

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010**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.  
NMLC065710A

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**7. If Unit or CA/Agreement, Name and/or No.  
NMNM94514X8. Well Name and No.  
LUSK WEST DELAWARE UNIT 010 ✓9. API Well No.  
30-025-21488-00-S1 ✓10. Field and Pool, or Exploratory  
W LUSK11. County or Parish, and State  
LEA COUNTY, NM1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator  
SHACKELFORD OIL COMPANY / E-Mail: CHOUSTON92083@YAHOO.COM

Contact: CLAY HOUSTON

3a. Address  
203 WEST WALL SUITE 200  
MIDLAND, TX 797013b. Phone No. (include area code)  
Ph: 432-682-97844. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 20 T19S R32E NWSE 1980FSL 1980FEL ✓

HOBBS OCD

SEP 29 2015

RECEIVED

## 12. CHECK 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"/> Fracture Treat	<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 checked="" type="checkbox"/> Recomplete	<input 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 checked="" 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Proposed Procedures: LWDU # 10- Squeeze cement to surface and recomplete to 4900' and 4950' zone

1. Set CIBP at 6412'. Spot 25 sxs of cement on top
2. Tag top of cement at 6260' to be witnessed by BLM
3. Perforate squeeze holes at 5520'. GIH w/tbg and cement retainer set at 5470'. Pump KCL water circulate fluid to surface, circulate 10 bbls. Pump 1920 sxs of Class C cement circulate to surface
4. Shut down POOH w/tbg wait 12 hours. Run CBL for top of cement
5. Perforate Upper Cherry Canyon at 4900-4910, 4956-71
6. GIH w/tbg and packer set at 4840' acidize w/1000 gallons of 7% acid
7. Swab test. Depending on test:
  - a) test good; prepare to frac. Frac w/75,000 gallons
  - b) test not to frac, set CIBP at 4850' spot 25 sxs. Prepare to test Yates at 2634-40,

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #306242 verified by the BLM Well Information System

For SHACKELFORD OIL COMPANY, sent to the Hobbs

Committed to AFMSS for processing by LINDA JIMENEZ on 08/26/2015 (15LJ1790SE)

Name (Printed/Typed) DON SHACKELFORD

Title PRESIDENT

Signature (Electronic Submission)

Date 06/23/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

**APPROVED**  
**PETROLEUM ENGINEER**

Date

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.

Office

SEP 22 2015

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.

