

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No. **NMLC058626A**

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator **LEGACY RESERVES OPERATING LP**

3a. Address **15 SMITH ROAD SUITE 3000, MIDLAND, TX 79**    3b. Phone No. (include area code)  
**(432) 689-5200**

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)  
**SEC 27/T22S/R37E/NMP**

7. If Unit of CA/Agreement, Name and/or No.  
**LANGLIE MATTIX PENROSE SA/NMNM70973X**

8. Well Name and No.  
**LM PENROSE SAND/222**

9. API Well No. **3002510477**

10. Field and Pool or Exploratory Area  
**LANGLIE MATTIX-7RVRS-QN-GB/LANGLIE MATTIX-7**

11. Country or Parish, State  
**LEA/NM**

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

- MIRU. Pull rods and tubing from 3590'
- PUMU 4.5" AW scraper. RIH to 3320'.
- PUMU 4.5" CIBP. RIH and set @ 3300'.
- MIRU cementers. RIH with tubing, tag CIBP, spot 25 sx. WOC & Tag- record depth.
- Circ hole with MLF and P/T casing to 500 # witnessed by NMOCD rep.
- Spot 25 sx cmt @2698'-2431'. (Yates/ Transil (B-salt))
- Spot 25 sx cmt @1650'-1500'. WOC & Tag. (Est TOC for 6.625" csg)
- Perf & Sqz 38 sx cmt @ 1302'-1025'. WOC & Tag (Rustler T-salt/ Surf Casing Shoe/ Sqz Holes)
- Spot 25 sx cmt @ 100'. (Surface Plug)
- Cut off well head, verify cmt at surface, weld on dry hole marker.

Accepted for record – NMOCD  
 JRH    3/24/23

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
**MELANIE REYES / Ph: (432) 221-6358**

Title **Compliance Coordinator**

Signature \_\_\_\_\_ Date **01/23/2023**

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by  
**KEITH P IMMATTY / Ph: (575) 988-4722 / Approved**

Title **ENGINEER** Date **02/24/2023**

Office **CARLSBAD**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

## Additional Information

### Location of Well

0. SHL: NESW / 1980 FSL / 1880 FWL / TWSP: 22S / RANGE: 37E / SECTION: 27 / LAT: 0.0 / LONG: 0.0 ( TVD: 0 feet, MD: 0 feet )

BHL: NESW / 1980 FSL / 1880 FWL / TWSP: 22S / SECTION: / LAT: 0.0 / LONG: 0.0 ( TVD: 0 feet, MD: 0 feet )

# Wellbore Schematic

Printed: 12/2/2022

Page 1

**LMPSU # 222** **BOLO ID: 300029.22.02** **API # 3002510477**

LMPSU # 222, 12/2/2022

1980 FSL & 1980 FWL	GL Elev: 3,331.00	KOP:	
Section 27, Township 22S, Range 37E		EOC:	
County, State: Lea, NM		Fill Depth:	
Aux ID: 41480		PBTD:	3,665.00
'KB' correction: ; All Depths Corr To:		TD:	3,665.00
		BOP:	

**Hole Size**

Diameter	Top At	Btm At	Date Drilled
11.0000	0.00	1,138.00	
<i>Bore size estimated.</i>			
7.8750	1,138.00	3,386.00	
<i>Bore size estimated.</i>			
6.0000	3,386.00	3,665.00	
<i>Open hole. Bore size estimated.</i>			

**Surface Casing**

Date Ran: 11/5/2008

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing		8.0000			1,138.00	0.00	1,138.00

**Production Casing**

Date Ran: 9/25/2009

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing		6.6250			3,386.00	0.00	3,386.00

**Production Liner**

Date Ran: 11/5/2008

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	79	4.5000	10.50		3,340.00	0.00	3,340.00

**Cement**

Top At	Btm At	ID	OD	TOC Per	# - Type	# Sx	Class	Wt.
0.00	1,138.00	8.000	11.000		10	400		
0.00	3,386.00	6.625	8.125		20	150		
TOC unknown.; TOC unknown.								
0.00	3,340.00	4.500	6.625	Circ	30	250		

