ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKL

THIS CHECKLIST 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] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [DHC-Downhole 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] TYPE OF APPLICATION - Check Those Which Apply for [A] [1] Location - Spacing Unit - Simultaneous Dedication \square NSL \square NSP \square SD Check One Only for [B] or [C] Commingling - Storage - Measurement \mathbb{B} ☑ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS Injection - Disposal - Pressure Increase - Enhanced Oil Recovery [C] WFX PMX SWD PPI EOR PPR [D]Other: Specify [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or □ Does Not Apply Working, Royalty or Overriding Royalty Interest Owners [A][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] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE. [4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division. Note: Statement must be completed by an individual with managerial and/or supervisory capacity. Print or Type Name Title Date Signature

e-mail Address

MERRION OIL & GAS

RECEIVED

July 8, 2004

JUL 1 2 2004

OIL CONSERVATION DIVISION

Mr. William Jones New Mexico Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505

RE: Application for Administrative Approval

Downhole Commingling
Wildcat Fruitland Sand, Basin Fruitland and Gavilan Pictured Cliffs Pools

Chubby Hubby No. 1 Section 2, T24N, R2W

Rio Arriba County, New Mexico

Dear Mr. Jones:

Merrion Oil & Gas (Merrion) requests administrative approval for downhole commingling of the Wildcat Fruitland Sand, Basin Fruitland and the Gavilan Pictured Cliffs in the subject wellbore. The following information is provided in support of this application.

I. History and Justification

The Chubby Hubby No. 1 APD was submitted for approval to the Rio Puerco BLM office in late May, and should be approved some time in the next month or so. Drilling will begin as soon as a rig is available.

There is Pictured Cliffs production in the area. A well was completed in the Fruitland Coal, however it is not commercially productive. The Fruitland Sand has not been tested (to our knowledge). We propose to commingle production from these three zones because we believe that no one zone would be economically productive. All three zones together could justify the drilling and operating cost of the well.

II. Proposed Spacing Units

Exhibit 1 is the C-102 plat for the Wildcat Fruitland Sand Pool with a 160 acre spacing unit in the northwest quarter of Section 2. Exhibit 2 is the C-102 plat for the Basin Fruitland Pool with a 320 acre spacing unit in the west half of Section 2. Exhibit 3 is the C-102 plat for the Gavilan Pictured Cliffs Pool with a 160 acre spacing unit in the northwest corner of section 2.

III. Allocation Methodology

Exhibit 4 is a map showing offset Pictured Cliffs wells and the Fruitland Coal well. Exhibits 5 through 8 show the production from three of the Pictured Cliffs offsets and one Fruitland Coal offset to the subject well. We project that the Pictured Cliffs will produce

about 50 MCFD. The Fruitland Sand is a wildcat pool in this area and we do not have production data to predict its performance. Open hole log information indicates that the interval may be productive, so we propose to test it. Our conservative estimate is about 20 MCFD, but we can not accurately predict the Fruitland Sand production.

The Fruitland Coal offset produced a maximum rate of 13 MCFD. It was plugged back from a Dakota producer drilled in 1986. We believe that the coal was damaged by mud drilling, and possibly lost circulation in the Fruitland interval. We plan to air drill through the Fruitland Coal to avoid formation damage. We estimate that the Fruitland Coal will produce about 50 MCFD. We have no production data to support this, however, we believe that commingling these three formations provides the best chance of success for each interval.

Merrion proposes to obtain stabilized production tests on each zone separately and use a fixed percentage to allocate future production between the three zones. If subsequent data indicate the need, additional testing may be done in the future to adjust the allocation percentages.

IV. Reservoir Fluid Compatibility

Water analyses are not available for wells in the immediate area. However, the waters of the Fruitland Sand, Coal and Pictured Cliffs have been generally determined to be compatible across the basin based on other similar applications to the NMOCD.

V. Cross Flow Between Zones

The reservoir pressure of all three zones is estimated to be about 850 psig. Therefore, crossflow is not anticipated to be a problem.

VI. Well Ownership Notification

The ownership of the three zones is identical, so no notification is necessary.

