

ATS 17-17

OCD Hobbs

HOBBS OCD
MAR 27 2017
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. LC-065710-A
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator SHACKELFORD OIL COMPANY (20595)		8. Lease Name and Well No. LUSK FEDERAL #9-A #9 (715243)
3a. Address 203 W. WALL, SUITE 200, MIDLAND, TEXAS 79701	3b. Phone No. (include area code) (432) 682-9784	9. API Well No. 30-025-0524 30524
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2310 FSL & 660 FEL At proposed prod. zone SAME		10. Field and Pool, or Exploratory LUSK; YATES, EAST (41750)
14. Distance in miles and direction from nearest town or post office* 40 MILES SOUTHWEST OF HOBBS, NM		11. Sec., T. R. M. or Blk. and Survey or Area Section 20, T. 19 S., R. 32 E.
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No of acres in lease 640	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1360'	19. Proposed Depth 2840'	20. BLM/BIA Bond No. in file NM 2156
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3685' GL	22. Approximate date work will start* ASAP	23. Estimated duration 12 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature <i>Barry W. Hunt</i>	Name (Printed/Typed) BARRY W. HUNT	Date 8/29/16
Title Permit Agent		
Approved by (Signature) <i>Cody Layton</i>	Name (Printed/Typed) Cody Layton	Date 03/20/17
Title Assistant FIELD MANAGER	Office BLM-CARLSBAD FIELD OFFICE	

Application approval 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.
Conditions of approval, if any, are attached.

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.

Approval Subject to General Requirements
& Special Stipulations Attached

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

Ka
03/28/17

DRILLING PLAN:

SHACKELFORD OIL COMPANY, INC.
(RE-ENTRY) LUSK FEDERAL #9-A
2310' FSL & 660' FEL, SECTION 20, T19S, R32E
Lea County, NM

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1. GEOLOGIC NAME OF SURFACE FORMATION:

A. Recent Permian with quaternary alluvium and other surficial deposits.

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Formation	Subsea Depth	Well Depth	Water / Oil / Gas
Anhydrite		782'	Salt
Tansil		2240'	Water/Oil/Gas
Yates		2582'	Water/Oil/Gas
Seven Rivers		2777'	Water/Oil/Gas
TD		2840'	Water/Oil/Gas

Water : Surface water between 50' – 230' behind casing.

Oil : Possible in the Yates below 2,600' and the Delaware below 4,820

Gas: None expected.

This project will involve re-entering the plugged and abandoned Lusk Deep Unit-A #20 well, drilling out cement and plugs and setting CIBP at 2840'. This vertical oil well will be re-entered for the Seven Rivers (SEE RE-ENTRY PROCEDURE).

3. CASING PROGRAM: EXISTING IN WELL

Hole Size	Depth	Casing Size	Weight	Joint	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17 1/2"	0' - 872'	13 3/8"	48#	STC	H-40 (8 Round)	New	N/A	N/A	N/A
12-1/4"	0' - 4485'	8-5/8"	24#	STC	J-55 (8 Round)	New	N/A	N/A	N/A
7-7/8"	2522'-7230'	5 1/2" 5 1/2"	15.5# 14#	LTC STC	J-55 (8 Round)	New	N/A	N/A	N/A

5 1/2" Casing cut off at 2522' when plugged.

4. CEMENT PROGRAM: EXISTING

- A. **Surface Casing: Existing.** 13 3/8", 48#, H-40, @872' cmtnd w 900 sx Class C 2% CaCl, 14.8 ppg, 1.32 yield, 6.3 gal. Circ to surface.
- B. **Intermediate Casing: Existing.** 8 5/8", 24#, J-55, @ 4485' cmtnd w 2350 sx. (Stage 1: 500 sx Class C 65/35/ poz, 6% gel, 13.1 ppg., 1.69 yield, 8.8 gal/sk, 150 sx Class C Neat, 14.8 ppg., 1.32 yield, 6.3 gal/sk.) (Stage 2: 800 sx Class C 20% Diacel D, 10% salt, 12 ppg., 3.02 yield, 17.5 gal/sk & 150 sx thickset, 14.2 ppg., 1.60 yield, 7.9 gal. Cement did not circ. TOC @ 2030). PU 1" pipe, set plug 1930' w/75 s Class C. Tag plug @1863'. Set plug 130 sx Class C. Tag plug @1710' & set plug 100 sx Class C. Set plug w/100 sx Class C. Tag plug @1100'. Set plug 100 sx Class C. Set plug 100 sx Class C. Set plug 95 sx Class C. Set plug 200 sx Class C Neat. Circ. 30 sx. Cement to surface.
- C. **Production Casing: Existing.** 5 1/2", 15.5#, J-55 @ 2522 - 7230' cmtnd w 800 sx. (400 sx Class C 65/35 poz, 6% gel, 13.1 ppg., 1.69 yield, 8.8 gal/sk & 400 sx Class C, 0.85% D-60, 14.8 ppg., 1.32 yield, 6.3 gal/sk. TOC 3030'.

