush to 1070 perf gun and perf 7" csg @ 450' and POOH w/wire line. Pump cement of ND BOP. Cut off well head and weld on marker.  PTH Tog ABTO 2858**  LOD C Tog (Bysalf, Tyafes, Thinks)	nultiple completion of er all requirements, i J plugging equipm 858'. Circulate wel erf 7" csg @ 1170'. '. POOH with work lown casing and ci	ent. Kill well ll with mud. . POOH wire string and v	on in a new interval, a lamation, have been contained by the second of the lamation of the lamation of the lamation of the lamatic of the lam	a Form 3160-4 must be filed once completed and the operator has  ND WH, remove 1 joint of 30 sxs of cement @ tubing and packer.  lug @ 1070'. Pick up MO plugging equipment.  ACHED FOR ONS OF APPROVAL
14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  LAURA PINA	Title REGULAT	ORY TECH		ATION PROCEDURE ATTACHED
Signature Laura Lug	Date 10/09/2013	· · · · · · · · · · · · · · · · · · ·		
THIS SPACE FOR FEDE	RAL OR STA	TE OFFIC	E USE	\
Approved by James Q. Omo	Title	ZPS	Da	ate 12-7-13
Conditions of approval, if any, are attached. Approval of this notice does not warrant or or that the applicant holds legal or equitable title to those rights in the subject lease which we entitle the applicant to conduct operations thereon.		0		
Title 18 11 C. Castian 1001 and Title 42 11 C.C. Castian 1212, make it a prime for any n	anaam lemannin alm and	willfully to	alsa ta anu danartes set	or agaman of the United States and Hele

Field:

Langlie Jal Unit

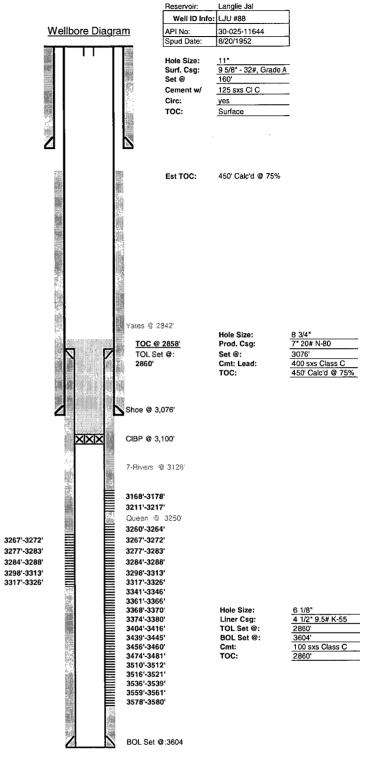
	Location:
Footage:	990' FNL & 330' FEL
Section:	17, T - 25S, R - 37E
Block:	
Survey:	
County:	Lea County , NM
Lat:	
Long:	
	Elevations:
GL:	3123'
KB:	3133'
KB Calc:	10'
ck w/log?	n/a

Date	History
9/10/1952	Open Hole complition from 3,076' to 3,386'. HydroFrac with 3,000 gals. Pumping 48 bopd & 0 bwpd; Prior 5 BOPD 0 BWPD.
4/23/1974	Deepened 6 1/4" to new TD @ 3,605'. Logged well to TD @ 3,605'. Ran 4 1/2" liner from 2860' to 3,604'. Cmt'd w/ 100 sx. Perf'd 7-Rivers/Queen l/ 3168-78', 3211'-17', 3267'-72', 3277'-83', 3284'-88', 3298'-3313', 3317'-26', 3404'-16', 3439'-45', 3474'-81', 1 JHPF. Acidized with 5,000 gals 15% NEFE HCI. IP: 18 BOPD 23 BWPD Gas TSTM. API = 33 degrees.
3/21/1975	Perd Queen #/3465-60", 3510-12", 3516'-21", 3536'-39" & 3559'-3561', 1 JSPF. Acid w1.210 gals 15% NEFE HCI. Frac'd w/23,856 gals 2% KCI wtr. Plus 31,668# 20/40 sand & 3,600# rock stat, IP: 7.7 BOPD 19 BWPD, API = 35 degrees
12/15/1995	Set CIBP @ 3,392'. Perf'd 7-R Queen f/ 3260'-64', 3341'-46', 3361'-66', 3368'-70' & 3374'-3380', 1 JSPF. No detail on Acid & Frac'd treatments.
2/10/1996	Perf'd 7-R Queen f/ 3267'-72', 3277'-83', 3284'-88', 3298'-3313' & 3317'- 3326', 1 JSPF. No detail on Acid & Frac'd treatments.
11/13/2006	Cat CIRD @ 2 100' Spatted compatibles from 2 858' 2100' Left 1 2 7/8"

	Tubing Detail (top to bottom)		
Joints	Description	Footage	Depth
1	2 3/8" J-55 6.4# Tubing	31.50	31.50
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	Rod Detail (top to bottom)		
Rods	Description	Footage	Depth
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		1	

