

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.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM103234
2. Name of Operator SHACKELFORD OIL COMPANY Contact: CLAY HOUSTON E-Mail: CHOUSTON92083@YAHOO.COM		6. If Indian, Allottee or Tribe Name
3a. Address 203 WEST WALL SUITE 200 MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 432-682-9784 Fx: 432-684-5026	7. If Unit or CA/Agreement, Name and/or No. NMNM94514X
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 21 T19S R32E NESW 2310FSL 1650FWL		8. Well Name and No. LUSK WEST DELAWARE UNIT 111
JUL 29 2014 RECEIVED		9. API Well No. 30-025-30791-00-S1
10. Field and Pool, or Exploratory LUSK Yates		11. County or Parish, and State LEA COUNTY, NM

## 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 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.)

RECOMPLETE FROM 6400' WATER FLOOD INTERVAL TO YATES FORMATION

1. POOH W/ TUBING AND PACKER

2. SET CIBP @ 6370' W/ CEMENT CAP. TAG PLUG POOH W/ TUBING.

3. NIPPLE UP 3000 # BOP

4. TEST CASING TO 500 PSI. RUN CHART.

5. PERFORATE THE FOLLOWING INTERVALS IN YATES FORMATION W/ 4 SPF

2632-34

2664-76

2684-88

2694-96

6. GIH W/ PACKER AND PLUG AND ACIDIZE INTERVALS INDIVIDUALLY W/ 500 GALS OF NEFE ACID

7. POOH W/ PLUG. GIH W/ PACKER AND TUBING SWAB TEST

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Capital Controlled Water Basin

SUBJECT TO LIKE  
APPROVAL BY STATE

14. I hereby certify that the foregoing is true and correct. Electronic Submission #236845 verified by the BLM Well Information System For SHACKELFORD OIL COMPANY, sent to the Hobbs Committed to AFMSS for processing by CHRISTOPHER WALLS on 04/28/2014 (14CRW0141SE)	
Name (Printed/Typed) DON SHACKELFORD	Title PRESIDENT
Signature (Electronic Submission)	Date 02/25/2014
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
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 _____
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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	

APPROVED

JUL 23 2014

Paul H. Hobbs

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

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

MSS/OCD 7/30/2014

AUG 05 2014

**Additional data for EC transaction #236845 that would not fit on the form**

**32. Additional remarks, continued**

8. SET PACKER AND TUBING AT 2550'. PRESSURE UP BACKSIDE TO 500 PSI. FRAC W/ 30,000 LBS OF SAND
9. RECOVER LOAD FROM FRAC
10. POOH W/ TUBING AND PACKER
11. GIH W/ TUBING AND MULESHOE CLEAN WELL TO BOTTOM
12. POOH W/ TUBING. GIH W/ TUBING, RODS, PUMP PUT ON PRODUCTION
13. CHANGE NAME OF WELL BY SUNDRY IF OPERATION IS SUCCESSFUL

1. POOH w/tubing and packer
2. Set CIBP @ 6370' w/cement cap. Tag plug POOH w/tubing.
3. Nipple up 3000 # BOP
4. Test casing to 500 psi. Run chart.
5. Perforate the following intervals in Yates Formation w/4 spf.
  - 2632-34
  - 2664-76
  - 2684-88
  - 2694-96
6. GIH w/packer and plug and acidize intervals individually w/500 gals of NEFE acid
7. POOH w/plug. GIH w/packer and tubing swab test
8. Set packer and tubing at 2550'. Pressure up backside to 500 psi. Frac w/30,000 lbs of sand
9. Recover load from Frac
10. POOH w/tubing and packer
11. GIH w/tubing and muleshoe clean well to bottom
12. POOH w/tubing. GIH w/tubing, rods, pump put on production
13. Change name of well by Sundry if operation is successful

1,000

2,000

3,000

4,000

5,000

6,000

Pkr @ 6379'

CIBP @ 6700'

Anhydrite

Tansil

Yates

Seven Rivers

DVT, D/O @ 2860'

Delaware

2,375' @ 6379'

Op Perfs 6468-6476'

G.L. (ft)	K.B. (ft)	Sec.	Township/Block	Range/Survey
		21	19S	32E
Operator		Well Status	Latitude	Longitude
Shackelford Oil Co				
Footage Call				
PropNum		Spud Date	Comp. Date	
Additional Information				
Prepared By		Updated By	Last Updated	
Brady Shackelford		Brady Shackelford	2/24/2014 1:07	

## Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	477	
	7.875	0	7,230	

## Tubular Summary

Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
	Surface Casing	2.375	48.00	J-55	0	
	Production Casing	5.500	15.50	J-55	0	7,230
	Tubing	2.375	4.70	J-55	0	6,700

## Casing Cement Summary

Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	475	2.375	0	477	SURFACE
	2,628	5.500	0	7,230	SURFACE

## Tool/Problem Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)
	DVT, D/O	5.500	0.000	2,860	
	Pkr	5.500	2.375	6,379	
	CIBP	5.500	0.000	6,700	

## Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		7.875	7,175	7,230	

## Perforation Summary

C	Date	Perf. Status	Formation	OA Top (MD ft)	OA Bottom (MD ft)	Sh
		Open	Delaware Brushy Canyon	6,468	6,476	
		Open		6,974	6,990	
		Open		7,040	7,074	
		Open		7,140	7,166	

## Formation Tops Summary

Formation	Top (TVD ft)	Comments
Anhydrite	832	
Tansil	2,487	
Yates	2,612	
Seven Rivers	2,810	
Delaware	4,794	

Operator	Well Status	Latitude	Longitude	PropNum
Shackelford Oil Co				
Last Updated	Prepared By	Updated By		
02/24/2014 1:07 PM	Brady Shackelford	Brady Shackelford		
Additional Information				

#### Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	477	
	7.875	0	7,230	

#### Tubular Summary

Date	Description	No. Jts	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)	Comments
	Surface Casing	—	13.375	48.00	J-55	0	477	
	Production Casing		5.500	15.50	J-55	0	7,193	
	Tubing		2.375	4.70	J-55	0	6,379	IPC

#### Casing Cement Summary

Date	No. Sx	Yield (cuft/sk)	Vol. (cuft)	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
	475	1.00	475	13.375	0	477	SURFACE	
	2,620	1.00	2,620	5.500	0	7,230	SURFACE	

#### Tools/Problems Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
	DV tool (drilled out)	5.500	0.000	2,860	0		
	Packer	5.500	2.375	6,379	0		
	Cast Iron Bridge Plug	5.500	0.000	6,700	0	with 36" cmt cap	

#### Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		7.875	7,175	7,230	

#### Perforation Summary

C	Date	Perf. Status	Formation		Comments	
		Open				
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	6,974	6,990				
C	Date	Perf. Status	Formation		Comments	
		Open				
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	7,040	7,074				
C	Date	Perf. Status	Formation		Comments	
		Open			**	
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	7,140	7,155				
C	Date	Perf. Status	Formation		Comments	
		Open	Delaware Brushy Canyon			
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	6,468	6,476				

#### Formation Top Summary

Formation Name	Top (TVD ft)	Comments
Anhydrite	832	
Tansill	2,487	
Yates	2,612	
Seven Rivers	2,810	
Delaware	4,794	

1,000

2,000

3,000

4,000

5,000

6,000

Anhydrite

Tansill

Yates

Op Perfs 2664-2676

Op Perfs 2684-2696

DVT, D/O @ 2860'

2,375' @ 2550'

Op Perfs 2684-2688

Seven Rivers

Delaware

CIBP @ 6372'

Op Perfs 6468-6476

CIBP @ 6700'

G.L. (ft)	K.B. (ft)	Sec.	Township/Block	Range/Survey
		21	19S	32E
Operator		Well Status	Latitude	Longitude
Shackelford Oil Co				
Footage Call				
PropNum		Spud Date	Comp. Date	
Additional Information				
Prepared By		Updated By	Last Updated	
Brady Shackelford		Brady Shackelford	2/24/2014 1:08	

## Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500		7,230	
	7.875	0	7,230	

## Tubular Summary

Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
	Surface Casing	17.5	48.00	J-55	0	
	Production Casing	5.500	15.50	J-55	0	7
	tubing	2.375	4.70	J-55	0	2

## Casing Cement Summary

Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	475	8.375	0	477	SURFACE
	2,620	5.500	0	7,230	SURFACE

## Tool/Problem Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)
	Pkr	5.500	2.375	2,550	
	DVT, D/O	5.500	0.000	2,860	
	CIBP	5.500	0.000	6,372	
	CIBP	5.500	0.000	6,700	

## Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		7.875	7,175	7,230	

## Perforation Summary

C	Date	Perf. Status	Formation	OA Top (MD ft)	OA Bottom (MD ft)	SI
		Open	Yates	2,632	2,634	
		Open	Yates	2,664	2,676	
		Open	Yates	2,684	2,688	
		Open	Yates	2,684	2,696	
		Open	Delaware Brushy Canyon	6,468	6,476	
		Open		6,974	6,990	
		Open		7,040	7,074	
		Open		7,140	7,166	

## Formation Tops Summary

Formation	Top (TVD ft)	Comments
Anhydrite	832	
Tansill	2,487	
Yates	2,612	
Seven Rivers	2,810	
Delaware	4,794	

Operator	Shackelford Oil Co	Well Status	Latitude	Longitude	PropNum
Last Updated	02/24/2014 1:08 PM	Prepared By	Brady Shackelford	Updated By	Brady Shackelford
Additional Information					

#### Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	477	
	7.875	0	7,230	

#### Tubular Summary

Date	Description	No. Jts	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)	Comments
	Surface Casing		13.375	48.00	J-55	0	477	
	Production Casing		5.500	15.50	J-55	0	7,193	
	Tubing		2.375	4.70	J-55	0	2,550	