5. PRESSURE CONTROL EQUIPMENT:

The blow out preventer equipment (BOP) for this well consists of a 10" 3M Cameron Space Saver, double ram BOP with choke manifold. The BOP will be installed on the 8 5/8" casing. Casing and BOP will be tested as described in Onshore Order No. 2. The pipe rams will be operated and checked daily, plus each time drill pipe is out of hole. This will be documented on drillers log. (See Exhibits).

6. PROPOSED MUD CIRCULATION SYSTEM: In lateral hole

INTERVAL		Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0 - 2840'		Brine water mud	9.5	29	NC

If needed, the necessary mud products for weight addition and fluid loss control will be on location at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location.

8. LOGGING, CORING AND TESTING PROGRAM:

Drill Stem Tests : None.

Logging: Bond Log was previously run.

Coring: None.

9. ABNORMAL PRESSURES AND TEMPERATURES / POTENTIAL HAZARDS:

None anticipated. In the event abnormal pressures are encountered, the proposed mud program will be modified to increase the mud weight. Max bottom hole pressure should not exceed 1,249.6 psi., surface pressure 1,856 psi (part. Evac. Hole) with BHT of 122 F anticipated.

H2S: None expected. None in the previously drilled well, but the Mud Log Unit will be cautioned to use a gas trap to detect H2S and if any is detected the mud weight will be increased along with H2S inhibitors sufficient to control the gas. The well will be shut down until a mud separator and flare line can be installed on the choke manifold, if the gas monitor approaches 10.

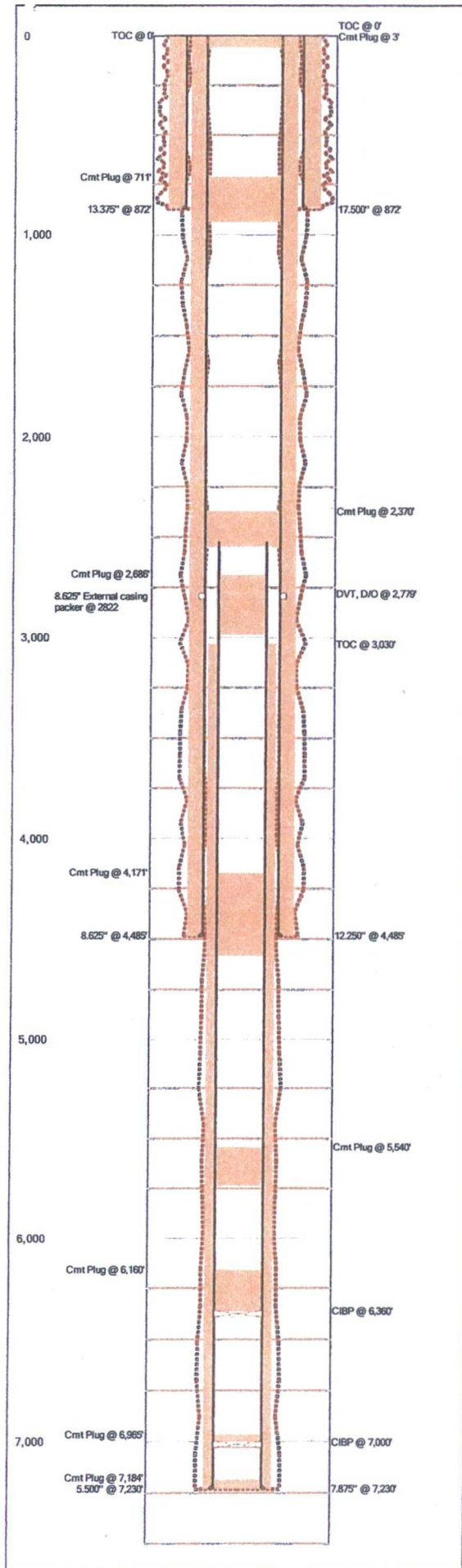
The operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