**Zone and Perfs**

**SEVEN RIVERS**

**Comments / Completion Summary**

6/13/1938: Spud well. Shot open hole with 330 qts Nitro.  
 3/52: Acidize OH w/ 500 gal acid  
 8/65: Shutin  
 10/63: Install Pmp Unit  
 4/25/1967: Frac OH down csg w/ 40,000 gal + 60,000 # 20/40 sand  
 8/92: Install 4 1/2" 10.5# Liner to repair csg leak. Run csg to 3340'. Cmt w/ 250 sxs and circ 15 sxs  
 11/99: Repair Surface Csg Leak. Perf 4 1/2" and 6 5/8" csg at 1075' and 800'. Couldn't pump into at 1075'. Cmt w/ 100 sxs cmt with circ to surface.

**Perforations**

Top	Bottom	Formation	Status	Opened	Closed	# / Ft	Ttl #
3,386.00	3,665.00	Penrose Sand					

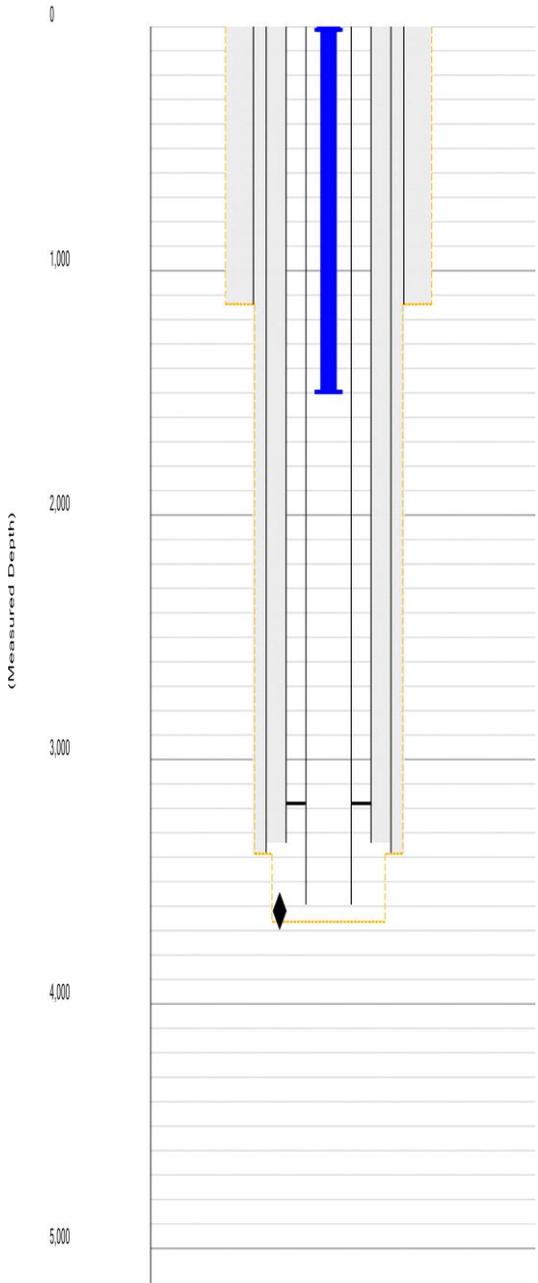
**Tubing**

Date Ran: 9/7/2007

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Tubing	102	2.3750	4.70	J55	3,178.00	0.00	3,178.00
Tubing Anchor	1	4.5000			3.00	3,178.00	3,181.00
Tubing	12	2.3750	4.70	J55	375.00	3,181.00	3,556.00
Tubing	1	2.3750	4.70	END	33.00	3,556.00	3,589.00

**Enduralloy Joint**

Seat Nipple	1	2.3750			1.00	3,589.00	3,590.00
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◇ = Fluid Level with Cas  
 ◆ = Net Fluid Level

