

DATE IN <u>7/8</u>	SUSPENSE <u>—</u>	ENGINEER <u>WOT</u>	LOGGED IN <u>7/8/11</u>	TYPE <u>DHC</u> <u>4527</u>	APPROV <u>PLANK 119259113</u>
--------------------	-------------------	---------------------	-------------------------	--------------------------------	-------------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

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



RECEIVED OOD  
 2011 JUL 11 P 12:03

**ADMINISTRATIVE APPLICATION CHECKLIST**

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]**  
**[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] or [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
- [D] Other: Specify \_\_\_\_\_
- [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] **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.**

<u>Matt Ogden</u> Print or Type Name	<u>Matt Ogden</u> Signature	<u>Regulatory Analyst</u> Title	<u>7/8/11</u> Date
		<u>Matt.ogden@meritenergy.com</u> e-mail Address	

District I  
1625 N French Drive, Hobbs, NM 88240

District II  
1301 W Grand Avenue, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S St Francis Dr, Santa Fe, NM 87505

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  
☒ Single Well  
☐ Establish Pre-Approved Pools  
EXISTING WELLBORE  
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Merit Energy Company 13727 Noel Rd Ste 500 Dallas, TX 72401  
Operator Address  
State A A/C 1 81 C-10-23S-36E Lea  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 14591 Property Code API No. 30-025-09295 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat Tansil Yates 7-Rivers		Eunice 7 Rivers Queen South
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3292'-3352'		3654'-3780'
Method of Production (Flowing or 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)	NA		NA
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1.3174		33.6 API/1.2088 BTU
Producing, Shut-In or New Zone	Producing		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 estimates and supporting data.)	Date: 07/07/2011 Rates: 10mcf/0 BO	Date: Rates:	Date: Rates: 10mcf/1.5 BO
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 0 % 50 %	Oil Gas % %	Oil Gas 100 % 50 %

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:

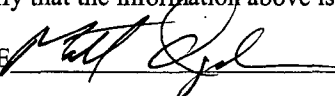
- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation 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  TITLE Regulatory Analyst DATE 07/08/2011  
TYPE OR PRINT NAME Matt Ogden TELEPHONE NO. ( ) (972)628-1603  
E-MAIL ADDRESS matt.ogden@meritenergy.com

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

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised July 16, 2010  
Submit one copy to appropriate  
District Office  
☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-025-09295		<sup>2</sup> Pool Code 24130		<sup>3</sup> Pool Name Eunice 7 Rivers Queen South	
<sup>4</sup> Property Code State A A/C 1		<sup>5</sup> Property Name State A A/C 1			<sup>6</sup> Well Number 81
<sup>7</sup> OGRID No. 14591		<sup>8</sup> Operator Name Merit Energy Company			<sup>9</sup> Elevation

<sup>10</sup> Surface Location

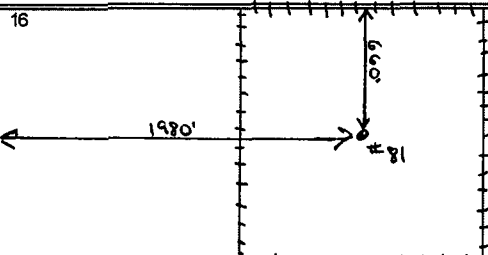
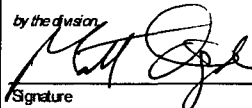
UL or lot no. C	Section 10	Township 23S	Range 36E	Lot 1dn	Feet from the 660	North/South line North	Feet from the 1980	East/West line West	County Lea
--------------------	---------------	-----------------	--------------	---------	----------------------	---------------------------	-----------------------	------------------------	---------------

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. C	Section 10	Township 23S	Range 36E	Lot 1dn	Feet from the 660	North/South line North	Feet from the 1980	East/West line West	County Lea
--------------------	---------------	-----------------	--------------	---------	----------------------	---------------------------	-----------------------	------------------------	---------------

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

<div>16</div> 	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p> 07/07/2011</p> <p>Signature Date</p> <p>Matt Ogden</p> <p>Printed Name</p> <p>matt.ogden@meritenergy.com</p> <p>E-mail Address</p>	
	<div>18 SURVEYOR CERTIFICATION</div> <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>	
	Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number	

**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

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

☐ AMENDED REPORT

API Number 30-025-09295		2 Pool Code 79240	3 Pool Name Jal-mat: Tam. Yates 7R.15 (Pro Gas)
4 Property Code 24669	5 Property Name State A A/C 1		6 Well Number 81
7 OGRID No. 162791	8 Operator Name Raptor Resources		9 Elevation

U/L or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	10	23S	36E		660	North	1980	West	Lea

