

DATE IN <b>8.24.10</b>	SUSPENSE	ENGINEER	LOGGED IN <b>DB.</b>	TYPE <b>DHC DTG-W</b>	APP NO. <b>1023627711</b>
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



*Lynx Pet*

*Lusk 31 Fed #3*  
*30-025-39593*

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

*4317*

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement  
 ~~DHC~~  CTB  PLC  PC  OLS  OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR
- [D] Other: Specify \_\_\_\_\_

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply
- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Debbie McKelvey      Debbie McKelvey      Agent      8/19/10  
 Print or Type Name      Signature      Title      Date

\_\_\_\_\_  
 e-mail Address

**LYNX PETROLEUM CONSULTANTS, INC.** RECEIVED OCD  
**P.O. BOX 1708**  
**HOBBS, NM 88241**

2010 AUG 23 P 1:28

August 19, 2010

Attention Engineering Bureau  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Re: Downhole Commingling Application  
Lusk "31" Federal No. 3, 30-025-35953

Gentlemen:

Attached is a C107A to downhole commingle the subject well. Lynx Petroleum would like to request that this application be reviewed at your earliest convenience. The well has reached TD and a rig will be available soon to perform the completion.

Thank you for your consideration. If you have any questions, please do not hesitate to call me at 575-392-3575.

Sincerely,



Debbie McKelvey, Agent for  
Lynx Petroleum Consultants, Inc.

District I  
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

District II  
1301 W. Grand Avenue, Artesia, NM 88210

**Oil Conservation Division**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE  
 Single Well  
 Establish Pre-Approved Pools  
EXISTING WELLBORE  
 Yes  No

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1320 S. St. Francis Dr., Santa Fe, NM 87505

**APPLICATION FOR DOWNHOLE COMMINGLING**

Lynx Petroleum Consultants, Inc. P.O. Box 1708, Hobbs, NM 88241  
Operator Address

Lusk 31 Federal 3 I-31-18S-32E Lea  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 13645 Property Code 37315 API No. 30-025-39593 Lease Type:  Federal  State  Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	LUSK; WOLFCAMP, NORTH	CISCO-CANYON WILDCAT	LUSK; STRAWN,
Pool Code	41608		41589
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	10332-10376'	10738-10992'	11163-11212'
Method of Production (Flowing or Artificial Lift)	Pumping	Pumping	Pumping
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	To be determined by Swab test	To be determined by Swab test	To be determined by Swab test
Oil Gravity or Gas BTU (Degree API or Gas BTU)	To be determined by Swab test	To be determined by Swab test	To be determined by Swab test
Producing, Shut-In or New Zone	New Zone	New Zone	New Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	No production data available in the area. Date:  Rates:	No production data available in the area. Date:  Rates:	No production data available in the area. Date:  Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas To be determined by Swab test % %	Oil Gas To be determined by Swab test % %	Oil Gas To be determined by Swab test % %

**ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes  No   
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes  No

Are all produced fluids from all commingled zones compatible with each other? Yes  No

Will commingling decrease the value of production? Yes  No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes  No

NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

**Attachments:**

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

**PRE-APPROVED POOLS**

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Debbie McKelvey TITLE Agent DATE 8/19/10

TYPE OR PRINT NAME Debbie McKelvey TELEPHONE NO. (575) 392-3575

E-MAIL ADDRESS \_\_\_\_\_

Lusk 31 Federal No. 3  
30-025-39593

Attachments to Application for Downhole Commingling (Form C-107A)

1. C102 for each zone is attached.
2. Production curve not available as this is a new well that has not been completed.
3. Estimated production rates and supporting data – No data is available.
4. Allocation method to be determined by swab test on each zone.
5. All working, royalty, and overriding royalty interests are common in all zones.
6. The lower three proposed zones would all be considered unconventional completion intervals as they are either shaly limestones or outright shales which will require significant stimulation to yield fluid in commercial quantity.