# Wellbore Schematic

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Page 2

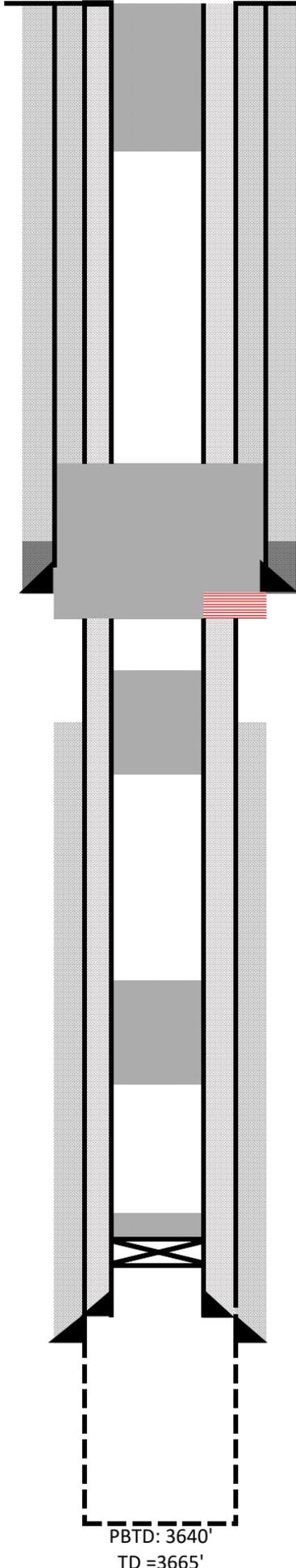
LMPSU # 222	BOLO ID: 300029.22.02	API # 3002510477
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**Rods** *Date Ran:* 9/7/2007

Description	#	Diameter	Rod Box	Grade	Length	Top At	Btm At
Polish Rod	1	1.2500			22.00	0.00	22.00
Polish Rod Liner	1	1.5000			14.00	8.00	22.00
Pony Rods	5	0.8750		KD	16.00	22.00	38.00
<i>Rod Count Wrong</i>							
Rods	58	0.8750		KD	1,450.00	38.00	1,488.00
Pump	1	1.5000			16.00	1,488.00	1,504.00



<b>Langlie-Mattix Penrose Sand Unit #222</b>		API#:	<b>30-025-10477</b>				
Field/Pool:	<b>Langlie-Mattix; 7Rvrs-Queen-Grayburg</b>	Section:	<b>27</b>				
County:	<b>Lea</b>	Township:	<b>22S</b>	Range:	<b>37E</b>		
State:	<b>New Mexico</b>	Location:	<b>1980' FSL x 1980' FWL</b>				Author:
Spud Date:	<b>6/13/1938</b>	GL:	<b>3331'</b>	PBTD:	<b>3640'</b>		J. Valdez



Description	O.D.	Weight	Top	Depth	Hole	Cmt Sx	TOC
Surface	8	Unknown	0	1132	11	400 sx	Unknown- Est 0'
Production	6.625	24	0	3380	7.875	150 sx	1575' calc/ 1075'-0' Dec 1999
Production Inner-string	4.5	10.5	0	3340	5.75	250 Sx	Circ'd
Open Hole	3.875" est		3380	3665	5.75/3.875	0	Open Hole

**8. Cut off well head, verify cmt at surface, weld on dry hole marker.**  
**7. Spot 25 sx cmt @ 100'. (Surface Plug)**

Formation Tops:	
<b>Rustler (T-Salt)</b>	1252'*
<b>Transil (B-Salt)</b>	2481'*
<b>Yates</b>	2648'*
<b>7Rivers</b>	2844'*
<b>Queen</b>	3416'*

\* Used offset well LMPSU #601

Sqz holes @ 1075'. 100sx up 6.625" x 8" annulus. Circ'd to surface

8" Surface Casing @ 1132'

