

District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 South First Street, Artesia, NM 88210
District III
1000 Rio Brazos Road, Artec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505
APPLICATION FOR DOWNHOLE COMMINGLING

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

Coleman Oil and Gas Company c/o Walsh Engineering, 7415 E. Main St, Farmington, NM 87402

Operator _____ Address _____
Darcy Ann #1 M 26 T26N R12W San Juan County, NM
Lease _____ Well No. _____ Unit Letter-Section-Township-Range _____ County _____
OGRID No.004838 Property Code 24807 API No. 30-045-29896 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal		WAW Fruitland Sand-PC
Pool Code	71629		87190
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	1222' – 1236'		1243 – 1248
Method of Production (Flowing or Artificial Lift)	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)	NR		NR
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1002 (Est. from Offset)		1006
Producing, Shut-In or New Zone	Producing		Shut-in 6/01
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: 7/11/01 Rates: 240 MCFD	Date: Rates:	Date: 5/01 Rates: 163 MCFD
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 % %	Oil Gas % %	Oil Gas % %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ X No
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☒ X 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 Paul C. Thompson TITLE Agent DATE 7/16/01
TYPE OR PRINT NAME Paul C. Thompson, P.E. TELEPHONE NO. (505) 327-4892

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

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

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code 87190	Pool Name WAW FRUITLAND SAND - PICTURED CLIFFS
Property Code	Property Name DARCY ANN		Well Number 1
OGRID No. 004838	Operator Name COLEMAN OIL & GAS, INC.		Elevation 6231'