A. Road and location construction will begin after BLM has approved APD. Anticipated spud date will be as soon after BLM approval and as soon as rig will be available. Move in operations and drilling is expected to take 12 days. An additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

PRESENT

Last Updated: 4/19/2016 04:37 PM



Field Name		Lease Name		Well No.
Lusk West Delaware		Lusk West Delaware Unit		9
County	State	API No.		
Lea	New Mexico	30025305240000		
Version	Version Tag			
1 PRESENT				
GL (ft)	KB (ft)	Section	Township/Block	Range/Survey
		20	19S	32E
Operator		Well Status	Latitude	Longitude
Shackelford Oil Company		Plugged		
Dist. N/S (ft)	N/S Line	Dist. EW (ft)	EW Line	Footage From
2310	FSL	660	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	4/19/2016 4:37 PM	

Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	872	
	12.250	0	4,485	
	7.875	0	7,230	

Tubular Summary

Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
11/21/1988	Surface Casing	13.375	48.00	H-40	0	872
11/30/1988	Intermediate Casing	8.625	24.00	J-55	0	4,485
12/8/1988	Production Casing	5.500	15.50	J-55	2,522	7,230

Casing Cement Summary

C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		900	13.375	0	872	
		2,350	8.625	0	4,485	
		800	5.500	3,030	7,230	

Tools/Problems Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)
	DVT, D/O	8.625	0.000	2,779	0
	CIBP	5.500	0.000	6,360	0
	CIBP	5.500	0.000	7,000	0

Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
6/17/2009	17	8.625	3	63	
6/16/2009	75	8.625	711	940	Tagged toc @ 711'
6/12/2009	40	8.625	2,370	2,550	Tagged toc @ 2370
6/11/2009	90	5.500	2,686	2,987	Cut 5 1/2" csg, could not pull @ 2987'
6/9/2009	25	5.500	4,171	4,585	
6/9/2009	25	5.500	5,540	5,740	
6/9/2009	25	5.500	6,160	6,360	
		5.500	6,965	7,000	
		5.500	7,184	7,230	

Last Updated: 4/19/2016 04:37 PM

Field Name		Lease Name		Well No.	County	State	API No.	
Lusk West Delaware		Lusk West Delaware Unit		9	Lea	New Mexico	30025305240000	
Version	Version Tag					Spud Date	Comp. Date	GL (ft) KB (ft)
1	PRESENT							
Section	Township/Block	Range/Survey	Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From	
20	19S	32E	2,310	FSL	660	FEL		
Operator			Well Status		Latitude	Longitude	Prop Num	
Shackelford Oil Company			Plugged					
Other 1		Other 2		Other 3		Other 4		
Last Updated			Prepared By			Updated By		
04/19/2016 4:37 PM			Shackelford			Shackelford		
Additional Information								

Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	872	
	12.250	0	4,485	
	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
11/21/1988	Surface Casing		13.375	48.00	H-40	0	872	
11/30/1988	Intermediate Casing		8.625	24.00	J-55	0	4,485	
12/8/1988	Production Casing		5.500	15.50	J-55	2,522	7,230	Ran 29 jts 5.5" 15.5# and ran 121 jts 5.5" 14#, cut 5.5" @ 2987 would not pull. cut and pulled 5.5" 2522

Casing Cement Summary

C	Date	No. Sx	Yield (ft3/sk)	Vol. (ft3)	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
		900	1.00	900	13.375	0	872	Class C	
		2,350	1.00	2,350	8.625	0	4,485	Class C & Neat	
		800	1.00	800	5.500	3,030	7,230	Class C	

Tools/Problems Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
	DV tool (drilled out)	8.625	0.000	2,778	0		
	Cast Iron Bridge Plug	5.500	0.000	6,360	0		
	Cast Iron Bridge Plug	5.500	0.000	7,000	0		