**6. Perf & Sqz 38 sx cmt @ 1302'-1025'. WOC & Tag (Rustler T-salt/ Surf Casing Shoe/ Sqz Holes)**

Est TOC 6.625" @1575' (calc). Sqz'd 100 sx up 6.625" x 8" annulus from 1075' in Dec 1999

**5. Spot 25 sx cmt @1650'-1500'. WOC & Tag. (Est TOC for 6.625" csg)**

**4. Spot 25 sx cmt @2698'-2431'. (Yates/ Transil (B-salt))**

**3. Circ hole with MLF and P/T casing to 500 # witnessed by NMOCD rep.**  
**2. MIRU cementers. RIH with tubing, tag CIBP, spot 25 sx. WOC & Tag- record depth.**  
**1. PUMU 4.5" CIBP. RIH and set @ 3300'.**

4.5" Production Inner-String @3340' (1992)

6.625" Production Casing @ 3380'

5.75"/3.875" (est) Open Hole 3380'-3665'

PBTD: 3640'  
TD = 3665'

1. MIRU. Pull rods and tubing from 3590'
2. PUMU 4.5" AW scraper. RIH to 3320'.
3. PUMU 4.5" CIBP. RIH and set @ 3300'.
4. MIRU cementers. RIH with tubing, tag CIBP, spot 25 sx. WOC & Tag- record depth.
5. Circ hole with MLF and P/T casing to 500 # witnessed by NMOCD rep.
6. Spot 25 sx cmt @2698'-2406'. (Yates/ Transil (B-salt)) **WOC and Tag**
7. Spot 25 sx cmt @1650'-1500'. WOC & Tag. (Est TOC for 6.625" csg)
8. Perf & Sqz 38 sx cmt @ 1302'-1025'. WOC & Tag (Rustler T-salt/ Surf Casing Shoe/ Sqz Holes). **Perf and sqz might need two sets of perfs to establish circulation due to cement above the interval**
9. Spot 25 sx cmt @ 100'. (Surface Plug)
10. Cut off well head, verify cmt at surface, weld on dry hole marker.

KEITH

IMMATTY

Digitally signed

by KEITH

IMMATTY

Date: 2023.02.24

13:56:14 -07'00'

# Wellbore Schematic

Printed: 12/2/2022

Page 1

**LMPSU # 222** **BOLO ID: 300029.22.02** **API # 3002510477**

LMPSU # 222, 12/2/2022

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Section 27, Township 22S, Range 37E		EOC:	
County, State: Lea, NM		Fill Depth:	
Aux ID: 41480		PBTD:	3,665.00
'KB' correction: ; All Depths Corr To:		TD:	3,665.00
		BOP:	

**Hole Size**

Diameter	Top At	Btm At	Date Drilled
11.0000	0.00	1,138.00	
<i>Bore size estimated.</i>			
7.8750	1,138.00	3,386.00	
<i>Bore size estimated.</i>			
6.0000	3,386.00	3,665.00	
<i>Open hole. Bore size estimated.</i>			

**Surface Casing**

Date Ran: 11/5/2008

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing		8.0000			1,138.00	0.00	1,138.00

**Production Casing**

Date Ran: 9/25/2009

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing		6.6250			3,386.00	0.00	3,386.00

**Production Liner**

Date Ran: 11/5/2008

Description	#	Diameter	Weight	Grade	Length	Top At	Btm At
Casing	79	4.5000	10.50		3,340.00	0.00	3,340.00

**Cement**

Top At	Btm At	ID	OD	TOC Per	# - Type	# Sx	Class	Wt.
0.00	1,138.00	8.000	11.000		10	400		
0.00	3,386.00	6.625	8.125		20	150		
TOC unknown.; TOC unknown.								
0.00	3,340.00	4.500	6.625	Circ	30	250		

**Zone and Perfs**

**SEVEN RIVERS**

**Comments / Completion Summary**

6/13/1938: Spud well. Shot open hole with 330 qts Nitro.  
 3/52: Acidize OH w/ 500 gal acid  
 8/65: Shutin  
 10/63: Install Pmp Unit  
 4/25/1967: Frac OH down csg w/ 40,000 gal + 60,000 # 20/40 sand  
 8/92: Install 4 1/2" 10.5# Liner to repair csg leak. Run csg to 3340'. Cmt w/ 250 sxs and circ 15 sxs  
 11/99: Repair Surface Csg Leak. Perf 4 1/2" and 6 5/8" csg at 1075' and 800'. Couldn't pump into at 1075'. Cmt w/ 100 sxs cmt with circ to surface.