DISTRICT I  
1021 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1901 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1400 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV  
1220 S. St. Francis Cr., Santa Fe, NM 87503

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 12, 2003

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-35953	Pool Code 41608	Pool Name LUSK; WOLFCAMP, NORTH
Property Code 37315	Property Name LUSK "31" FEDERAL	Well Number 3
OGWD No. 13645	Operator Name LYNX PETROLEUM CONSULTANTS, INC.	Elevation 3678'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	31	18 S	32 E		1880	SOUTH	2080	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p style="text-align: center;">SURFACE LOCATION</p> <p>Lot - N 32°42'07.04" Long - W 103°48'13.75" NMSPC - N 619309.512 E 704218.337 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Debbie McKelvey</i> 8/19/08 Signature Date</p> <p>Debbie McKelvey Printed Name</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p style="text-align: center;">GARY L. JONES 2008</p> <p>Date Surveyed: _____ Signature of _____ Professional Surveyor 7977</p> <p style="text-align: center;">GARY L. JONES Professional Surveyor 7977</p> <p>Certificate No. Gary L. Jones 7977</p> <p style="text-align: center;">BASIN SURVEYS</p>

DISTRICT I  
1036 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1331 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1069 Rio Brizos Rd., Aztec, NM 87413

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office:  
State Lease - 4 Copies  
Fee Lease - 3 Copies

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

AMENDED REPORT

API Number 30-025-35953	Pool Code	Pool Name <b>CISCO-CANYON WILDCAT</b>	Well Number 3
Property Code 37315	Property Name <b>LUSK "31" FEDERAL</b>		Elevation 3676'
CGRID No. 13645	Operator Name <b>LYNX PETROLEUM CONSULTANTS, INC.</b>		

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	31	18 S	32 E		1880	SOUTH	2080	EAST	LEA

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Point or Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

**OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Debbie McKelvey 8/19/10*  
Signature Date

Debbie McKelvey  
Printed Name

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**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

GARY L. JONES 2009  
Date Surveyed

GARY L. JONES  
Signature  
Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

DISTRICT I  
1626 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number <b>30-025-35953</b>	Pool Code <b>41589</b>	Pool Name <b>Lusk; Strawn</b>
Property Code <b>37315</b>	Property Name <b>LUSK "31" FEDERAL</b>	Well Number <b>3</b>
OGRID No. <b>13645</b>	Operator Name <b>LYNX PETROLEUM CONSULTANTS, INC.</b>	Elevation <b>3676'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	31	18 S	32 E		1880	SOUTH	2080	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <b>160</b>	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p><b>SURFACE LOCATION</b> Lat - N 32°42'07.04" Long - W 103°48'13.75" NMSPC E - N 619509.512 E 704218.337 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Debbie McKelvey</i> 8/19/10 Signature Date</p> <p><i>Debbie McKelvey</i> Printed Name</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>SEP 22 2009 Date Surveyed Signature &amp; Seal of Professional Surveyor GARY L. JONES</p>
	<p>Certificate No. Gary L. Jones 7977</p>
	<p><b>BASIN SURVEYS</b></p>

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0137  
Expires: March 31, 2007

**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.  
NM 23006

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.

1. Type of Well  
 Oil Well     Gas Well     Other

8. Well Name and No.

2. Name of Operator  
Lynx Petroleum Consultants, Inc.

Lusk '31' Federal No. 3

3a. Address  
P.O. Box 1708, Hobbs, NM 88241

3b. Phone No. (include area code)  
575-392-6950

9. API Well No.  
30-025-39593

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1880' FSL & 2080' FEL, Section 31, T-18S, R-32E

10. Field and Pool, or Exploratory Area  
Lusk No. Strawn, Lusk No. Wolfcamp, Cisco-Canyon Wildcat

11. County or Parish, State  
Lea, New Mexico

**12. CHECK APPROPRIATE BOX(S) 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 type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Multiple completion and Downhole Commingle</u>
	<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.)