VII. Summary

Projected reserves for any one zone are not sufficient to justify drilling the well. Commingling the zones will maximize reserves and protect correlative rights. Therefore, we request your approval of this application.

If you have questions or need additional information, please call me at 505.324.5326.

Sincerely,

Connie S. Dinning

Production Engineer

Cc: Steve Hayden, Aztec NMOCD BLM, Farmington Field Office

File: s/operate/drilling/lindrith/Cookie Dough Commingle Just.doc

District I

1625 N. French Drive, Hobbs, NM 88240

District II 1301 W. Grand Avenue, Artesia, NM 88210

<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

E-MAIL ADDRESS cdinning@merrion.bz

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-107A Revised June 10, 2003

Oil Conservation Division

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION TYPE X_Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE

APPLICATION FOR DOWNHOLE COMMINGLING

____ Yes <u>X</u>No

Merrion Oil & Gas	610 Reilly Ave., Farming										
Operator	Ado	fress									
Chubby Hubby	1 C-2-24N-2V		Rio Arriba								
Lease	Well No. Unit Letter-	Section-Township-Range	County								
OGRID No. <u>014634</u> Property 0	Code API No	Lease Type:	FederalState _XFee								
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE								
Pool Name	Wildcat 24N2W23 Fruitland Sand	Basin Fruitland (Pre-approved w/ Gavilan PC)	Gavilan Pictured Cliffs (Pre-Approved w/ Basin FC)								
Pool Code		71629	77360								
Top and Bottom of Pay Section	Perforated or Open-Hole Interval)										
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift								
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)	omhole Pressure Pressure data will not be required if the bottom tion in the lower zone is within 150% of the 865 psi Estimated from 0.26 gradient Estimated from 0.26 gradient Estimated from 0.26 gradient										
Oil Gravity or Gas BTU (Degree API or Gas BTU)	±1100 BTU/SCF	±1000 BTU/SCF	±1100 BTU/SCF								
Producing, Shut-In or New Zone	·										
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	Date: Estimated from Offsets	Date: Estimated from Offsets	Date: Estimated from Offsets								
estimates and supporting data.)	Rates: 20 MCFD	Rates: 50 MCFD	Rates: 50 MCFD 0 BOPD								
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	or past production, supporting data or 0 % 17% 0 % 42%										
opania. Will de toqui de.)	ADDITIO	NAL DATA	<u></u>								
Are all working, royalty and overriding	royalty interests identical in all cor	mmingled zones?	Yes X No								
If not, have all working, royalty and over		·	Yes X No								
Are all produced fluids from all commit	-	other?	Yes X No								
Will commingling decrease the value of		Commission of CPallin Yang la	Yes No_ <u>X</u>								
If this well is on, or communitized with or the United States Bureau of Land Ma	nagement been notified in writing	of this application?	Yes_XNo								
NMOCD Reference Case No. applicabl	e to this well:		_								
Attachments: C-102 for each zone to be comming Production curve for each zone for a For zones with no production histor Data to support allocation method o Notification list of working, royalty Any additional statements, data or de-	at least one year. (If not available, y, estimated production rates and s r formula. and overriding royalty interests for	attach explanation.) upporting data. r uncommon interest cases.									
	PRE-APPRO	VED POOLS									
If application is	to establish Pre-Approved Pools, the	ne following additional information wi	ll be required:								
List of other orders approving downhole List of all operators within the proposed Proof that all operators within the proposed Bottomhole pressure data.	Pre-Approved Pools										
I hereby certify that the information	above is true and complete to t	he best of my knowledge and belie	ef.								
SIGNATURE (TITLE	Production Engineer DATE	E 7/7/04								
TYPE OR PRINT NAME Conni	e Dinning	TELEPHONE NO. (_505	324-5326								

State of New Mexico Energy. Minerals & Mining Resources Department OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

Form C - 102

MENDED REPORT

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APA Number Po					d Code Pool Name WC24N2W2; Fruitland Sand						
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OGRID No. Operator Name									Elevation		
014634					MERRION OIL & GAS					7328	
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State of New Mexico Energy. Minerals & Mining Resources Department OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

