		PTGW
	1,12 SUSPEN	NSE ENGINEER WIJ LOGGED IN 1.24.12 TYPE DHP APNO. 1202450679
		ABOVE THIS LINE FOR DIVISION USE ONLY ABOVE THIS LINE FOR DIVISION USE ONLY NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau - 1829 - A 1220 South St. Francis Drive, Santa Fe, NM 87505 Jicavilla 15 45
		ADMINISTRATIVE APPLICATION CHECKLIST 30-039-2205
Applicatio	n Acronym SL-Non-Sta [DHC-Dow [PC-Pc	Indard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] Inhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] Inhole Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] alified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1] · TY	Y <b>PE OF AF</b> [A]	PPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD NSL INSP 10
	Check [B]	k One Only for [B] or [C]
•	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery           WFX         PMX         SWD         IPI         EOR         PPR
	[D]	Other: Specify
[2] • NC	DTIFICAT [A]	<b>TION REQUIRED TO:</b> - Check Those Which Apply, or Does Not Apply 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
		CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE ATION INDICATED ABOVE.
pproval is	accurate as until the re	<b>TION:</b> I hereby certify that the information submitted with this application for administrative and <b>complete</b> to the best of my knowledge. I also understand that <b>no action</b> will be taken on this equired information and notifications are submitted to the Division.
Adam	Note:	: Statement must be completed by an individual with managerial and/or supervisory capacity.
Print or Typ	13 18111	Signature Title Date

Print or Type Name

÷,

۰,

Signature

Title <u>a Klem Q energen . (om</u> e-mail Address

January 10, 2012

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

RE: Approval to Downhole Commingle Energen Resources Corporation Jicarilla 107 #5
1720' FNL, 1495' FWL, Section 33, T26N, R04W Rio Arriba County, New Mexico

Dear Ms. Bailey:

Energen Resources Corporation requests approval to downhole commingle the South Blanco Pictured Cliffs, Blanco Mesaverde and W. Lindrith Gallup-Dakota 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

### District II

1301 W. Grand Avenue, Artesia, NM 88210

## District III

Well 1000 Rio Brazos Road, Aztec, NM 87410

1000 K10 Bin

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.

APPLICATION FOR DOWNHOLE COMMINGLING

Santa Fe, New Mexico 87505

Form C-107A Revised June 10, 2003

APPLICATION TYPE <u>X</u>Single

Establish Pre-Approved Pools EXISTING WELLBORE \_\_\_\_\_\_Yes \_\_\_\_No

Energen Resources		2010 Afton Place, Farmington, New Mexico 87401	NHCA
Operator Jícarilla 107	#5	Address F Section 33, T26N, R4W	Rio Arriba
Lease	Well N	D. Unit Letter-Section-Township-Range	County

 162928
 22028
 30-039-22053
 X

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

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
	South Blanco Pictured Cliffs	Blanco Mesaverde	W. Lindrith Gallup-Dakota 🛛 🚺
Pool Name			
Pool Code	72439	72319	39189
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3390'-3490'	5501'-5623'	7599'-7751'
Method of Production (Flowing or Artificial Lift)	Artificial Lift - Plunger	Artificial Lift - Plunger	Artificial Lift – Plunger
Bottomhole Pressure (Note: Pressure data will not be required if the bottom	Not completed	1,000 psi	1,050 psi
perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	· · · · ·		
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1,341 BTU	1,341 BTU	1,341 BTU
Producing, Shut-In or New Zone	New Zone	Producing	Producing
Date and Oil/Gas/Water Rates of		······································	
Last Production. (Note: For new zones with no production history,	Date: N/A	Date: 12/2011	Date: 12/2011
applicant shall be required to attach production	-		
estimates and supporting data.)	Rates: N/A	Rates: 0 BOPD/ 35 MCFPD/0.7 BWPD	Rates: 0 BOPD/ 37 MCFPD/0.8 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil Gas	Oit Gas	Oil Gas
than current or past production, supporting data or . explanation will be required.)	N/A N/A	33% 49%	2 <del>67% 51%</del>

# 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?	YesXNo YesNo
Are all produced fluids from all commingled zones compatible with each other?	Yes <u>X</u> 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\_

TITLE \_\_\_\_ District Engineer\_\_\_

DATE<u>1/5/12</u>

TYPE OR PRINT NAME Adam Klem

\_\_\_\_\_TELEPHONE NO. (

324-4163

\_<u>505</u>

E-MAIL ADDRESS \_\_aklem@energen.com

Didti ict 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
---

<i>۲</i>	r		<sup>2</sup> Pool Code	e	<sup>3</sup> Pool Name				
30	3		39189 W. Lindrith Gallup-Dakota						
<sup>4</sup> Property (	<sup>4</sup> Property Code					Name		6 1	Well Number
015879					Jicarilla	107			5
<sup>7</sup> OGRID I	No.				<sup>8</sup> Operator 1	Name			<sup>9</sup> Elevation
162928					Energen Resources	Corporation			6856'
					<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	33	26N	4W		1720	North	1495	West	Rio Arriba
		L	<sup>11</sup> Bot	ttom Hol	e Location If	f Different From	m Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
					4				
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint o	r Infill 4 Co	nsolidation	Code 15 Or	der No.				
160									

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.