**Perforations**

Top	Bottom	Formation	Status	Opened	Closed	# / Ft	Ttl #
3,386.00	3,665.00	Penrose Sand					

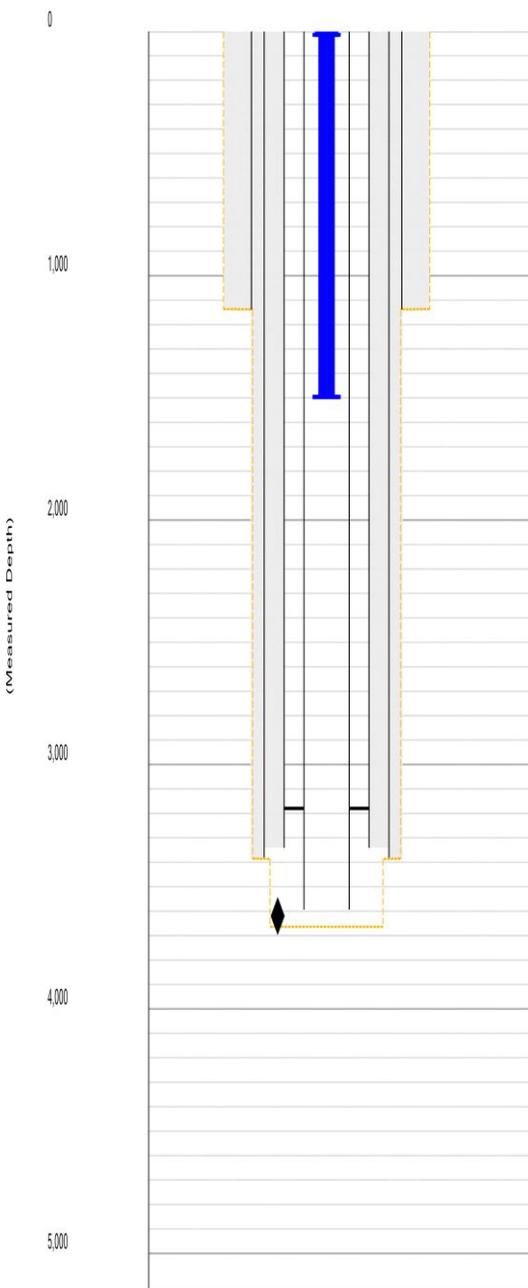
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Date Ran: 9/7/2007

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Tubing	12	2.3750	4.70	J55	375.00	3,181.00	3,556.00
Tubing	1	2.3750	4.70	END	33.00	3,556.00	3,589.00

**Enduralloy Joint**

Seat Nipple	1	2.3750			1.00	3,589.00	3,590.00
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◇ = Fluid Level with Cas  
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# Wellbore Schematic