#### Casing Cement Summary

Date	No. Sx	Yield (cuft/sk)	Vol. (cuft)	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
	475	1.00	475	13.375	0	477	SURFACE	
	2,620	1.00	2,620	5.500	0	7,230	SURFACE	

#### Tools/Problems Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
	Packer	5.500	2.375	2,550			
	DV tool (drilled out)	5.500	0.000	2,860			
	Cast Iron Bridge Plug	5.500	0.000	6,372			WI/ 35' CMT CAP
	Cast Iron Bridge Plug	5.500	0.000	6,700			WI/ 35' CMT CAP

#### Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		7.875	7,175	7,230	

#### Perforation Summary

C	Date	Perf. Status	Formation			Comments
		Open				
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	6,974	6,990				
C	Date	Perf. Status	Formation			Comments
		Open				*
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	7,040	7,074				
C	Date	Perf. Status	Formation			Comments
		Open				**
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	7,140	7,145				
C	Date	Perf. Status	Formation			Comments
		Open				Yates
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	2,632	2,634				
C	Date	Perf. Status	Formation			Comments
		Open				Yates
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	2,664	2,676				
C	Date	Perf. Status	Formation			Comments
		Open				Yates
	Top (MD ft)	Bottom (MD ft)	SPF	Shots	Phasing (deg)	Interval Comments
	2,684	2,688				

Formation Name	Top (feet)	Comments
Anhydrite	832	
Tansill	2,487	
Yates	2,612	
Seven Rivers	2,810	
Delaware	4,794	

PROPOSED



## Conditions of Approval

Shackelford Oil Company  
Lusk West Delaware Unit – 111  
API 3002530791, T19S-R32E, Sec 21  
July 22, 2014

1. Due to being within the Lesser Prairie Chicken habitat, this workover activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15. Exceptions to these restrictions may be granted by BLM's Johnny Chopp <jchopp@blm.gov> 575.234.2227 or Bob Ballard <bballard@blm.gov> 575.234.5973.
2. Operator is removing well from the unitized formation. Operator shall remove "Unit" from the well name via sundry, and or rename well to be produced on a lease basis.
3. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
4. Subject to like approval by the New Mexico Oil Conservation Division.
5. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 6370 or below to top of cement. The CBL may be attached to a pswartz@blm.gov email. The CFO BLM on call engineer may be reached at 575-706-2779.**
6. **The well is within the BLM designated Capitan Reef four casing boundary and was allowed to be completed with only surface and production casings. It is critical to protect the C. R. The operator shall maintain annual casing (above the top perforation) integrity test records available for BLM access.**
7. Surface disturbance beyond the existing pad must have prior approval.
8. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
9. Functional H<sub>2</sub>S monitoring equipment shall be on location.
10. 3000 (3M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels) equipment shall be installed regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.
11. All waste (i.e. 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.

12. Sample each plug for cement curing time and tag and/or pressure test (WOC time of 4 hours recommended).
13. Set cement plugs to cover a minimum of 100ft plus 10ft for every 1,000ft from the bottom of the plug, rounding the number of necessary sacks up to the nearest 5 sacks. Never use less than 25sx. Examples: A cement plug set at 8000 in 7" casing would require a min of 35sx. A 25sx plug in 5 1/2" casing should cover 250ft, which may exceed 100ft plus 10ft per 1000ft.
14. Class H > 7500ft & C < 7500ft) cement plugs(s) will be necessary. For any plug that requires a tag or pressure test a minimum WOC time of 4 hours(C) & 8 hours(H) is recommended. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 ft<sup>3</sup>/sx, 6.3gal/sx water and "H" to be mixed 16.4#/gal, 1.06ft<sup>3</sup>/sx, 4.3gal/sx water.
15. Minimum requirement for mud placed between plugs is 25 sacks of salt water gel per 100 barrels in 9 lb/gal brine.
16. After setting the top plug and before perforating, **perform a BLM PET witnessed (charted) casing integrity test of at least 200psig psig. Verify all annular casing vents are plumbed to surface and those valves open to the surface during this pressure test.** Pressure leakoff may require correction for approval. Include a copy of the chart in the subsequent sundry for this workover.
17. The operator shall test for oil and gas production from the injection zone. Demonstrate that paying quantities of hydrocarbons are not produced when the well has a pumped off fluid level. Open hole logs may support the evaluation. BLM agreement is to be obtained prior completion as a disposal well.
18. Submit the BLM Form 3160-4 **Recompletion Report** within 30 days of the date all BLM approved procedures are complete.
19. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.

An inactive/shut-in well bore is a non-producing completion that is capable of "beneficial use" i.e. production in **paying quantities** or of service use.

20. Submit evidence to support your determination that the well has been returned to active "beneficial use" for BLM approval on the Sundry Notice Form 3160-5 (the original and 3 copies) before 12/20/2014.
21. Should "beneficial use" not be achieved submit for BLM approval a plan for plug and abandonment.

PRS 07/23/2014

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - [http://www.blm.gov/nm/st/en/prog/energy/oil\\_and\\_gas.html](http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html)

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.