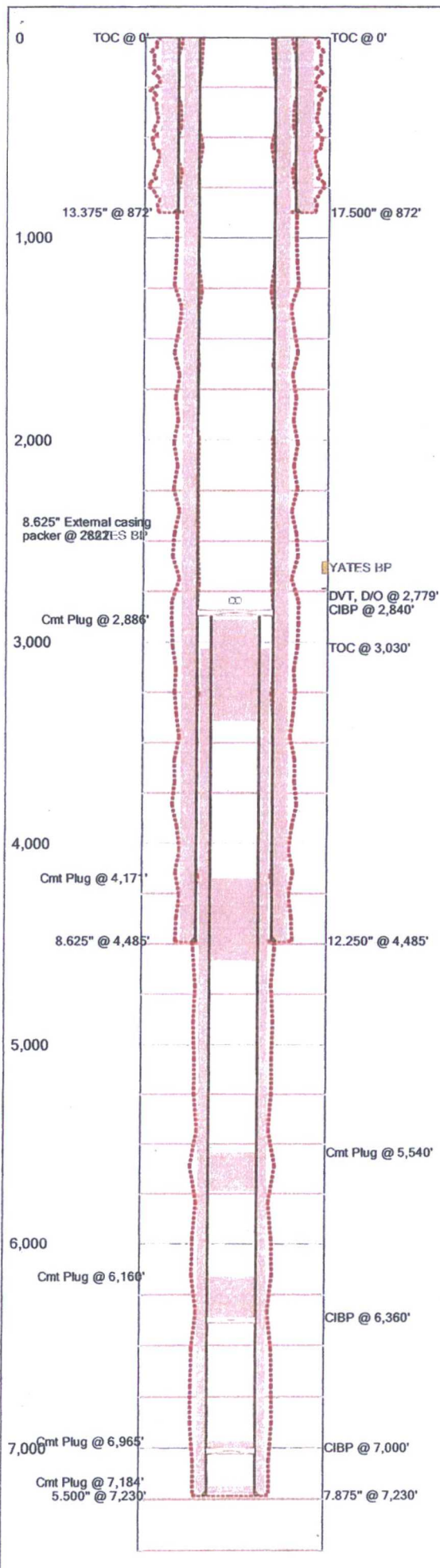
Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
6/17/2009	17	8.625	3	63	
6/16/2009	75	8.625	711	940	Tagged toc @ 711'
6/12/2009	40	8.625	2,370	2,550	Tagged toc @ 2370
6/11/2009	90	5.500	2,686	2,987	Cut 5 1/2" csg, could not pull @ 2987'
6/9/2009	25	5.500	4,171	4,585	
6/9/2009	25	5.500	5,540	5,740	
6/9/2009	25	5.500	6,160	6,360	
		5.500	6,965	7,000	
		5.500	7,184	7,230	

Well History Summary

Date	Comments
6/12/2009	Cut and lay down 5 1/2" at 2522'

Last Updated: 8/8/2016 03:09 PM *PROPOSED*



Field Name		Lease Name		Well No.
Lusk West Delaware		Lusk West Delaware Unit		9
County	State	API No.		
Lea	New Mexico	30025305240000		
Version	Version Tag			
2 PROPOSED				
GL (ft)	KB (ft)	Section	Township/Block	Range/Survey
		20	19S	32E
Operator		Well Status	Latitude	Longitude
Shackelford Oil Company		Plugged		
Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From
2310	FSL	660	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	8/8/2016 3:09 PM	

Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	872	
	12.250	0	4,485	
	7.875	0	7,230	

Tubular Summary

Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
11/21/1988	Surface Casing	13.375	48.00	H-40	0	872
11/30/1988	Intermediate Casing	8.625	24.00	J-55	0	4,485
12/8/1988	Production Casing	5.500	15.50	J-55	2,850	7,230

Casing Cement Summary

C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
		900	13.375	0	872	
		2,350	8.625	0	4,485	
		800	5.500	3,030	7,230	

Tools/Problems Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)
	DVT, D/O	0.000	0.000	2,779	0
	CIBP	8.625	0.000	2,840	0
	CIBP	5.500	0.000	6,360	0
	CIBP	5.500	0.000	7,000	0

Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
6/11/2009	90	5.500	2,886	3,395	Cut 5 1/2" csg, could not pull @ 2987'
6/9/2009	25	5.500	4,171	4,585	
6/9/2009	25	5.500	5,540	5,740	
6/9/2009	25	5.500	6,160	6,360	
		5.500	6,965	7,000	
		5.500	7,184	7,230	