**Kenneth Rennick**

BUREAU OF LAND MANAGEMENT

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

OCT 08 2015

**Additional data for EC transaction #306242 that would not fit on the form**

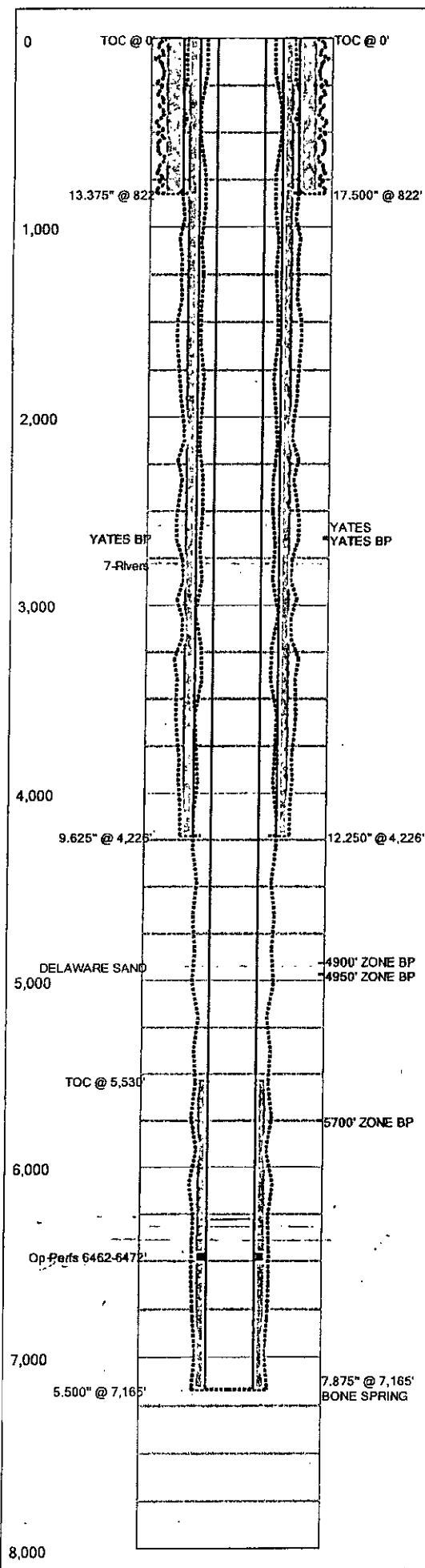
**32. Additional remarks, continued**

2647-54

8. If successful, remove from Unit and change name

Proposed Procedures: LWDU # 10- Squeeze cement to surface and recomplete to 4900' and 4950' zone

1. Set CIBP at 6412'. Spot 25 sxs of cement on top
2. Tag top of cement at 6260' to be witnessed by BLM
3. Perforate squeeze holes at 5520'. GIH w/tbg and cement retainer set at 5470'. Pump KCL water circulate fluid to surface, circulate 10 bbls. Pump 1920 sxs of Class C cement circulate to surface
4. Shut down POOH w/tbg wait 12 hours. Run CBL for top of cement
5. Perforate Upper Cherry Canyon at 4900-4910, 4956-71
6. GIH w/tbg and packer set at 4840' acidize w/1000 gallons of 7 ½ % acid
7. Swab test. Depending on test:
  - a) test good; prepare to frac. Frac w/75,000 gallons
  - b) test not to frac, set CIBP at 4850' spot 25 sxs. Prepare to test Yates at 2634-40, 2647-54
8. If successful, remove from Unit and change name



Last Updated: 5/11/2015 03:14 PM

Field Name		Lease Name		Well No.
Lusk West Delaware Unit		Lusk West Delaware Unit		10
County	State	API No.		
Lea	New Mexico	30025214880000		
Version	Version Tag			
1	Current			
GL (ft)	KB (ft)	Section	Township/Block	Range/Survey
3,572.0	3,589.0	20	19S	32E
Operator		Well Status	Latitude	Longitude
Shackelford Oil Company		Producer		
Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From
1980	FSL	1980	FEL	
Prop Num	Spud Date		Comp. Date	
Additional Information				
Other 1	Other 2	Other 3	Other 4	
Prepared By	Updated By	Last Updated		
Shackelford	Shackelford	5/11/2015 3:14 PM		

#### Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	822	
	12.250	0	4,226	
	7.875	0	7,165	

#### Tubular Summary

Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
	Surface Casing	13.375		J-55	0	822
	Intermediate Casing	9.625	47.00	J-55	0	4,226
	Production Casing	5.500	15.50	J-55	0	7,165

#### Casing Cement Summary

C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		1,180	13.375	0	822	circulated to surface
		2,365	9.625	0	4,226	circulated to surface
		500	5.500	5,530	7,165	toc orig est to be 5595' by temp svy. TOC @ 5530' CBL (1/12/15)

#### Perforation Summary

C	Date	Perf. Status	Formation	OA Top (MD ft)	OA Bottom (MD ft)	Shots
		Open	delaware lower	6,462	6,472	10

#### Formation Tops Summary

Formation	Top (TVD ft)	Comments
YATES	2,577	
7-Rivers	2,780	
DELAWARE SAND	4,921	
BONE SPRING	7,188	

