

ABOVE THIS LINE FOR DIVISION USE ONLY

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

2895

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET 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]

[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL     NSP     SD

Check One Only for [B] and [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

[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] **INFORMATION / DATA SUBMITTED IS COMPLETE - Certification**

I hereby certify that I, or personnel under my supervision, have reviewed the applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common.

***I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.***

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Cathleen Colby \_\_\_\_\_ Land Manager \_\_\_\_\_ 2-16-01  
 Print or Type Name                      Signature                      Title                      Date

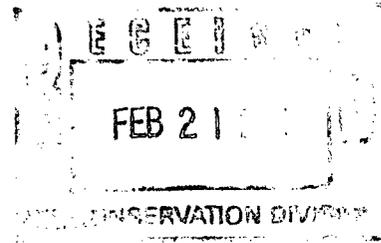
\_\_\_\_\_  
 e-mail address



**RICHARDSON OPERATING COMPANY**

1700 Lincoln, Suite 1700  
Denver, Colorado 80203 (303) 830-8000  
FAX (303) 830-8009

February 16, 2001



Ms. Lori Wrotenberry  
New Mexico Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87504

RE: Downhole Commingle Application  
WF Federal 28-3  
845' FSL, 1652' FWL 28-30N-14W  
San Juan County, NM  
Basin Fruitland Coal and Harper Hill  
Pictured Cliffs

Dear Ms. Wrotenberry:

This is a request for administrative approval for downhole commingling of the production from the captioned formations.

We have attached for your review, an acreage plat outlining the dedicated acreage and a proposed allocation formula with a short discussion of the history of the well.

The Bureau of Land Management is being notified of this application by certified return receipt mail. A copy of this letter to the BLM is also enclosed.

Thank you for your consideration and approval of this application. If you have any questions or concerns please do not hesitate to contact the undersigned.

Sincerely,

Cathleen Colby  
Land Manager

CC/cos  
enclosures

District I  
1625 N. French Dr., Hobbs, NM 88240

District II  
811 South First, Artesia, NM 88210

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

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87504

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107-A  
Revised May 15, 2000

OIL CONSERVATION DIVISION  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

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

APPLICATION FOR DOWNHOLE COMMINGLING

Richardson Operating Company 1700 Lincoln St., Suite 1700, Denver, CO 80203  
Operator Address

WF Federal 28 #3 N 28-30N-14W San Juan  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No 019219 Property Code 24567 API NO. 30-045-30379 Lease Type:  Federal  State  Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal		Harper Hill Pictured Cliffs
Pool Code	71629		78160
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	992'-998'; 1002'-1010'		1013'-1025'
Method of Production (Flowing or Artificial Lift)	to be determined		to be determined
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)	200		200
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1000		1000
Producing, Shut-In or New Zone	shut-in waiting on pipeline		shut-in waiting on pipeline
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: Rates:	Date: Rates:	Date: Rates:
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 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, either the Commissioner of Public Lands or the United States Bureau of Land Management has 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 Cathleen Colby TITLE Land Manager DATE 2/16/01  
TYPE OR PRINT NAME Cathleen Colby TELEPHONE NO. (303) 830-8000

**Richardson Operating Company**  
**WF Federal 28-3**  
**Commingling Application**

The WF Federal 28-3 is a newly drilled Basin Fruitland Coal/Harper Hill Pictured Cliffs well. This is part of Richardson's development program in their WF (West Farmington) field. This is the second Pictured Cliffs and Fruitland Coal well in this section. The first such well in the section is Richardson's WF Federal 28-1 (Unit A, Sec. 28, T30N, R14W), which was approved for downhole commingling of the Fruitland Coal and Pictured Cliffs formations in Administrative Order DHC-2435. Richardson also has two Pictured Cliffs wells in this Section. The WF Federal 28-2 (Unit J, Sec. 28, T30N, R14W) first delivered January 9, 2000. The WF Federal 28-4 (Unit F, Sec. 28, T30N, R14W) has been drilled, but is not yet producing.