	<b>A</b>		<sup>17</sup> 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 unleased mineral interest in the land including the proposed
	720'		bottom hole location or has a right to drill this well at this location pursuant to
	12		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.
	•		1/3/2012
<b>▲</b> (	Ó.		Signature Date
	$\bigcirc$		Signature Date
1495'			Adam Klem
			Printed Name
		<b>n</b>	
	3.	5	
			<sup>18</sup> 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.
			· · ·
			 Date of Survey
			Signature and Seal of Professional Surveyor:
	,	•	
			Certificate Number

District I

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

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## AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>i</sup> API Number				<sup>2</sup> Pool Code		<sup>3</sup> Pool Name				
3	3		72319 Blanco Mesaverde							
<sup>4</sup> Property Code					<sup>5</sup> Property 1	Name			<sup>6</sup> Well Number	
015879	,				Jicarilla	107			5	
<sup>7</sup> OGRID No.					<sup>8</sup> Operator	Name		1	<sup>9</sup> Elevation	
162928			Energen Resources Corporation					6856'		
·····	A	· · · ·			<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	33	26N ·	4W	:	1720	North	1495	West	Rio Arriba	
	L		<sup>11</sup> Bot	ttom Hole	e Location If	f Different Fro	m Surface		1	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West li	ne County	
<sup>12</sup> Dedicated Acre 320	s <sup>13</sup> Joint o	r Infili <sup>14</sup> C	onsolidation	Code <sup>15</sup> Ord	ler 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.

	•			<sup>17</sup> OPERATOR CERTIFICATION
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				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
	720'			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.
	•		•	. 1/3/2012
<b>∢</b> −−−−→	$\mathbf{O}$			Signature Date
1495'				Adam Klem
· ·				Printed Name
	[ 			
		2		
	3	3		
				<sup>18</sup> 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.
			,	Date of Survey
				Signature and Seal of Professional Surveyor:
				Cartificate Mumber
				Certificate Number

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

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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

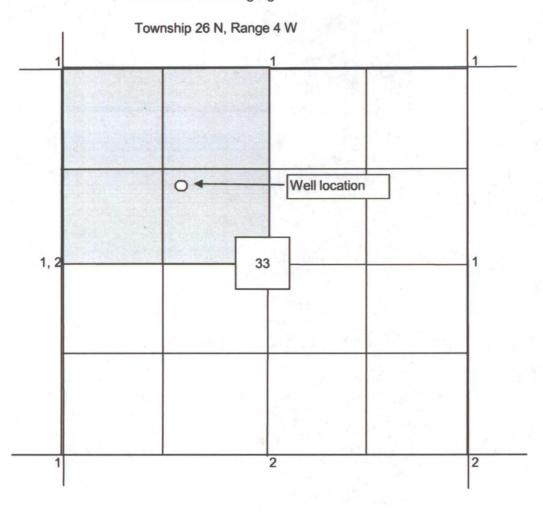
' API Number				<sup>2</sup> Pool Code	e		me			
30	-039-22053	3		72439		South Blanco Pictured Cliffs				
<sup>4</sup> Property C	Code				<sup>5</sup> Property 1	Name		6 1	Well Number	
015879		Jicarilla 107 5						5		
<sup>7</sup> OGRID N	<sup>7</sup> OGRID No. <sup>8</sup> Oper					Name			<sup>9</sup> Elevation	
162928					Energen Resources	Energen Resources Corporation				
					<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	33	26N	4W		1720	North	1495	West	Rio Arriba	
I		L	<sup>11</sup> Bo	ttom Hol	le Location If	Different Fro	m 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	<sup>13</sup> Joint of	r Infill 14 C	onsolidation	Code <sup>15</sup> Or	rder No.					
160										
· · · · · · · · · · · · · · · · · · ·										

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.

	<b>▲</b>			<sup>17</sup> OPERATOR CERTIFICATION
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	720'			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.
	•			1/3/2012
┥────	0			Signature Date
1495'				Adam Klem Printed Name
				FILLIOU IVALIE
		L		
	2	3		
	J	3		
				<sup>18</sup> SURVEYOR CERTIFICATION
				I hereby certify that the well location shown on this plat was
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				my supervision, and that the same is true and correct to the
	-			best of my belief.
• · · ·				Date of Survey
				Signature and Seal of Professional Surveyor:
			·	
			, ,	
				Certificate Number
		L		

1

Energen Resources Corp. Jicarilla 107 #5 Offset Operator/ Ownership Plat W. Lindrith GL-DK/Blanco Mesaverde/South Blanco Picured Cliffs Downhole Commingling