Current Schematic

Last Updated: 5/11/2015 03:14 PM

Field Name	Lease Name	Well No.	County	State	API No.
Lusk West Delaware Unit	Lusk West Delaware Unit	10	Lea	New Mexico	30025214880000
Version	Version Tag	Spud Date	Comp. Date	GL (ft)	KB (ft)
1	Current			3,572.0	3,589.0
Section	Township/Block	Range/Survey	Dist. N/S (ft)	N/S Line	Dist. E/W (ft)
20	19S	32E	1,980	FSL	1,980
Operator	Well Status	Latitude	Longitude	Prop Num	
Shackelford Oil Company	Producer				
Other 1	Other 2	Other 3	Other 4		
Last Updated	Prepared By	Updated By			
05/11/2015 3:14 PM	Shackelford	Shackelford			
Additional Information					

Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	822	
	12.250	0	4,226	
	7.875	0	7,165	

Tubular Summary

Date	Description	No. Jts	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)	Comments
	Surface Casing		13.375		J-55	0	822	
	Intermediate Casing		9.625	47.00	J-55	0	4,226	split string 47# and 53.5#
	Production Casing		5.500	15.50	J-55	0	7,165	

Casing Cement Summary

C	Date	No. Sx	Yield (ft3/sk)	Vol. (ft3)	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
		1,180	1.00	1,180	13.375	0	822	Class c	circulated to surface
		2,365	1.00	2,365	9.625	0	4,226	Class c	circulated to surface
		500	1.00	500	5.500	5,530	7,165	Class c	toc orig est to be 5595' by temp svy. TOC @ 5530' CBL (1/12/15)

Tools/Problems Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments

Perforation Summary

C	Date	Perf. Status	Formation		Comments	
		Open	delaware lower			
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	6,462	6,472	1	10		

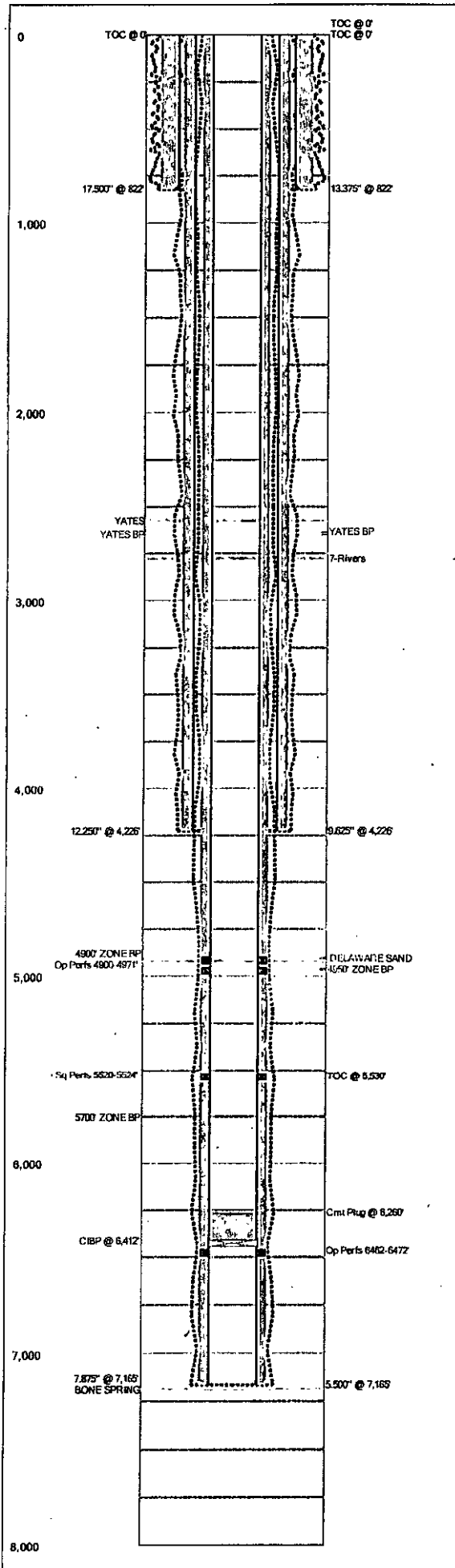
Formation Top Summary

Formation Name	Top(TVD ft)	Comments
YATES	2,577	
7-Rivers	2,780	
DELAWARE SAND	4,921	
BONE SPRING	7,188	