Pumping Unit: Injector Updated: 10/4/13 MS LJU #88



PBTD: 3585 ft TD: 3605 ft OH ID: 6-1/4" Field:

Langlie Jal Unit

	Location:		
Footage:	990' FNL & 330' FEL		
Section:	17, T - 25S, R - 37E		
Block:			
Survey:			
County:	Lea County, NM		
Lat:	<u> </u>		
Long:			
	Elevations:		
GL:	3123'		
KB:	3133'		
KB Calc:	10'		
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12/15/1995	Set CIBP @ 3,392'. Perl'd 7-R Queen f/ 3260'-64', 3341'-46', 3361'-66', 3368'-70' & 3374'-3380', 1 JSPF. No detail on Acid & Frac'd treatments.
2/10/1996	Perf'd 7-R Queen f/ 3267'-72', 3277'-83', 3284'-88', 3298'-3313' & 3317'- 3326', 1 JSPF. No detail on Acid & Frac'd treatments.
11/13/2006	Set CIBP @ 3,100'. Spotted cement plug from 2,858'-3100'. Left 1 - 2 7/8' joint tubing in hole. T&A.
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	Tubing Detail (top to bottom)		
Joints	Description	Footage	Depth
11	2 3/8" J-55 6.4# Tubing	31.50	31.50
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		-	
		<u> </u>	
	<u> </u>		

	Rod Detail (top to bottom)		
Rods	Description	Footage	Depth
		+	
-			
		-	
	-		

Pumping Unit: Injector Updated:

LJU #88

Proposed

Wellbore Diagram



XXX

Reservoir: Langlie Jal Well ID Info: LJU #88 API No: 30-025-11644 Spud Date: 8/20/1952

Hole Size: Surf. Csg: 9 5/8" - 32#, Grade A 160' Set @ Cement w/ 125 sxs CI C Circ: yes TOC: Surface

Surface-450' (75 sxs)

Est TOC: 450' Calc'd @ 75%

Hole Size: 1070'-1170' (55 sxs) Prod. Csg: 8 3/4" 7" 20# N-80

Set @:

3076' 400 sxs Class C

2350'-2510' (30 sxs) Yates @ 2842' TOC:

Cmt: Lead:

450' Calc'd @ 75%

TOC @ 2858'

TOL Set @:

2860

Shoe @ 3,076'

CIBP @ 3,100°

7-Rivers @ 3128'

3168'-3178' 3211'-3217'

Queen @ 3250' 3260'-3264' 3267'-3272' 3277'-3283' 3284'-3288'

3298'-3313' 3317'-3326'

3317'-3326' 3341'-3346' 3361'-3366' 3368'-3370' 3374'-3380' 3404'-3416' 3439'-3445' 3456'-3460' 3474'-3481'

3510'-3512' 3516'-3521' 3536'-3539' 3559'-3561' 3578'-3580'

BOL Set @:3604

Hole Size: Liner Csg: TOL Set @: BOL Set @: Cmt: TOC:

6 1/8\* 4 1/2\* 9.5# K-55 2860' 3604'

100 sxs Class C 2860'

PBTD: 3585 ft TD: 3605 ft OH ID: 6-1/4"

3267'-3272'

3277'-3283'

3284'-3288'

3298'-3313'

3317'-3326'

### 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.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may 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 BOP must be installed and maintained as per API and manufacturer recommendations. 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 brine 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. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), 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. Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.

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 BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10<sup>th</sup> day, the BLM is to be contacted with justification to receive an extension for completing the cut off.

The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement, unless otherwise noted in COA (requirements will be attached). 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 three 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 will be required. See attached reclamation procedure.



## 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

#### Reclamation Objectives and 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. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its predisturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines. Strip and remove caliche, contour the location to blend with the surrounding landscape, redistribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

- 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). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
- 3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
- 4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. 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.

- 5. 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.
- 6. 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 after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
- 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

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

#### Inspection & Enforcement

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

Mike Burton Environmental Protection Specialist 575-234-2226

Jeffery Robertson Natural Resource Specialist 575-234-2230

Jennifer Van Curen Environmental Protection Specialist 575-234-5905

Doug Hoag Civil Engineering Technician 575-234-5979

Linda Denniston Environmental Protection Specialist 575-234-5974

Solomon Hughes Natural Resource Specialist 575-234-5951

#### Permitting

Cody Layton Natural Resource Specialist 575-234-5959

Trishia Bad Bear Natural Resource Specialist 575-393-3612

Todd Suter Surface Protection Specialist 575-234-5987

Tanner Nygren Natural Resource Specialist 575-234-5975

Amanda Lynch Natural Resource Specialist 575-234-5922

Legion Brumley Environmental Protection Specialist 575-234-5957

Realty, Compliance

Randy Pair
Environmental Protection Specialist
575-234-6240