Energen Resources
 ConocoPhillips

# Allocation Method: Jicarilla 107 #5

Energen Resources plans on DHC the W. Lindrith Gallup-Dakota and Blanco Mesaverde with the South Blanco Pictured Cliffs

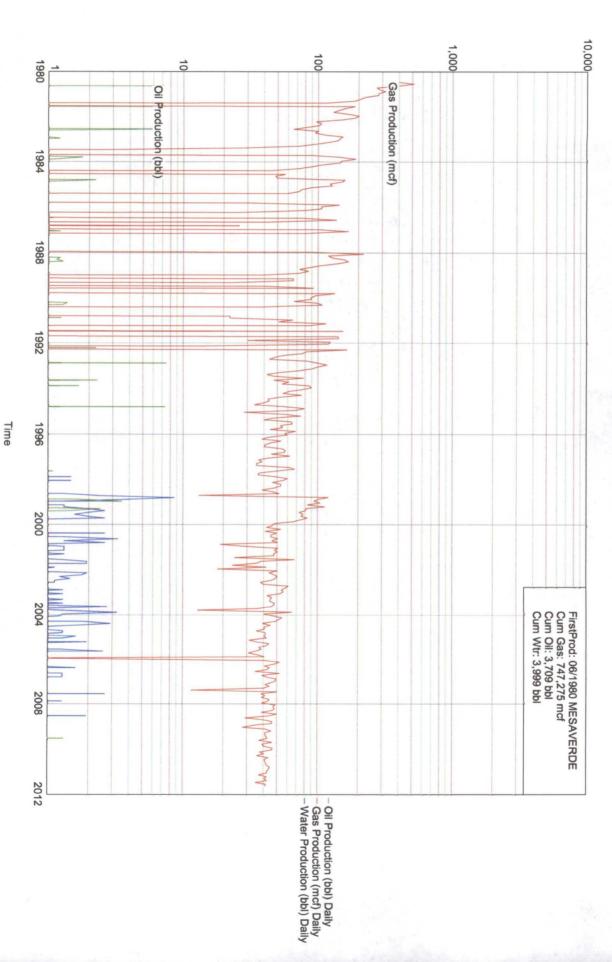
South Blanco Pictured Cliff perforations: 3390' to 3458' Blanco Mesaverde: 5501' to 5623' W. Lindrith Gallup-Dakota: 7599'-7751'

Current rates: PC – not yet completed MV - 0 BOPD, 35 MCFD, & 0.7 BWPD WLGD – 0 BOPD, 37 MCFD, & 0.8 BWPD

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

Lease Name: JICARILLA 107 County, State: RIO ARBA, NM Operator: ENERGEN RESOURCES CORPORATION Field: BLANCO Reservoir: MESAVERDE Location: 33 26N 4W NW SE NW

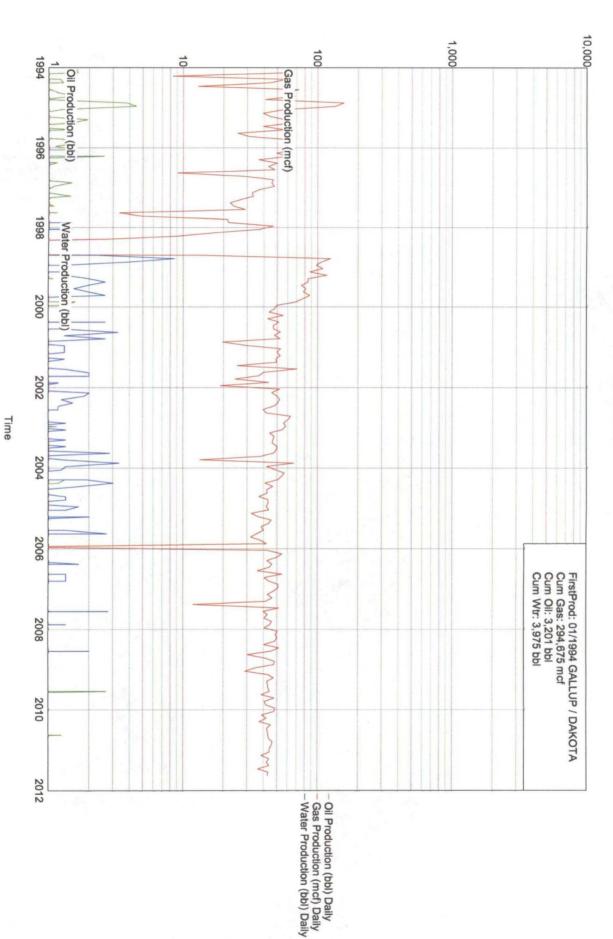




Production Rates

Lease Name: JICARILLA 107 County, State: RIO ARBA, NM Operator: ENERGEN RESOURCES CORPORATION Field: LINDRITH WEST Reservoir: GALLUP DAKOTA Location: 33 26N 4W NW SE NW





**Production Rates**