Lynx Petroleum has reached TD on the subject well. We wish to request permission to complete the well in multiple zones and downhole commingle the Strawn, Cisco-Canyon, and Wolfcamp zones. The commingling will not reduce the value of the production and will allow Lynx to recover additional reserves that would not have been economically viable to capture otherwise. Ownership and percentages are identical in all zones.

The proposed perforated intervals are:

- Zone 1: Strawn 11163-74' & 11202-212' w/6 JSPF
- Zone 2: Cisco-Canyon @ 10972-92' w/4 JSPF
- Zone 3: Cisco-Canyon @ 10738-58' w/4 JSPF
- Zone 4: Wolfcamp @ 10332-36', 10358-64', 10370-72' & 10374-76' w/4 JSPF

See attached procedure.

14. I hereby certify that the foregoing is true and correct  
 Name (Printed/Typed) **Debbie McKelvey** Title **AGENT**  
 Signature *Debbie McKelvey* Date **8/19/10**

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

Approved by \_\_\_\_\_ Title \_\_\_\_\_ 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 \_\_\_\_\_

LUSK '31' FEDERAL NO. 3

30-025-39593

APPLICATION TO COMPLETE AND DOWNHOLE COMMINGLE

1. Tag and drill up cement and DV tool. Pressure test csg. to 1000 psi for 15 minutes.
2. Drill cement to PBTD of 11250'.
3. Circulate hole clean w/260 bbls. 2% KCL TFW leaving 2 bbls. 15% HCL-NE-FE acid on spot at 11250-11000'.
4. Run GR-CBL-CCL.
5. Perforate Zone 1.
6. Frac Strawn Zone 1 w/100,000 lbs. white sand carried in 3500 bbls. 10 lbs. gelled KCL water.
7. Set 10K Composite BP @  $\pm$  11100'. Perforate Zone 2.
8. Frac Cisco-Canyon Zone 2 w/100,000 lbs. white sand carried in 3500 bbls. 10 lbs. gelled KCL water.
9. Set 10K Composite BP @  $\pm$  10900'. Perforate Zone 3.
10. Frac Cisco/Canyon Zone 3 w/100,000 lbs. white sand carried in 3500 bbls. 10 lbs. gelled KCL water.
11. Set 10K Composite BP @  $\pm$  10650'. Perforate Zone 4.
12. Set packer @  $\pm$  10250'. Acidize Zone 4, Wolfcamp perfs, w/1200 gals. 15% HCL-NE-FE acid plus 100 ballsealers.
13. Swab or flow-test the Wolfcamp separately before drilling out Cisco-Canyon plugs.
14. Drill out BP set at 10650' and 10900'. Set packer @  $\pm$  10500'. Test Cisco-Canyon shales.
15. Drill out BP set at 11100'.
16. Run tbg., pump, and rods, and place well on production.



New Mexico Energy, Minerals and Natural Resources Department

---

**Bill Richardson**

Governor

**Jim Noel**

Cabinet Secretary

**Karen W. Garcia**

Deputy Cabinet Secretary

**Mark Fesmire**

Division Director

Oil Conservation Division



September 20, 2010

Lynx Petroleum Consultants, Inc.

Attn: Ms. Debbie McKelvey

P.O.Box 1708

Hobbs, NM 88241

**Re: Lynx Petroleum  
Lusk 31 Federal Well No. #3  
DHC Application**

Dear Ms. McKelvey

The referenced application for down-hole commingling was granted on September 17, 2010 by Order DHC-4317.

The signed, original order will be posted on OCD's website.

Sincerely

A handwritten signature in cursive script that reads "David K. Brooks".

David K. Brooks

Legal Examiner

505-476-3450

Oil Conservation Division

1220 South St. Francis Drive • Santa Fe, New Mexico 87505

Phone (505)-476-3440 • Fax (505)-476-3462 • [www.emnrd.state.nm.us/OGD](http://www.emnrd.state.nm.us/OGD)