Behind Pipe Summary

C	Formation Name	Top (MD ft)	Bottom (MD ft)	Net Pay (ft)	Drain. Area(Acre)	Res. Pres. (psi)	Water Sat. (%)	Eff. Por. (%)	EUR Oil (MBO)	EUR Gas (MMCF)	Comments
	YATES	2,634	2,640	0	0	0	0.0%	0.0%	0	0	
	YATES	2,647	2,654	0	0	0	0.0%	0.0%	0	0	
	4900' ZONE	4,900	4,910	0	0	0	45.9%	15.0%	0	0	
	4950' ZONE	4,956	4,971	0	0	0	50.6%	17.0%	0	0	
	5700' ZONE	5,743	5,757	0	0	0		0.0%	0	0	

Last Updated: 6/23/2015 01:36 PM



Field Name		Lease Name		Well No.
Lusk West Delaware Unit		Lusk West Delaware Unit		10
County	State	API No.		
Lea	New Mexico	30025214880000		
Version		Version Tag		
2		Proposed		
GL (ft)	KB (ft)	Section	Township/Block	Range/Survey
3,572.0	3,589.0	20	19S	32E
Operator		Well Status	Latitude	Longitude
Shackelford Oil Company		Producer		
Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From
1980	FSL	1980	FEL	
Prop Num		Spud Date	Comp. Date	
Additional Information				
Other 1	Other 2	Other 3	Other 4	
Prepared By		Updated By	Last Updated	
Shackelford		Shackelford	6/23/2015 1:36 PM	

Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	822	
	12.250	0	4,226	
	7.875	0	7,165	

Tubular Summary

Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
	Surface Casing	13.375		J-55	0	822
	Intermediate Casing	9.625	47.00	J-55	0	4,226
	Production Casing	5.500	15.50	J-55	0	7,165

Casing Cement Summary

C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		1,180	13.375	0	822	circulated to surface
		2,365	9.625	0	4,226	circulated to surface
		1,920	5.500	0	5,530	circulate cement to surface
		500	5.500	5,530	7,165	too orig est to be 5595' by temp svy. TOC @ 5530' CBL (1/12/15)

Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	25	5.500	6,260	6,412	

Perforation Summary

C	Date	Perf. Status	Formation	OA Top (MD ft)	OA Bottom (MD ft)	Shots
		Open	Upper Cherry Canyon	4,900	4,971	100
		Squeezed		5,520	5,524	8
		Open	delaware lower	6,462	6,472	10

Formation Tops Summary

Formation	Top (TVD ft)	Comments
YATES	2,577	
7-Rivers	2,780	
DELAWARE SAND	4,921	
BONE SPRING	7,188	

Field Name		Lease Name		Well No.	County	State	API No.	
Lusk West Delaware Unit		Lusk West Delaware Unit		10	Lea	New Mexico	30025214880000	
Version	Version Tag			Spud Date	Comp. Date	GL (ft)	KB (ft)	
2	Proposed					3,572.0	3,589.0	
Section	Township/Block	Range/Survey	Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From	
20	19S	32E	1,980	FSL	1,980	FEL		
Operator		Well Status		Latitude		Longitude		Prop Num
Shackelford Oil Company		Producer						
Other 1		Other 2		Other 3		Other 4		
Last Updated		Prepared By		Updated By				
06/23/2015 1:36 PM		Shackelford		Shackelford				
Additional Information								

## Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	822	
	12.250	0	4,226	
	7.875	0	7,165	

## Tubular Summary

Date	Description	No. Jts	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)	Comments
	Surface Casing		13.375		J-55	0	822	
	Intermediate Casing		9.625	47.00	J-55	0	4,226	split string 47# and 53.5#
	Production Casing		5.500	15.50	J-55	0	7,165	

