

DATE IN 1.24.12	SUSPENSE	ENGINEER WVS	LOGGED IN 1.24.12	TYPE DHC 4508	APP NO. 1202451001
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PT&W

ABOVE THIS LINE FOR DIVISION USE ONLY

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



162928  
 Energen

Jicarilla 95 # 7B

**ADMINISTRATIVE APPLICATION CHECKLIST** 30-039-26854

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]

F-36-27N-3W

- [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.**

<u>Adam Klem</u> Print or Type Name	<u>[Signature]</u> Signature	<u>District Engineer</u> Title	<u>1/19/12</u> Date
		<u>aklem@energen.com</u> e-mail Address	

January 20, 2012

Ms. Jami Bailey - Director  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Approval to Downhole Commingling  
Energen Resources Corporation  
Jicarilla 95 #7B  
1830' FNL, 1720' FWL, Section 36, T27N, R03W  
Rio Arriba County, New Mexico

Dear Ms. Bailey:

Energen Resources Corporation requests approval to downhole commingle the Gavilan Pictured Cliffs and Blanco Mesaverde pools in the subject well. Due to the liquid loading problems commingling with plunger lift is the most economical method to recover gas from all zones in the subject well. We have successfully applied this method along with plunger lift in similar wells that have experienced liquid loading problems and it is felt this method would improve the overall producing efficiency of the well.

To comply with New Mexico Oil Conservation Rules, Energen Resources Corporation is submitting the following data for your approval of the proposed commingling.

1. C-107A - Application for Downhole Commingling
2. C-102 - Location plat showing each spacing unit and dedicated acreage
3. Offset Operator Ownership Plat
4. Allocation method

In accordance to New Mexico Oil Conservation Division Rule 303C, Energen Resources will notify all Offset operators.

If additional information is needed, please contact me at 505-324-4163.

Sincerely,



Adam Klem  
District Engineer

xc:

NMOCD - Aztec District Office  
BLM- FFO notified via Federal Sundry Notice 3160-5 and sent NMOCD form C-107A

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.

APPLICATION TYPE  
X Single

District III  
Well  
1000 Rio Brazos Road, Aztec, NM 87410

Santa Fe, New Mexico 87505

Establish Pre-Approved Pools  
EXISTING WELLBORE

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

APPLICATION FOR DOWNHOLE COMMINGLING

X Yes    No

Energen Resources

2010 Afton Place, Farmington, New Mexico 87401

Operator  
Jicarilla 95

#7B

Address  
F Section 36, T27N, R3W

Rio Arriba

Lease  
162928

Well No.  
21289

Unit Letter-Section-Township-Range  
30-039-26854

X

County

OGRID No. \_\_\_\_\_ Property Code \_\_\_\_\_ API No. \_\_\_\_\_ Lease Type: \_\_\_\_\_ Federal \_\_\_\_\_ State \_\_\_\_\_ Fee \_\_\_\_\_

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Gavilan Pictured Cliffs <i>Ger</i>		Blanco Mesaverde
Pool Code	77360		72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3771'-3791'		5570'-6104'
Method of Production (Flowing or Artificial Lift)	Artificial Lift - Plunger		Artificial Lift - Plunger
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)	Not completed		1,000 psi <i>OK</i>
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1,341 BTU		1,341 BTU
Producing, Shut-In or New Zone	New Zone		Producing
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.)	Date: N/A Rates: N/A	Date: Rates:	Date: 12/2011 Rates: 0 BOPD/ 80 MCFPD/0.5 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil N/A	Gas N/A	Oil Gas <i>Turn in later</i>

**ADDITIONAL DATA**

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

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

Will commingling decrease the value of production? Yes    No X

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 X 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 *Adam Klem* TITLE District Engineer DATE 1/11/12

TYPE OR PRINT NAME Adam Klem TELEPHONE NO. ( 505 ) 324-4163

E-MAIL ADDRESS aklem@energen.com

District I  
1625 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 & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-26854		<sup>2</sup> Pool Code 72319		<sup>3</sup> Pool Name Blanco Mesaverde	
<sup>4</sup> Property Code 21289		<sup>5</sup> Property Name Jicarilla 95			<sup>6</sup> Well Number 7B
<sup>7</sup> OGRID No. 162928		<sup>8</sup> Operator Name Energen Resources Corporation			<sup>9</sup> Elevation 7179'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	36	27N	3W		1830	North	1720	West	Rio Arriba

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres 320		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

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><sup>17</sup> OPERATOR CERTIFICATION</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 or has a right to drill this well at this 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>[Signature]</i> 1/11/2012 Signature Date</p> <p>Adam Klem Printed Name</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</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>Date of Survey Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p>