Form C - 102

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT APA Number Pool Code Pagi Name **Basin Fruitland** 71629 Property Code Property Name Wal Number CHUBBY HUBBY OGRID No. Operator Name **Elevation** 014634 MERRION OIL & GAS 7328 Surface Location Feet from> North/South County UL or Lot Lot las. Feet from> Tup. Rga East/West RIO ARRIBA 2 24 N 2 W. W1/2 NORTH 885 1640 C WEST Bottom Hole Location & Different From Surface UL or Los Sec. Top. Rga Feet from> North/South Feet from> Egat/West County Dedication Joint ? Order No. Consolidation 320 Ac NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 5284'** OPERATOR CERTIFICATION I hareby certify that the information contained heren is true and complete to the best of my knowledge and 885 2 3 42.34 42.46 • 42.38 42.42 • belief. 1640 Signature 2718 **Printed Name** WGS 84 Connie Dinning 36'20'4110' N Title . 107 Of 2L32" W Production Engineer Date July 7, 2004 Z SURVEYOR CERTIFICATION 0 0 오 오 I hereby certify that the well location on this plat was platted from field notes of actual surveys made by me or under my supervision, and that the \$ BLM/GL0 Œ * calculated Fee Surface same is true and correct to the best of my belief. Date of Survey 6/04/04 Signature Professio 5284 -N 89'57' W *

State of New Mexico Energy. Minerals & Mining Resources Department OIL CONSERVATION DIVISION 2040 South Pacheco Scata Fe. NM 87505

Form C - 102

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Property Code							Property No	rag.				Wei Number	
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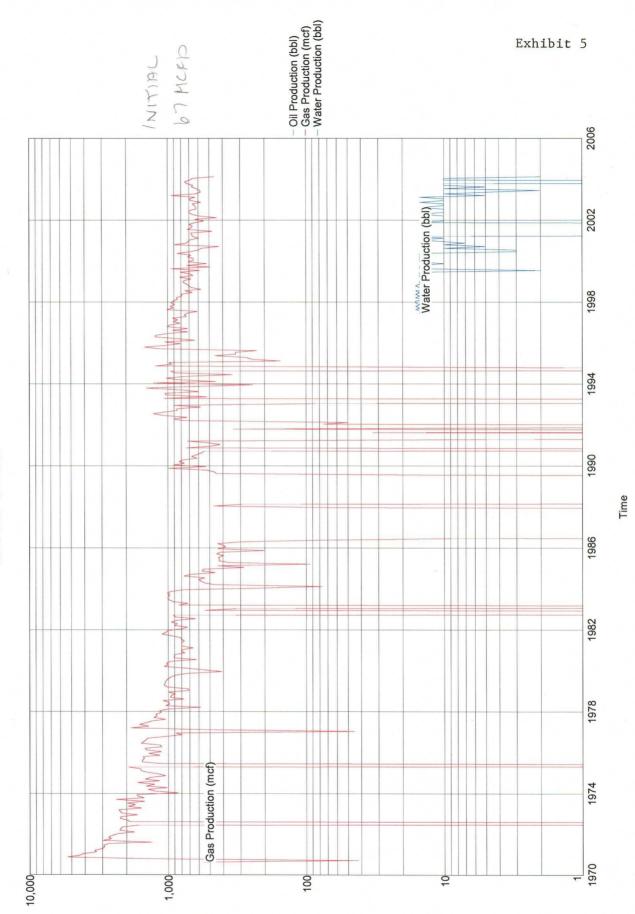
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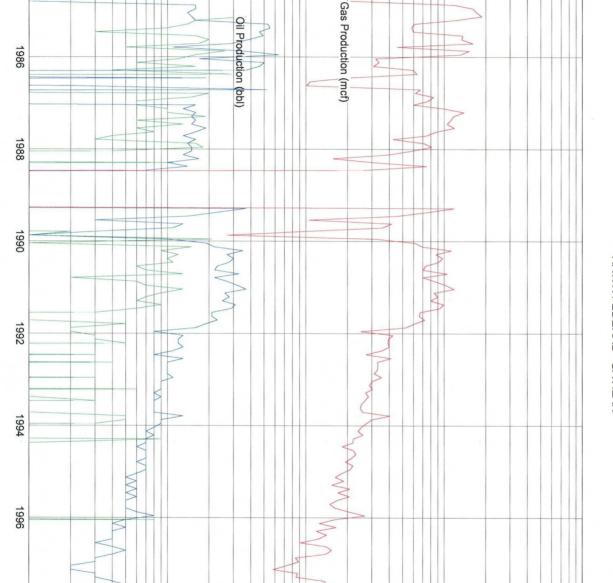
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Lease Name: KILGORE |
County, State: RIO ARBA, NM
Operator: DUGAN PRODUCTION CORPORATION
Field: GAVILAN
Reservoir: PICTURED CLIFFS
Location: 36 25N 2W SE SE