Last Updated: 8/8/2016 03:09 PM

Field Name		Lease Name		Well No.	County	State	API No.	
Lusk West Delaware		Lusk West Delaware Unit		9	Lea	New Mexico	30025305240000	
Version	Version Tag				Spud Date	Comp. Date	GL (ft)	KB (ft)
20	2 PROPOSED							
Section	Township/Block	Range/Survey	Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From	
20	19S	32E	2,310	FSL	660	FEL		
Operator		Well Status		Latitude		Longitude		Prop Num
Shackelford Oil Company		Plugged						
Other 1		Other 2		Other 3		Other 4		
Last Updated		Prepared By		Updated By				
08/08/2016 3:09 PM		Shackelford		Shackelford				
Additional Information								

Hole Summary

Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	17.500	0	872	
	12.250	0	4,485	
	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
11/21/1988	Surface Casing		13.375	48.00	H-40	0	872	
11/30/1988	Intermediate Casing		8.625	24.00	J-55	0	4,485	
12/8/1988	Production Casing		5.500	15.50	J-55	2,850	7,230	Ran 29 jts 5.5" 15.5# and 5.5" 121 jts 14#, cut 5.5" @ 2987 would not pull, cut and pulled 5.5" @ 2522

Casing Cement Summary

C	Date	No. Sx	Yield (ft ³ /sk)	Vol. (ft ³)	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
		900	1.00	900	13.375	0	872		
		2,350	1.00	2,350	8.625	0	4,485		
		800	1.00	800	5.500	3,030	7,230		

Tools/Problems Summary

Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)	Description	Comments
	DV tool (drilled out)	0.000	0.000	2,779	0		
	Cast Iron Bridge Plug	8.625	0.000	2,840	0		
	Cast Iron Bridge Plug	5.500	0.000	6,360	0		
	Cast Iron Bridge Plug	5.500	0.000	7,000	0		

Cement Plug Summary

Date	No. Sx	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
6/11/2009	90	5.500	2,886	3,395	Cut 5 1/2" csg, could not pull @ 2987'
6/9/2009	25	5.500	4,171	4,585	
6/9/2009	25	5.500	5,540	5,740	
6/9/2009	25	5.500	6,160	6,360	
		5.500	6,965	7,000	
		5.500	7,184	7,230	

Behind Pipe Summary

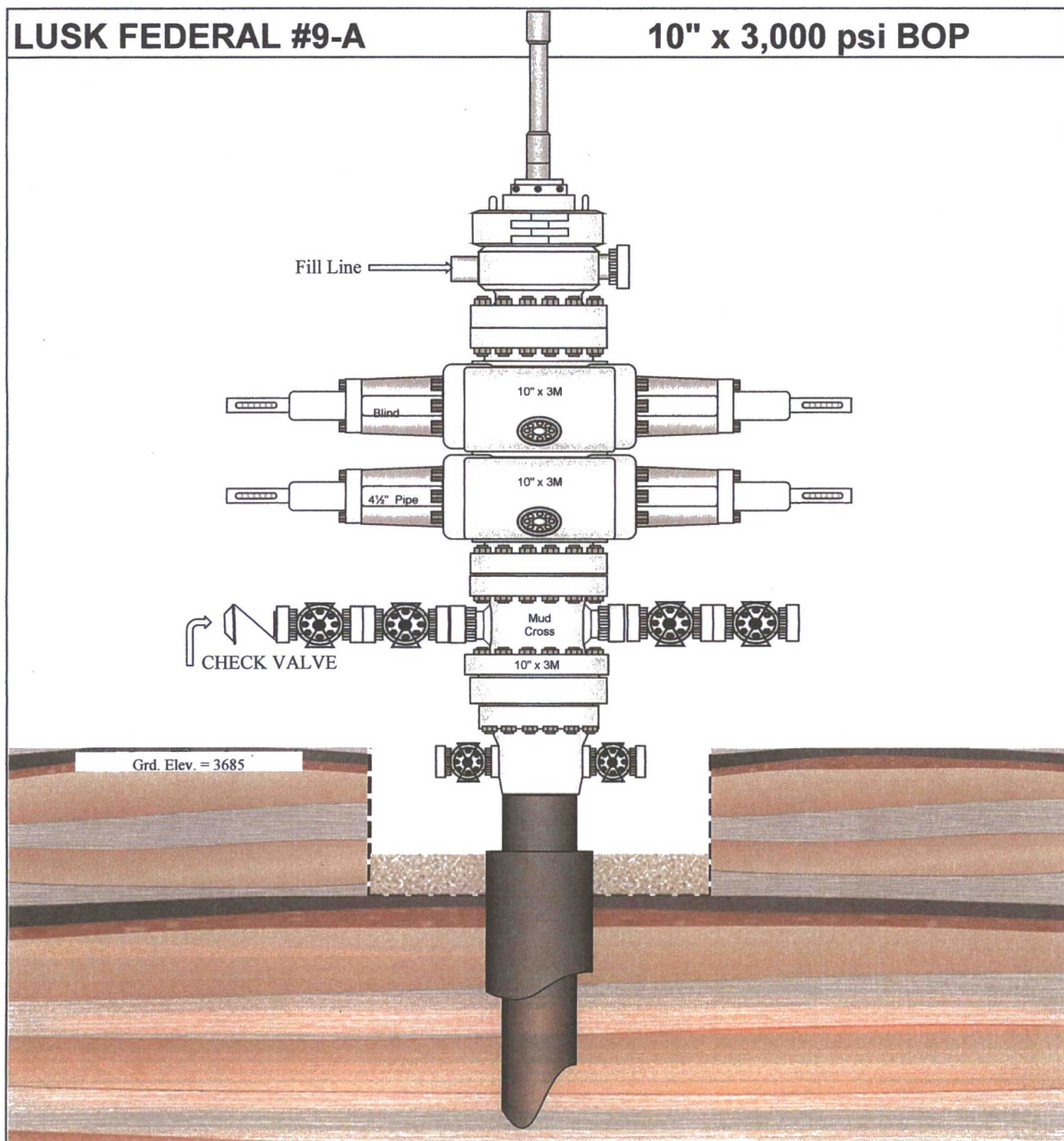
C	Formation Name	Top (MD ft)	Bottom (MD ft)	Net Pay (ft)	Drain. Area (Acre)	Res. Pres. (psi)	Water Sat. (%)	Eff. Por. (%)	EUR Oil (MBO)	EUR Gas (MMCF)	Comments
	YATES	2,600	2,664	0	0	0	0.0%	0.0%	0	0	
	YATES	2,732	2,740	0	0	0	0.0%	0.0%	0	0	