## Casing Cement Summary

C	Date	No. Sx	Yield (ft <sup>3</sup> /sk)	Vol. (ft <sup>3</sup> )	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
		1,180	1.00	1,180	13.375	0	822		circulated to surface
		2,365	1.00	2,365	9.625	0	4,226		circulated to surface
		1,920	1.00	1,920	5.500	0	5,530		circulate cement to surface
		500	1.00	500	5.500	5,530	7,165		toc orig est to be 5595' by temp svy. TOC @ 5530' CBL (1/12/15)

## Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	25	5.500	6,260	6,412	

## Perforation Summary

C	Date	Perf. Status	Formation		Comments		
		Open	delaware lower				
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments	
	6,462	6,472	1	10			
C	Date	Perf. Status	Formation		Comments		
		Squeezed					
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments	
	5,520	5,524	2	8			
C	Date	Perf. Status	Formation		Comments		
		Open	Upper Cherry Canyon				
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments	
	4,900	4,910	4	40			
	4,956	4,971	4	60			

## Formation Top Summary

Formation Name	Top(TVD ft)	Comments
YATES	2,577	
7-Rivers	2,780	
DELAWARE SAND	4,921	
BONE SPRING	7,188	

## Behind Pipe Summary

C	Formation Name	Top (MD ft)	Bottom (MD ft)	Net Pay (ft)	Drain. Area(Acre)	Res. Pres. (psi)	Water Sat. (%)	Eff. Por. (%)	EUR Oil (MBO)	EUR Gas (MMCF)	Comments
	YATES	2,634	2,640	0	0	0	0.0%	0.0%	0	0	
	YATES	2,647	2,654	0	0	0	0.0%	0.0%	0	0	
	4900' ZONE	4,900	4,910	0	0	0	45.9%	15.0%	0	0	
	4950' ZONE	4,956	4,971	0	0	0	50.6%	17.0%	0	0	
	5700' ZONE	5,743	5,757	0	0	0	0.0%	0.0%	0	0	

**Lusk West Delaware Unit 010**  
**30-025-21488**  
**Shackelford Oil Company**  
**Conditions of Approval**

**Notify BLM at 575-393-3612 (Lea County) a minimum of 24 hours prior to commencing work.**

**Work to be completed by December 23, 2015.**

1. Operator approved to set a CIBP at 6412-feet and spot 25-sxs of cement. Tagged is to be witnessed by BLM.
2. Must conduct a casing integrity test before perforating and fracturing. Test should be run for 30 minutes. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails. Document the pressure test on a one hour full rotation calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed tested. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
3. Approved to perforate the proposed interval starting at 5520-feet as well as squeeze cement to obtain circulation to surface.
4. **Provide BLM with an electronic copy (Adobe Acrobat Document) of the Cement Bond Log (CBL) record that will be run as proposed in Step #4 of the submitted Sundry. This electronic copy must be submitted before perforating the Delaware (Step #6). The address that may be use is <pswartz@blm.gov>. For additional questions on this request, the CFO BLM on call engineer may be reached at 575-706-2779.**
5. Approved to perforate the Upper Cherry Canyon as proposed.
6. If successful by indication of swab test, request removal from Unit and change well name by sending in Subsequent reports and updated Completion report.
7. If not successful, approved to set CIBP at 4850-feet and spot 25-sxs of cement. Must be tagged which shall be witnessed by BLM. Then test the Yates as proposed. Still send Subsequent reports and updated Completion report afterwards to request removal from Unit and change well name.



8. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
9. Closed loop system required.
10. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
11. Operator to have H2S monitoring equipment on location.
12. A minimum of a 2000 (2M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (2M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
13. **Subsequent sundry required detailing work done, a C-102 form, and completion report for the new formations. Operator to include well bore schematic of current well condition when work is complete.**
14. **See attached for General Plugback Guidelines**

**KGR 09222015**

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

**Permanent Abandonment of Production Zone 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 this approval.

**If you are unable to plug back 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 back. Failure to do so will result in enforcement action.**

2. Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-393-3612

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.**

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. Subsequent Plug back Reporting: Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back 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 work was completed.**

7. 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.