**District I**  
1625 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 & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-039-26854	<sup>2</sup> Pool Code 77360	<sup>3</sup> Pool Name Gavilan Pictured Cliffs
<sup>4</sup> Property Code 21289	<sup>5</sup> Property Name Jicarilla 95	
<sup>7</sup> OGRID No. 162928	<sup>8</sup> Operator Name Energen Resources Corporation	<sup>6</sup> Well Number 7B
		<sup>9</sup> Elevation 7179'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	36	27N	3W		1830	North	1720	West	Rio Arriba

<sup>11</sup> 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

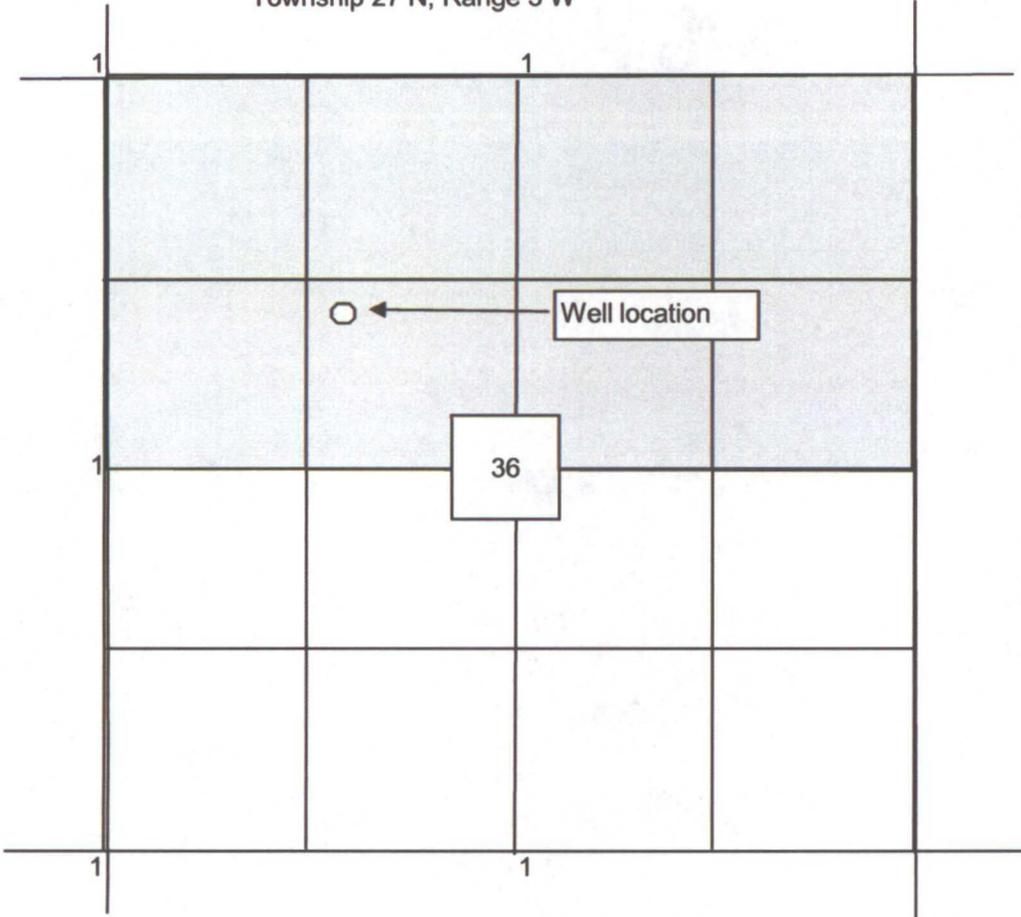
<sup>12</sup> Dedicated Acres 160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<p style="text-align: center;"><sup>17</sup> OPERATOR CERTIFICATION</p> <p><i>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 or has a right to drill this well at this 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.</i></p> <p style="text-align: right;">1/11/2012</p> <p>Signature _____ Date _____</p> <p>Adam Klem Printed Name</p> <hr/> <p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>Date of Survey _____</p> <p>Signature and Seal of Professional Surveyor: _____</p> <hr/> <p>Certificate Number _____</p>
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Energen Resources Corp.  
Jicarilla 95 #7B  
Offset Operator/ Ownership Plat  
Blanco Mesaverde/Gavilan Picured Cliffs  
Downhole Commingling

Township 27 N, Range 3 W



1) Energen Resources

## **Allocation Method: Jicarilla 95 #7B**

Energen Resources plans on DHC the Blanco Mesaverde with the Gavilan Pictured Cliffs

Gavilan perforations: 3771'-3791'

Blanco Mesaverde: 5570' to 6104'

Current rates:

PC – not yet completed

MV - 0 BOPD, 80 MCFD, & 0.5 BWPD

Recommended Allocation: Subtraction method following 60 days of stabilized production. Rates reported to NMOCD – Aztec for final determination.

Lease Name: JICARILLA 95  
 County, State: RIO ARBA, NM  
 Operator: ENERGEN RESOURCES CORPORATION  
 Field: BLANCO  
 Reservoir: MESAVERDE  
 Location: 36 27N 3W NW SE NW

JICARILLA 95 - 7B