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

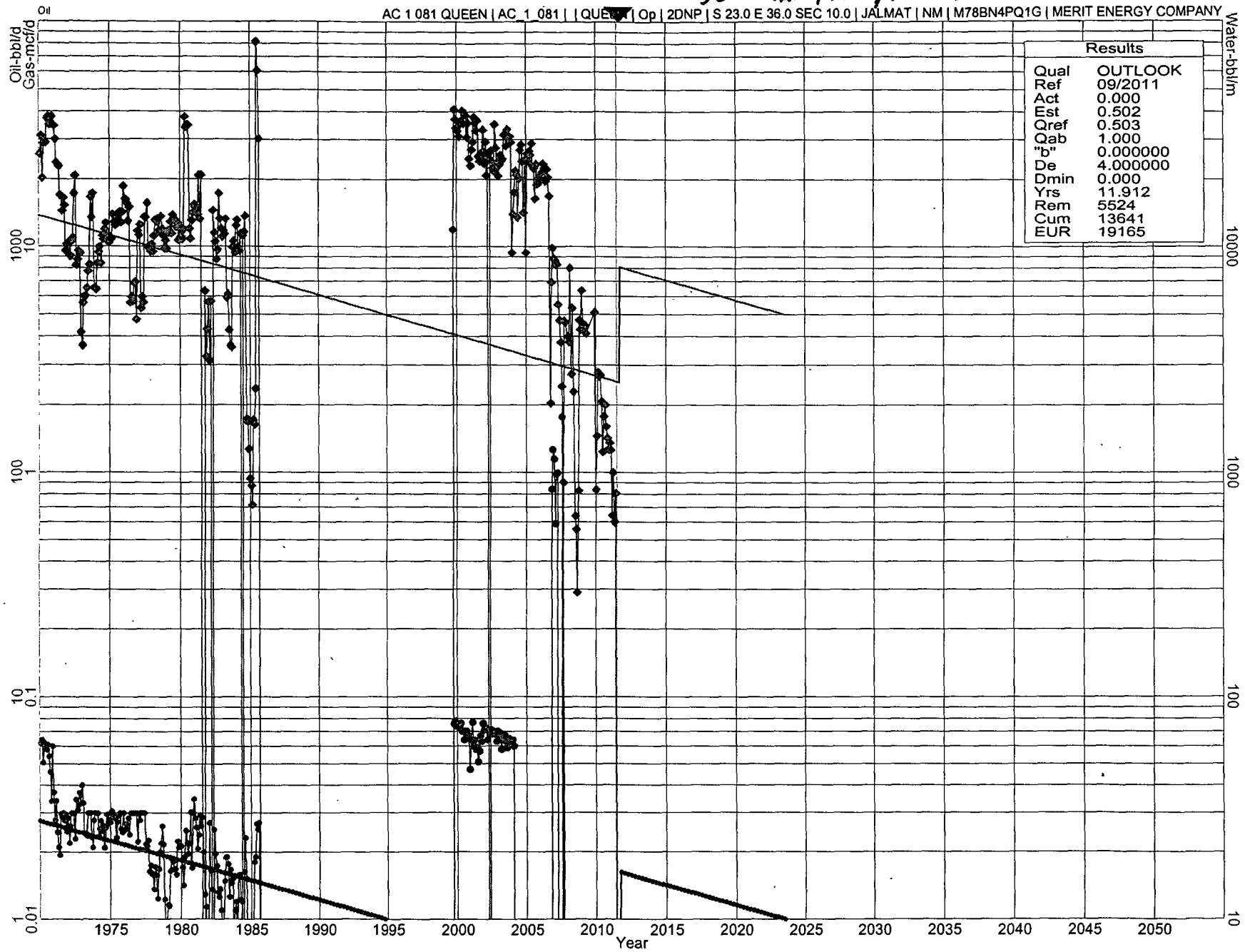
12 Dedicated Acres 420	13 Joint or Infill	14 Consolidation Code	15 Order No. NSP-1862(SD)
---------------------------	--------------------	-----------------------	------------------------------

[illegible]

**Certificate Number**

OIL 10090 QUEEN 1.5 BOPD

5090 QUEEN 10 MCFD  
507 TAN-YATES-TAVES 10 MCFD



TOP

9 5/8" @ 326'  
w/300 sx Cmt

Cored 3,669-3,754'

TOC @ 2,180' by Temp Surv.