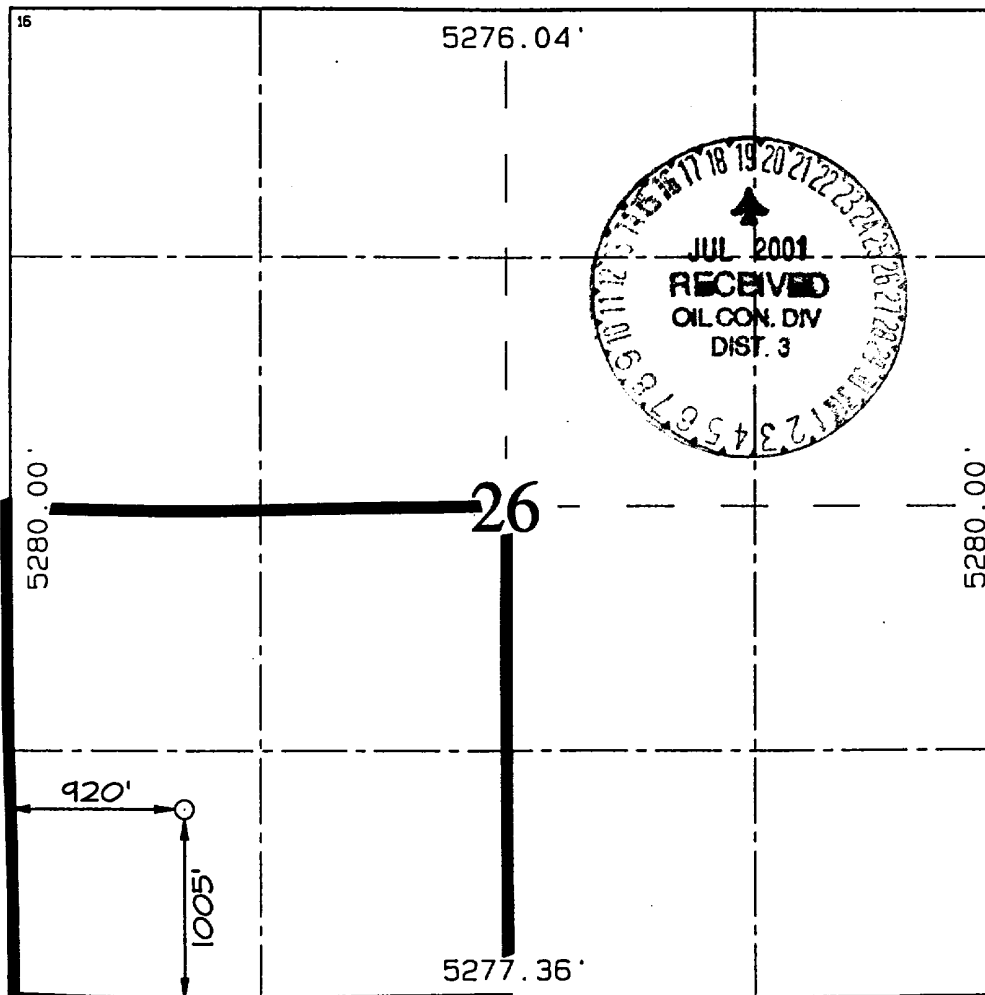
¹⁰ Surface Location

U. or lot no. M	Section 26	Township 26N	Range 12W	Lot Idn	Feet from the 1005	North/South line SOUTH	Feet from the 920	East/West line WEST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 160		Joint or Infill N	Consolidation Code	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>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Paul C. Thompson</i> Signature Paul C Thompson Printed Name Agent Title 4/5/99 Date</p>
	<p>¹⁸ 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>DECEMBER 21, 1998 Date of Survey</p> <p><i>NEALE C. EDWARDS</i> Signature and Seal of Professional Surveyor NEALE C. EDWARDS NEW MEXICO 6857 Professional Surveyor</p> <p>Certificate Number</p>

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FIGURE 3A

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number' 30-045-29896	'Pool Code' 71629	'Pool Name' BASIN FRUITLAND COAL
'Property Code' 24807	'Property Name' DARCY ANN	'Well Number' 1
'OGRID No.' 004838	'Operator Name' COLEMAN OIL & GAS, INC.	'Elevation' 6231'

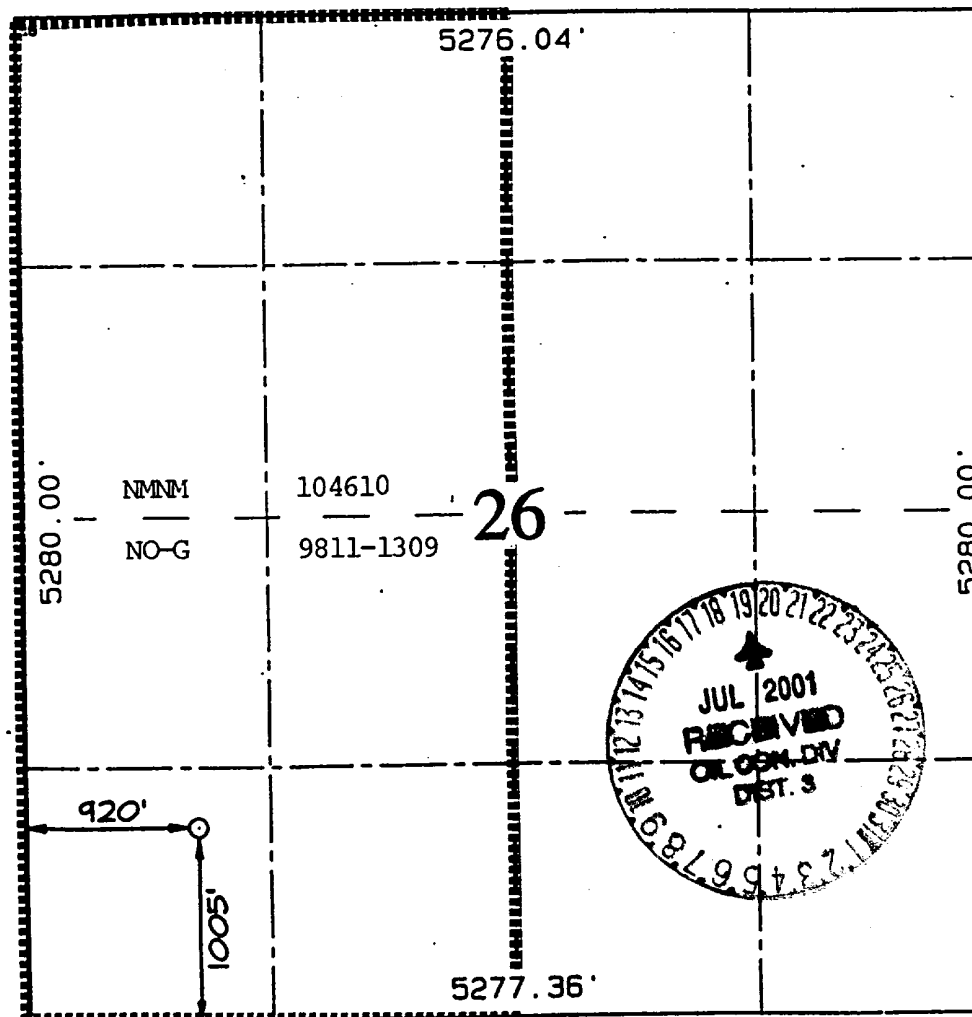
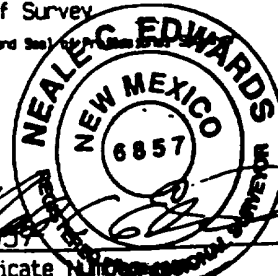
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
M	26	26N	12W		1005	SOUTH	920	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320		¹³ Joint or Infill Y		¹⁴ Consolidation Code C		¹⁵ 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>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Paul C. Thompson</i> Signature Paul C. Thompson Printed Name Agent Title 6/5/00 Date</p>
	<p>¹⁸ 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.</p> <p>DECEMBER 21, 1998 Date of Survey <i>Neale C. Edwards</i> Signature and Seal  Certificate No. 6857</p>