Well History Summary

Date	Comments
6/12/2009	Cut and lay down 5 1/2" at 2522'

LUSK FEDERAL #9-A

10" x 3,000 psi BOP



RE-ENTRY PROCEDURE

SHACKELFORD OIL COMPANY

^{WEST}
LUSK^{WEST} DELAWARE UNIT #9

(LUSK FEDERAL #9-A)

I-SEC 20-19S-32E

2310' FSL & 660 FEL

1. Cut Wellhead
2. Install Bop. Test to 3000 PSI.
3. GIH W/ 7 7/8" Bit and drill collars.
4. Drill out 63' surface plug. Tag 2nd plug at 711'.
5. Drill out 2nd plug from 711'-940'. Tag 3rd plug @ 2370'.
6. Drill out 3rd plug from 2370'-2522'. POOH, Tag casing stub @ 2522'.
7. GIH w/ 4 3/4 " bit and drill collars. Drill out remainder of 3rd plug to 2550'. Tag 4th plug @ 2686'.
8. Drill out 4th plug to 2886'.
9. GIH w/shoe and wash over pipe. Drill out around 5 1/2" casing to 2850'. Cut and pull casing from 2522'-2850'. Circulate hole clean. Pressure test casing to 500 PSI.
10. GIH and set CIBP @ 2840'
11. GIH w/cement bond log, log from 2840' to surface, if cement is OK.

12. GIH w/wireline perforate 2733'-2740', 2718'-2722', 2638'-2657', 2629-2633', 2600-2606'. Acidize w/2500 gals 15% HCL. Swab test for oil shows. If zones looks productive frsc and put on pump.

Well Name Change

Lusk West Delaware Unit #9

I-Sec. 20-T19S-R32E

2310' FSL & 660' FEL

API# 3002530524

1. Proposed zones to be tested:

2717'-2740' Yates sand (Non-unitized zone)

2630'-2662' Yates sand (Non-unitized zone)

2717'-2740' Yates sand (Non-unitized zone)

**The Lusk West Delaware Unit #9 re-entry will be a non-unit well,
the proposed well name change will be the Lusk Federal #9-A.**

Surface Comments

- Location of Existing and/or Proposed Production Facilities Deficiency:

Please identify on Exhibit E where the #10 battery is located. Please show flow-line plat that continues to the #10 Battery.

