

WJ))

DHC-3737A

PWT 6631879 411

District I
1627 N. Energy Blvd., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 87210

District III
1000 E. Plains Road, Aztec, NM 87410

District IV
1220 S. R. French 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-107A
Revised June 10, 2003

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

APPLICATION FOR DOWNHOLE COMMINGLING

BLACK HILLS GAS RESOURCES, INC. c/o Mike Pippin LLC (agent), 3104 N. Sullivan, Farmington, NM 87401
Operator Address

JICARILLA 459-17 #24 H SEC. 17 T30N R03W Rio Arriba
Lease Well No. Unit Letter-Section-Township-Range County

GRID No. 013925 Property Code 22211 API No. 30-039-29324 Lease Type: Federal State Fee

THIS IS PART OF THE BLACK HILLS CLEAN-UP PROGRAM

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Cabresto Canyon Tertiary	Basin Fruitland Coal	East Blanco Pictured Cliffs
Pool Code	97037	71629	72400
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	1578'-2224'	3668'-98'	3735'-92'
Method of Production (Flowing or Artificial Lift)	Plan to Pump	Plan to Pump	Plan to Pump
Bottomhole Pressure <small>(Note: If vacuum 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)</small>	258	1130	1150
Oil Gravity or Gas BTU <small>(Degree API or Gas BTU)</small>	1052	1165	1175
Producing, Shut-In or New Zone	Shut-in	Shut-in	Shut-in
Date and Oil/Gas/Water Rates of Last Production <small>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)</small>	Date: 11/6/06 Rates: 250 MCF/D	Date: 11/6/06 Rates: 72 MCF/D	Date: 11/6/06 Rates: 91 MCF/D
Fixed Allocation Percentage <small>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)</small>	Oil 0% Gas 61%	Oil 0% Gas 17%	Oil 100% Gas 22%

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 Mike Pippin TITLE Petroleum Engineer - Agent DATE November 14, 2006

TYPE OR PRINT NAME Mike Pippin TELEPHONE NO. (505) 327-4573

E-MAIL ADDRESS mike@mippinllc.com

Jicarilla 459-17 #24
Current Wellbore Diagram
 API # 30-039-29324
 SE NE Sec. 17, T30N, R3W

Elev. GL= 7166'
 Elev. KB= 7179'

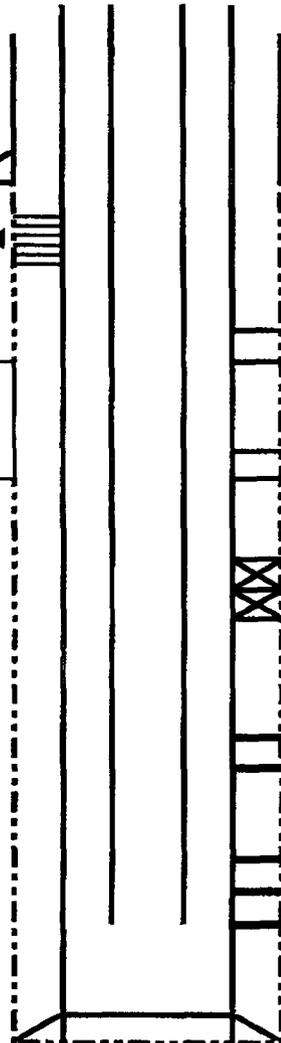
SURF CSG

8 5/8" 24# J-55 @267' KB,
 Cementw/ 175 sx Circ
 cement to surf. TOC surf

SQ holes @ 350', 56 sx
 cement, did not circ to
 surf.

PROD CASING

5 1/2" 17# @3885' KB;
 cmt; 750 sx Circ 60 bbbs to
 surf. TOC= Surf



2-3/8" 4.7# J-55 TBG @ 3812'

San Jose perms: 1578-1680', frac with 54980# sand in 50Q
 N2 foam

Nacimiento perms: 2132-2224', frac 20600 # sand in 50Q
 N2 foam

Ojo Alamo perms: 3178-3210', frac w/ 93260# in 70Q N2
 foam. SQ w/ 308 sx cement

Fruitland Sand perms: 3668-3698, Formic, N2

Pictured Cliffs perms: 3736-3792', frac65760# 20/40 in 66Q
 foam

PBTD=3848'
 TD = 3885'

Prepared: 14-Nov-06

PROPERTY 1
2625 N. French St., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

PROPERTY 2
613 South First, Artesia, N.M. 88210

OIL CONSERVATION DIVISION

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

PROPERTY 3
1660 Elva Avenue NE, Artesia, N.M. 88210

2040 South Pacheco
Santa Fe, NM 87505

AMENDED REPORT

PROPERTY 4
2540 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-29324	² Pool Code 72400	³ Pool Name East Blanco; Pictured Cliffs
⁴ Property Code 24245 22211	⁵ Property Name JCARILLA 459-17	⁶ Well Number 24
⁷ OSID No. 013925	⁸ Operator Name MALLON OIL CO.	⁹ Elevation 7166'

10 Surface Location

TL or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West Line	County
H	17	30-N	3-W		1795	NORTH	425	EAST	RIO ARriba

11 Bottom Hole Location If Different From Surface

TL or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South Line	Feet from the	East/West Line	County
¹² Indicated Acres					¹³ Joint or Infill	¹⁴ Consolidation Code	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

QTR. CORNER
N 89-50-59 W
2639.94' (M)

SEC. CORNER
N 89-50-59 W
2639.94' (M)

QTR. CORNER
S 09-05-15 E
2639.45' (M)

QTR. CORNER
S 09-05-15 E
2639.45' (M)

QTR. CORNER
N 09-05-15 W
425'

LAT.=36-48-54 N (NAD 83)
LONG.=107-09-59 W (NAD 83)

MAY 2005

17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Kathy L. Schneebeck
Signature

Kathy L. Schneebeck
Printed Name

Agent for Mallon Oil Company
Title

July 30, 2004
Date

18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of original surveys made by me or under my supervision and that the same is true and correct.

[Signature]
Signature

14831
Certificate Number

BLACK HILLS GAS RESOURCES, INC.
 JICARILLA 459-17 #24 PC / FRTC
 H Section 17 T30N R03W
 6/22/06

OLDER

Commingle Allocation Calculations

DHC-3737

OIL

The Basin Fruitland Coal gas pool does not make any oil in the vicinity of the subject well. The East Blanco Pictured Cliffs gas pool does produce a little oil. Therefore, any and all oil will be assigned to the Pictured Cliffs.

GAS

During workover operations in June & July 2005, stabilized gas tests were taken on the PC alone, then on the FRTC alone.

Orifice well tester (1") on FRTC alone for 12 hours (6/14/05): 175 MCF/D.

The Pictured Cliffs (only) choke test stabilized at 20 psi on a ½" choke for a 2 hour period on 6/14/05.

$Q = .0555 \cdot C \cdot P$ $C = \text{coefficient for } \frac{1}{2}'' \text{ choke} = 112.72$
 $P = \text{gauge pressure} + 15 \text{ psi} = 35 \text{ psi.}$

$Q = .0555 \cdot 112.72 \cdot 35 = 219 \text{ MCF/D.}$

Total gas = 175 + 219 = 394 MCF/D.

% Pictured Cliffs = $\frac{219}{394} = 56\%$

% FRTC = $\frac{175}{394} = 44\%$