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LMPSU # 222	BOLO ID: 300029.22.02	API # 3002510477
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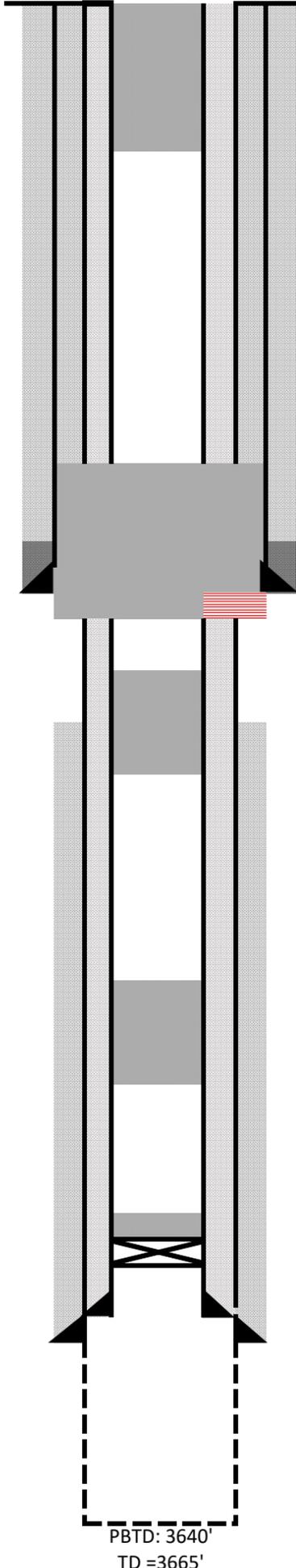
**Rods** *Date Ran:* 9/7/2007

Description	#	Diameter	Rod Box	Grade	Length	Top At	Btm At
Polish Rod	1	1.2500			22.00	0.00	22.00
Polish Rod Liner	1	1.5000			14.00	8.00	22.00
Pony Rods	5	0.8750		KD	16.00	22.00	38.00
<i>Rod Count Wrong</i>							
Rods	58	0.8750		KD	1,450.00	38.00	1,488.00
Pump	1	1.5000			16.00	1,488.00	1,504.00

Proposed Plugged WBD



<b>Langlie-Mattix Penrose Sand Unit #222</b>		API#:	<b>30-025-10477</b>		
Field/Pool:	<b>Langlie-Mattix; 7Rvrs-Queen-Grayburg</b>	Section:	<b>27</b>		
County:	<b>Lea</b>	Township:	<b>22S</b>	Range:	<b>37E</b>
State:	<b>New Mexico</b>	Location:	<b>1980' FSL x 1980' FWL</b>		Author:
Spud Date:	<b>6/13/1938</b>	GL:	<b>3331'</b>	PBTD:	<b>3640'</b>
					J. Valdez



Description	O.D.	Weight	Top	Depth	Hole	Cmt Sx	TOC
Surface	8	Unknown	0	1132	11	400 sx	Unknown- Est 0'
Production	6.625	24	0	3380	7.875	150 sx	1575' calc/ 1075'-0' Dec 1999
Production Inner-string	4.5	10.5	0	3340	5.75	250 Sx	Circ'd
Open Hole	3.875" est		3380	3665	5.75/3.875	0	Open Hole

- 8. Cut off well head, verify cmt at surface, weld on dry hole marker.
- 7. Spot 25 sx cmt @ 100'. (Surface Plug)

Formation Tops:	
Rustler (T-Salt)	1252'*
Transil (B-Salt)	2481'*
Yates	2648'*
7Rivers	2844'*
Queen	3416'*

\* Used offset well LMPSU #601

Sqz holes @ 1075'. 100sx up 6.625" x 8" annulus. Circ'd to surface

8" Surface Casing @ 1132'

- 6. Perf & Sqz 38 sx cmt @ 1302'-1025'. WOC & Tag (Rustler T-salt/ Surf Casing Shoe/ Sqz Holes)

BLM NOTE: Perf and sqz might need two sets of perfs to establish circulation due to cement above the interval

Est TOC 6.625" @1575' (calc). Sqz'd 100 sx up 6.625" x 8" annulus from 1075' in Dec 1999

- 5. Spot 25 sx cmt @1650'-1500'. WOC & Tag. (Est TOC for 6.625" csg)

- 4. Spot 25 sx cmt @2698'-2434'. (Yates/ Transil (B-salt))  
2406'. WOC & TAG

- 3. Circ hole with MLF and P/T casing to 500 # witnessed by NMOCD rep.
- 2. MIRU cementers. RIH with tubing, tag CIBP, spot 25 sx. WOC & Tag- record depth.
- 1. PUMU 4.5" CIBP. RIH and set @ 3300'.

