

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
**District II**  
1301 W. Grand Ave., Artesia, NM 88210  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

WELL API NO.  
30-045-31218

5. Indicate Type of Lease  
STATE ☐ FEE ☐

6. State Oil & Gas Lease No.  
**Federal #SF-078243**

7. Lease Name or Unit Agreement Name  
**Arnstein**

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:  
Oil Well ☐ Gas Well ☒ Other

2. Name of Operator  
**Cordillera Energy Inc.**

8. Well No. **1Y**

3. Address of Operator  
**8450 E. Crescent Parkway, Suite 400 Greenwood Village, Colorado 80111**

8. Pool name or Wildcat  
**Basin Dakota and Blanco Mesa Verde**

4. Well Location  
  
Unit Letter C : 660 feet from the South line and 1315 feet from the West line  
  
Section 18 Township 31N Range 12W NMPM San Juan County

10. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**5916' GR**

**11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data**

**NOTICE OF INTENTION TO:**

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

**SUBSEQUENT REPORT OF:**

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐

OTHER: **Down hole Commingle** ☒

OTHER: ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Down hole commingle the Basin Dakota (71599) and Blanco Mesa Verde (72319) pools in this well bore. These are pre-approved pools as per NMOCD Order # 11363. These zones have been segregated down hole since completion in August of 2002. This work would be done immediately upon NMOCD approval.

Attached are the following documents:

1. A well bore diagram showing the perforated intervals and well bore configuration.
2. The allocation method proposed and supporting data.
3. Statement of commingling showing no reduced value of the total remaining production.
4. Statement attesting that notice was sent to all interest owners and no objections were received.
5. Statement attesting a copy of this form was sent to the BLM



*Ohc 1239AZ*

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

SIGNATURE J.C. Ridens TITLE Vice President of Operations DATE June 4, 2003

Type or print name J.C. Ridens Telephone No. 303-290-0990

(This space for State use) DEPUTY OIL & GAS INSPECTOR, DIST. 8 JUN 18 2003

APPROVED BY [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of approval, if any:



**PRODUCTION DEPARTMENT**

Lease: Arnstein

Well No: 12

State: *NM*

County: Santa Clara

Sec: 18

Twp: 31

Rng: 12h

### WELL PROFILE

סד

6982

Elevation 6400 ft (1950 m)

**PBTD**

Order Page **6941**

Customer Name: \_\_\_\_\_

[illegible][illegible]

## COMMENTS

R3. Packer @ 9941'

SUBMITTED BY:

DS A

**IPALE:**

6/4/03

APPROVED BY



## Arnstein 1Y

### Based on April 2003 Production

#### Fixed Percentage Allocation Formula

	<table><tr><th>Oil</th><th></th></tr><tr><th>Barrels</th><th>%</th></tr></table>	Oil		Barrels	%	<table><tr><th>Gas</th><th></th></tr><tr><th>MCF</th><th>%</th></tr></table>	Gas		MCF	%
Oil										
Barrels	%									
Gas										
MCF	%									
Dakota	0 0.0	0 0.0								
Mesa Verde	15 100.0	4,564 100.0								
TOTAL	15 100.0	4,564 100.0								

### Suggested Future Allocation Based on Offset Production

#### Fixed Percentage Allocation Formula

	<table><tr><th>Oil</th><th></th></tr><tr><th>Barrels</th><th>%</th></tr></table>	Oil		Barrels	%	<table><tr><th>Gas</th><th></th></tr><tr><th>MCF</th><th>%</th></tr></table>	Gas		MCF	%
Oil										
Barrels	%									
Gas										
MCF	%									
Dakota	5 25.0	3,000 28.6								
Mesa Verde	15 75.0	7,500 71.4								
TOTAL	20 100.0	10,500 100.0								

## **Statement of Commingling**

The commingling of the Basin Dakota (71599) and Blanco Mesa Verde (72319) Pools in this well bore will not reduce the value of the remaining production. Commingling these two pools should actually increase the value of the remaining reserves due to using the remaining reservoir energy in both zones produce this well. Commingling operations conducted on other wells similar to this have resulted in increased production rates and greater reserve recovery than producing each zone separately to depletion.

Commingling will benefit both zones in this well. The Dakota is currently shut in through the tubing under a packer, while the Mesa Verde zone is producing up the casing-tubing annulus. Each zone is very susceptible to fluid loading at low bottom hole pressures. Combining the energy flow from both zones with one tubing string should greatly increase lift efficiency, thereby reducing down time due to fluid loading.

Previous commingling operations we have conducted in the San Juan Basin have shown improvement in most cases and in a minority of cases no improvement. We have not conducted a commingle that has resulted in reduced production rates or reserve recovery.

### Statement of Notification

The interests in these two pools are identical. A list of all parties affected by this commingling is attached. They were all notified by certified mail of our intention to commingle these two zones. No objections were received to this operation.

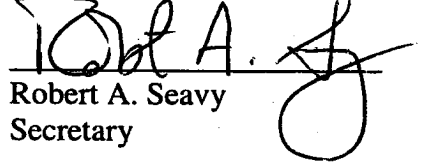
Further, a copy of the Division Form 103C has been filed with the Bureau of Land Management using Sundry Notice Form 3160-5.



J.C. Ridens  
Vice President of Operations

June 4, 2003

Attest

  
Robert A. Seavy  
Secretary