ATTACHED

Engineering Comments

- Bottom hole pressures and hazards inadequate and/or incomplete

Surface and bottomhole pressure needs to be recalculated because they are inconsistent to each other.

- Engineering Review: Other submitted information are inadequate and/or incomplete

Needs manifold diagram shown as a closed loop system.

ATTACHED

↓
SURFACE PRESSURE IS EXPECTED TO BE ZERO. BOTTOM HOLE
PRESSURE MAXIMUM IS EXPECTED TO 1403 PSI.
BHT IS EXPECTED TO BE 86°

SHACKELFORD OIL COMPANY

203 W. Wall STE 200

Midland, TX 79701

DESIGN: Closed-Loop system with roll-off steel bin (pits)

Contacts: Bob Shackelford – Office: 432-682-9784 Cell: 432-813-7090

Art Marquez – Office: 432-682-9784 Cell: 575-405-1334

Monitoring: 12 hour service

Equipment:

500 bbl waste fluid tank

500 bbl brine water tank


Pump, swivel manifold

Reverse tank

1 CRI Bin with track system

Air pumps on location for immediate remediation process

Layout of Closed Loop System with bin, attached

Cuttings and associated liquids will be hauled to a State regulated third party disposal site, via CRI (Controlled Recovery, Inc.) Disposal Facility Permit # R9166

OPERATIONS:

Closed Loop equipment will be inspected daily by each tour and any necessary maintenance performed.

Any leak in system will be repaired and/or contained immediately.

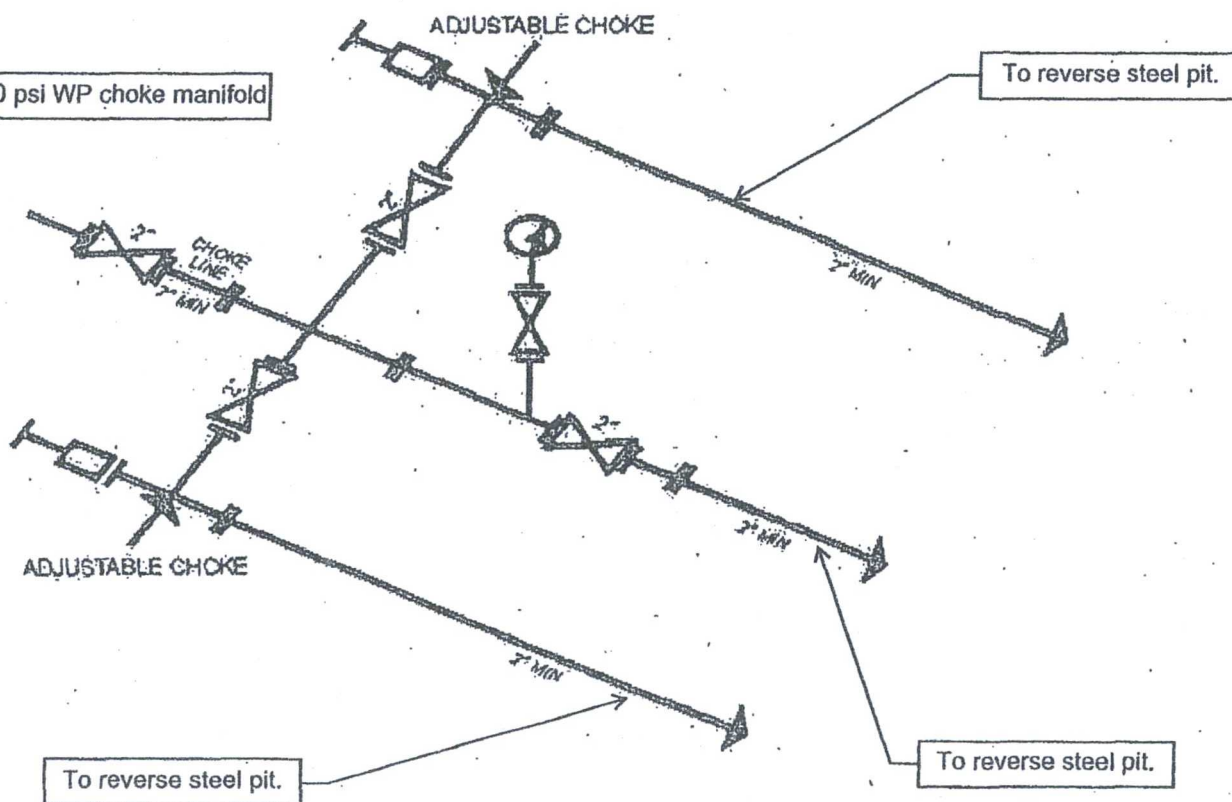
OCD will be notified within 48 hours of the spill.