4.5" Production Inner-String @3340' (1992)  
6.625" Production Casing @ 3380'

5.75"/3.875" (est) Open Hole 3380'-3665'

PBTD: 3640'  
TD =3665'

Sundry ID		2712045				
Plug Type	Top	Bottom	Length	Tag	Sacks	Notes
Surface Plug	0.00	100.00	100.00	Verify circulated to surface	25.00	Verify to surface inside casing and in annulus
Shoe Plug	1070.68	1182.00	111.32	WOC and Tag	38.00	Same as below plug
Top of Salt @ 1252	1189.48	1302.00	112.52	WOC and Tag	38.00	Perf and sqz
TOC 1575'						Perf and sqz above
Base of Salt @ 2481	2406.19	2531.00	124.81	WOC and Tag	25.00	Same as below plug
Yates @ 2648	2571.52	2698.00	126.48	WOC and Tag	25.00	
Shoe Plug	3256.60	3390.00	133.40	WOC and Tag	25.00	Covered by below plug
CIBP Plug	3265.00	3300.00	35.00	Verify CIBP depth	25.00	Leak test 500psi, 30mins

<b>No more than 2000' is to be allowed between plugs in open hole, and no more than 3000' between plugs in cased hole.</b>
<b>Class H &gt;7500'</b>
<b>Class C &lt;7500'</b>
<b>Fluid used to mix the cement in R111P shall be saturated with the salts common to the section penetrated, and in suitable proportions, but not more than 3% calcium chloride by weight of cement will be considered the desired mixture whenever possible.</b>
<b>Critical, High Cave Karst: Cave Karst depth to surface</b>
<b>R111P: Solid plug in all annuli - 50' from bottom of salt to surface.</b>

<b>Class C: 1.32 ft<sup>3</sup>/sx</b>
<b>Class H: 1.06 ft<sup>3</sup>/sx</b>

**Onshore Order 2.III.G Drilling Abandonment Requirements: "All formations bearing usable-quality water, oil, gas, or geothermal resources, and/or a prospectively valuable deposit of minerals shall be protected.**

<b>Cave Karst/Potash Cement</b>	<b>Low</b>	500.00
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Shoe @	1132.00
Shoe @	3380.00
Shoe @	3340.00

Perforatons Top @	3380.00	Perforations	3665.00
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CIBP @	3300.00
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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 **ninety (90)** 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. **Notification:** 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 575-689-5981.

3. **Blowout Preventers:** 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. **Mud Requirement:** 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. **Cement Requirement:** 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. Dry Hole Marker: 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). A weep hole shall be left if a metal plate is welded in place.

7. Subsequent Plugging Reporting: 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. Trash: 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 objectives.



# 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 pre-disturbance 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/all contaminants, scrap/trash, equipment, pipelines and powerlines **(Contact service companies, allowing plenty of time to have the risers and power lines and poles removed prior to reclamation, don't wait till the last day and try to get them to remove infrastructure)**. Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip (across the slope 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:

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

Arthur Arias  
Environmental Protection Specialist  
575-234-6230

Crisha Morgan  
Environmental Protection Specialist  
575-234-5987

Jose Martinez-Colon  
Environmental Protection Specialist  
575-234-5951

Mark Mattozzi  
Environmental Protection Specialist  
575-234-5713

Robert Duenas  
Environmental Protection Specialist  
575-234-2229

Trishia Bad Bear, Hobbs Field Station  
Natural Resource Specialist  
575-393-3612



**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

COMMENTS

Action 190820

**COMMENTS**

Operator: LEGACY RESERVES OPERATING, LP 15 Smith Road Midland, TX 79705	OGRID: 240974
	Action Number: 190820
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

**COMMENTS**

Created By	Comment	Comment Date
john.harrison	Accepted for record - NMOCD JRH 3/24/23 BLM approved P&A 2/24/23	3/24/2023

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Created By	Condition	Condition Date
john.harrison	None	3/24/2023