KILGORE - GAVILAN



100



Oil Production (bbl)
Gas Production (mcf)
Water Production (bbl)

33 MCFD

HAWK FEDERAL - GAVILAN

10,000

1,000

Lease Name: HAWK FEDERAL |
County, State: RIO ARBA, NM
Operator: ENERGEN RESOURCES CORPORATION
Field: GAVILAN
Reservoir: PICTURED CLIFFS
Location: 35 25N 2W SW NE NE

1998

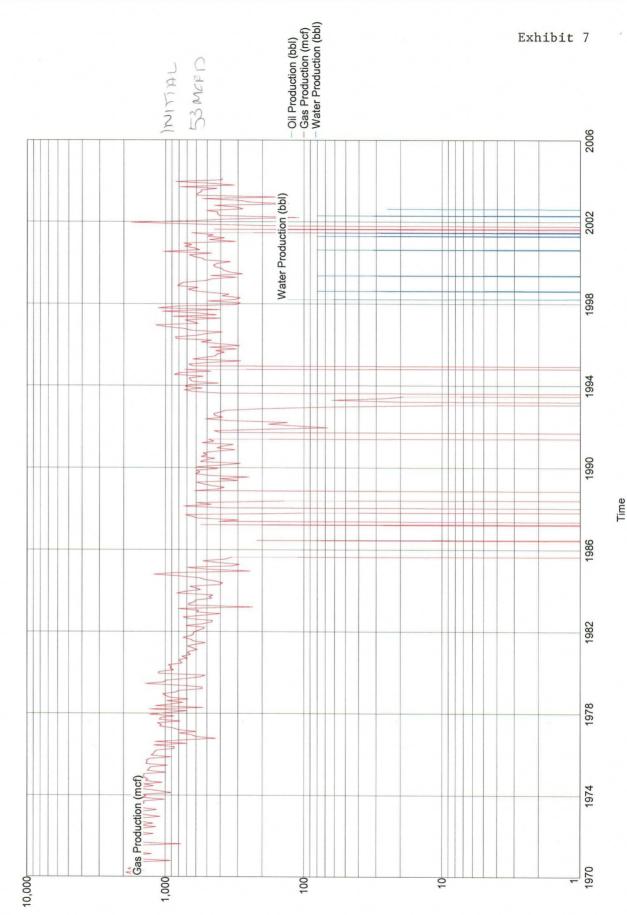
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1984

Time

Lease Name: FEDERAL / ←
County, State: RIO ARBA, NM
Operator: N M & O OPERATING COMPANY
Field: GAVILAN
Reservoir: PICTURED CLIFFS
Location: 36 25N 2W SW NW

FEDERAL - GAVILAN



Time

1998

Lease Name: FEDERAL INVADER POUNTY, State: RIO ARBA, NM
Operator: N M & O OPERATING COMPANY
Field: BASIN
Reservoir: FRUITLAND COAL
Location: 1 24N 2W SE NW NW

CHURSH HUGBY .. CHUNKY MONKEY (1) OUD DIAIROTA 1986 @ COMLTEST 1998

2 RECOMP TO MY 2007

FEDERAL INVADER - BASIN FRUITLAND COST

10,000

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