Remediation process started immediately:

CLOSURE:

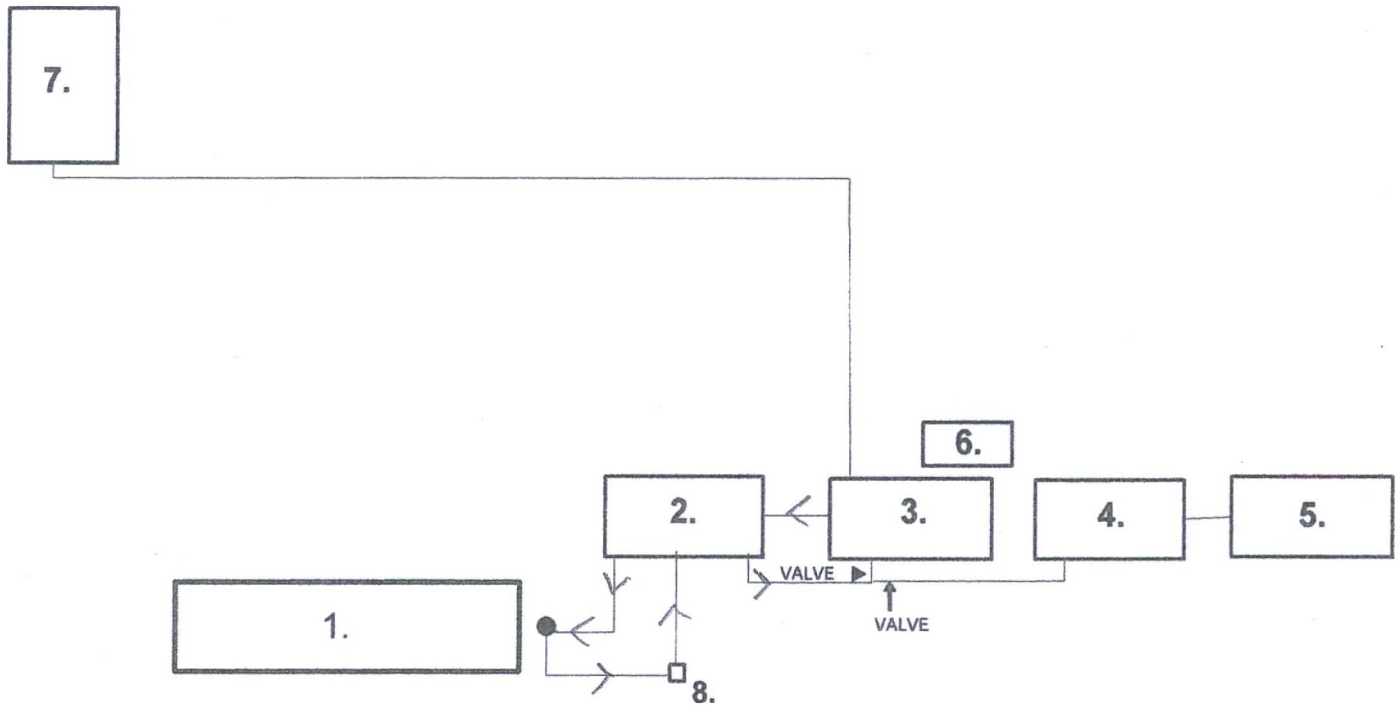
During drilling operations all liquids, drilling fluids and cuttings will be hauled off via CRI (Controlled Recovery Incorporated) Disposal Facility Permit # R9166

3000 psi WP choke manifold



LUSK FEP #9-A

RIG LAYOUT



1. WELL SERVICE RIG
2. REVERSE UNIT
3. REVERSE PIT
4. WASTE FLUID TANK
5. WASTE FLUID TANK
6. SOLIDS BIN
7. 500 BBL. FRAC TANK
8. MANIFOLD



Prevailing Winds
Direction SW

H₂S Briefing Areas and Alarm Locations