Rate/Time Graph

Lease Name:
County, ST:
Location:

DARCY ANN (1)
SAN JUAN, NM
26 26N 12W NE SW SW

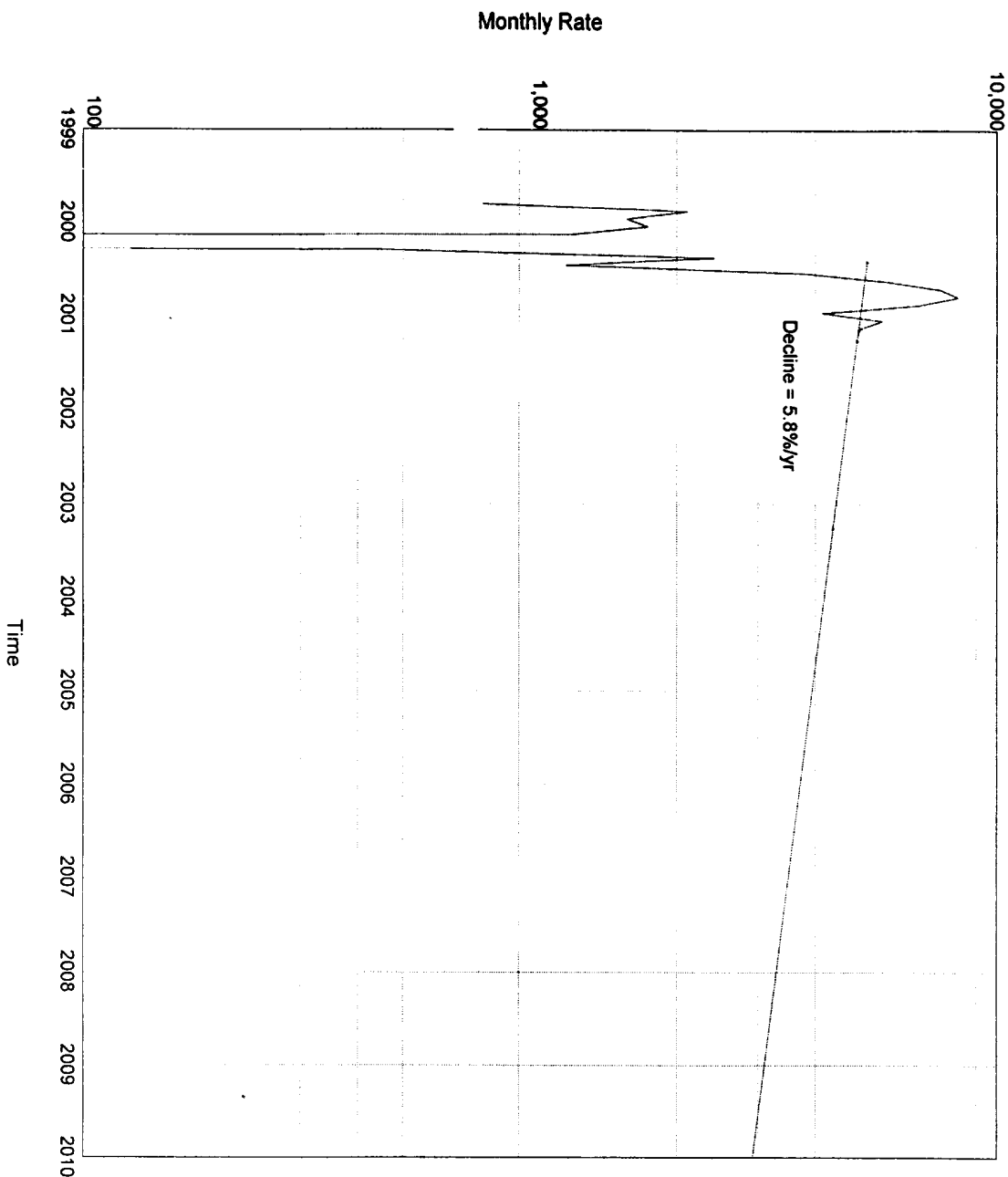
Operator:
Field Name:

COLEMAN OIL & GAS INCORPORATED
WAW

Project: C:\Program Files\IHS Energy\PowerTools v4.0\Projects\DarcyAnn.MDB

Date: 7/16/2001
Time: 4:40 PM

DARCY ANN - WAW



Gas Curve:

Segment 1: 6/1/2000 - 4/1/2001
Start Rate: 5,190 mcf
End Rate: 4,938 mcf
Decline: 5,8000
N Factor: 0.000000
Segment 2: 4/1/2001 - 4/1/2003
Start Rate: 4,938 mcf
End Rate: 4,382 mcf
Decline: 5,8000
N Factor: 0.000000

Water Curve:

Segment 1: 10/1/1999 - 3/1/2001
Start Rate: 1,574 bbl
End Rate: 1,124 bbl
Decline: 21.1282
N Factor: 0.000000

Darcy Ann #1
Downhole Commingling
Allocation Formula

Coleman Oil and Gas drilled the Darcy Ann #1 in August 1999. The well was completed in the WAW Fruitland Sand - Pictured Cliffs Pool in October of 1999 and was first delivered into El Paso Field Services gathering system that same month. After several months of low production due to frac-sand production and scale problems, the well finally started producing on a regular basis in mid-2000. Production from the well stabilized at approximately 4950 MCF/mo. and is declining at approximately 5.8 %/yr. (see attached production graph).

In June of 2001, Coleman Oil and Gas, set a bride plug on top of the Pictured Cliffs zone and recompleted the well in the Basin Fruitland Coal pool.

The two zones are very close to each other (total of 7 feet separation) and the reservoir pressures are expected to be similar. Therefore, cross flow will not be a factor. Both zones will produce water, but neither zone will produce any liquid hydro carbons. Since neither zone is fluid sensitive, the fluids from the two zones should be compatible.

Due to the lack of production data from the Fruitland Coal, Coleman Oil and Gas proposes to allocate the production according to the following method.

Calculate Pictured Cliffs rate at any time from the following:

$Q_{pc} = Q_{pc1} * e^{(-Dt)}$ where t is time in months since the commingling began and Q_{pc1} is 163 MCFD. The Pictured Cliffs decline (D) was calculated from the attached rate - time plot at 5.8%/yr. (0.00483/mo.).

The Fruitland Coal production can be calculated from the actual measured production for any month minus Q_{pc} .

Coleman Oil and Gas is the only working interest owner in the Darcy Ann #1. The working and net revenue interests are common in the two pools. This well is on a Navajo Allotted lease, so the BLM has also been notified.



2030 AFTON PLACE
FARMINGTON, N.M. 87401
(505) 325-8622

ANALYSIS NO. CO210011
CUST. NO. 18200 - 10000

OFFSET TO DAILY ANN #1

WELL/LEASE INFORMATION

CUSTOMER NAME COLEMAN OIL AND GAS INC.
WELL NAME PEGASUS #1
COUNTY/ STATE SAN JUAN NM
LOCATION
FIELD
FORMATION BASIN FRUITLAND COAL
CUST. STL. NO.

SOURCE
PRESSURE 14 PSIG
SAMPLE TEMP 80 DEG.F
WELL FLOWING Y
DATE SAMPLED 6/29/01
SAMPLED BY MIKE HANSON
FOREMAN/ENGR.

REMARKS ROD PUMP - GAS SOLD OFF CASING
API NO. 30-045-30295

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	0.189	0.0000	0.00	0.0018
CO2	2.027	0.0000	0.00	0.0308
METHANE	96.175	0.0000	973.58	0.5327
ETHANE	1.809	0.4304	28.54	0.0187
PROPANE	0.000	0.0000	0.00	0.0000
I-BUTANE	0.000	0.0000	0.00	0.0000
N-BUTANE	0.000	0.0000	0.00	0.0000
I-PENTANE	0.000	0.0000	0.00	0.0000
N-PENTANE	0.000	0.0000	0.00	0.0000
HEXANE PLUS	0.000	0.0000	0.00	0.0000
TOTAL	100.000	0.4304	1,002.12	0.5821

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 14.730 PSIA & 80 DEG. F.

COMPRESSIBILITY FACTOR (1/2) 1.0021
BTU/CU.FT (DRY) CORRECTED FOR (1/2) 1,004.2
BTU/CU.FT (WET) CORRECTED FOR (1/2) 988.7
REAL SPECIFIC GRAVITY 0.5832

ANALYSIS RUN AT 14.730 PSIA & 80 DEGREES F

DRY BTU @ 14.650 998.8
DRY BTU @ 14.696 1,001.9
DRY BTU @ 14.730 1,004.2
DRY BTU @ 15.025 1,024.3

CYLINDER # WIB-5855
CYLINDER PRESSURE 15 PSIG
DATE RUN 5/31/01
ANALYSIS RUN BY GINA HANON