Based on recent Richardson Operating wells in this township, it is anticipated that both zones will have similar bottom hole pressures of approximately 200 psi. Both zones produce some water and no liquid hydrocarbons. Neither zone is fluid sensitive and fluids from the two zones are compatible.

Since neither zone has enough data to prepare a reliable production forecast, or predict the ultimate reserves, Richardson Operating proposes to allocate the production based on the initial production rates from the Pictured Cliffs. The well will be perforated and stimulated in the Pictured Cliffs formation. The stimulation will then be cleaned up and the well flow tested. The production based on the flow test will establish the Pictured Cliffs base rate. The Fruitland Coal formation will be completed separately but it will be produced with the Pictured Cliffs. The Fruitland Coal production will be the total measured production minus the Pictured Cliffs production.

Assuming a 7% decline rate from the Pictured Cliffs, the proposed allocation formula is as follows:

Pictured Cliffs Production = Pictured Cliffs base rate  $\times e^{(-Dt)}$ , where  $D = 7\%/yr$  and  $t =$  time in years since first production.

Fruitland Coal Production = Total Production – Pictured Cliffs production.

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505

200 SEP 21 AM 11:40

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

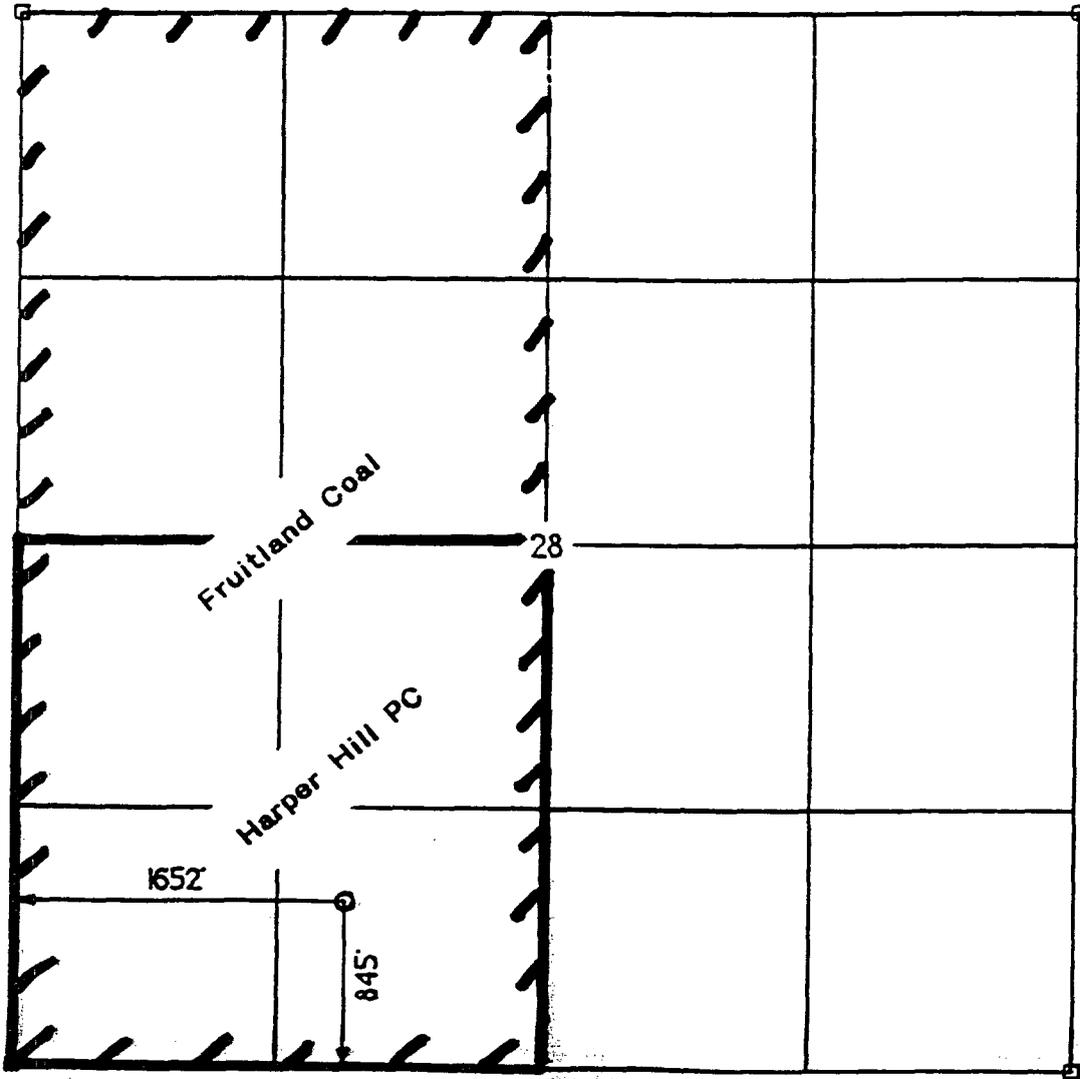
APA Number	Pool Code	Pool Name
	71629 & 78160	FRUIT. COAL & HARPER HILL PC
Property Code	Property Name	Well Number
	WF FEDERAL	28 - 3
OGFD No.	Operator Name	Elevation
019219	RICHARDSON OPERATING COMPANY	5520'

Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
N	28	30 N.	14 W.		845	SOUTH	1652	WEST	SAN JUAN

Bottom Hole Location if Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County

Dedication	Joint ?	Consolidation	Order No.

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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

Signature *Brian Wood*

Printed Name **BRIAN WOOD**

Title **CONSULTANT**

Date **SEPT. 15, 2000**

**SURVEYOR CERTIFICATION**  
I hereby certify that the well location 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 Professional Seal of Surveyor

**Richardson Operating Company**  
WF Federal 28-3

**FRUITLAND COAL FORMATION:**

Township 30 North, Range 14 West  
Section 28: W/2  
Containing 320.00 acres, more or less  
San Juan County, NM

Working Interest:  
Richardson Production Company

Royalty Interest:  
USA NMNM-97843

Overriding Royalty Interest:  
Yates Petroleum Corporation  
Yates Drilling Company  
Abo Petroleum Corporation  
Myco Industries, Inc.

**PICTURED CLIFFS FORMATION:**

Township 30 North, Range 14 West  
Section 28: SW/4  
Containing 160.00 acres, more or less  
San Juan County, NM

Working Interest:  
Richardson Production Company

Royalty Interest:  
USA NMNM-97843

Overriding Royalty Interest:  
Yates Petroleum Corporation  
Yates Drilling Company  
Abo Petroleum Corporation  
Myco Industries, Inc.



RICHARDSON OPERATING COMPANY

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1700 Lincoln, Suite 1700  
Denver, Colorado 80203 (303) 830-8000  
FAX (303) 830-8009

February 16, 2001

Bureau of Land Management  
1235 La Plata Highway  
Farmington, NM 87401

Attention: Minerals

RE: Downhole Commingling Application  
WF Federal 28-3  
845'FSL, 1652'FWL-Sec. 28-30N-14W  
San Juan County, NM  
Basin Fruitland Coal and Harper Hill  
Pictured Cliffs

Gentlemen:

Enclosed you will find a copy of the above referenced application that has been submitted to the New Mexico Oil Conservation Division for administrative approval. You are being notified of this application for concurrent approval.

If you desire to submit remarks concerning the application, please send them to Ms. Lori Wrotenberry, Director, New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, New Mexico 87504 within 20 days from receipt of this notice. If you have no objection to the proposal, concurrent approval is requested.

Thank you for your consideration in this matter. If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

Cathleen Colby  
Land Manager

CC/cos  
enclosures