Squeeze Perfs: 3,083-3,276'  
Perfs: 3292-3582'

3292, 94, 96, 3302, 22, 44 (2 spf), 46 (2 spf),  
48 (2 spf), 50 (2 spf), 53 (2 spf), 72, 76, 3410,  
27, 34, 53, 72, 75 (2 spf), 79 (2 spf), 81 (2 spf),  
89, 98, 3508, 17, 24, 27 (2 spf), 29, 31, 58, 63,  
66, 68, 78, 80 (2 spf), 82' (2 spf)  
Perf: 3,346-3,352'  
3346, 48, 50, 52'

4 1/2" Liner @ 3,590'  
CIBP @ 3,590'

CIBP @ 3,625' w/35' cmt on top on 10/1/93  
Perfs: 3,654-77'  
3,654-56, 67, 77'  
7" @ 3,681' w/250 sx Cmt

Original TD @ 3,754', deepened on 5/85

# STATE A A/C-1 #81

## PROPOSED WELLBORE DIAGRAM

### MISSION RESOURCES INC

SU-T-R 10C-23S-36E API #: 30-025-09295

POOL: JALMAT; TAN-YATES-7 RVRs (PRO GAS)

CO, ST: LEA, NEW MEXICO LAND TYPE: STATE

STATUS: ACTIVE ACREAGE 40.12

LATEST RIG WORKOVER:

DIAGRAM REVISED: 4/27/2004 BY ERG

LOG ELEVATION: 3,495' KB  
GROUND ELEVATION: 3,483'

	CASING	LINER	TUBING
Hole	12"	8 3/4"	
Pipe	9 5/8"	7"	2 3/8"
Weight	32#	20#	4.7#
Grade			
Thread			
Depth	326'	3,681'	
Mud wt			

## LOGS

Thermal Decay		1999
TDI Advisor		1999
Sonic		1960
Temperature		1960

## TAN-YATES-7 RVRs ZONE HISTORY

9/99 Recompleted from Queen  
9/16/99 Perforated Yates 3,083-3,276' (50 holes)  
Frac w/37,140 gals 40# linear & 104 tons CO<sub>2</sub> &  
183,000# 12/20  
IP 0 BOPD, 39 MCFPD, 2 BWPD

## PROPOSED

Squeeze Yates perfs 3083-3276'  
DO 3,000' & cmt  
Run cased hole log  
Perf top of 7 Rvrs 3,346-3,352'  
Check for communication w/Yates  
Set 4 1/2" liner on CIBP @ 3,590' & cmt in place  
Perf 3,292-3,582'  
Acidize perfs w/2500 gals 71/2% NEFE HCl w/PPI tool  
Frac 7 Rivers perfs  
RIH w/2 3/8" prod tbg, pump & rods  
Pump test well

## LANGIE MATTIX (LWR 7RVRs-QUEEN) HISTORY

1/60 Spud. 1/60 Initial completion  
Completed openhole 3,681' to 3,754  
1/60 Vibro-frac 3,745-50' w/two #3 charges  
SOF w/10,000 gal oil & 10,000# 20/40 sand.  
IPF 142 BO, 7.5 BW in 8 hrs  
5/85 Deepen OH to 3,780'.  
Perforated 3,654-77'.  
Acidize OH & 3,654-77' w/6000 gal 15%  
After P 7 BOPD, 40 BWPD & 40 MCFPD  
12/86 Change pump  
10/93 Set CIBP @ 3,625' w/35' cmt on top. Tstd to  
530 psi - OK. T&A well.

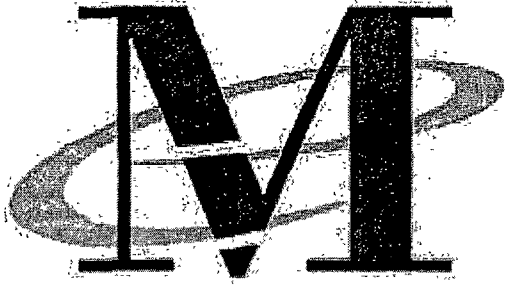
TANSILL 2,934'  
(file pick)

YATES 3,100'

7 RVRs 3,298'

QUEEN 3,706'

TD 3,780'



*Merit Energy Company  
13727 Noel Road, Suite 500  
Dallas, TX 75240*

Date: July 8, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
**RE. Jalmat Field: 2 Commingling Applications  
Lea County, New Mexico**

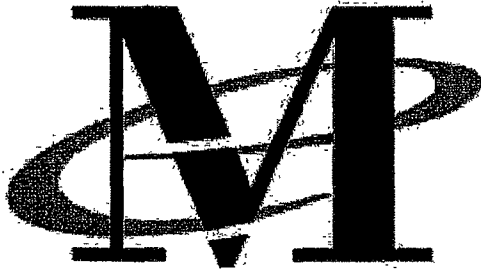
Merit Energy Company has requested approval to commingle the Queen formation (Langlie Mattix Pool) with the Tansill-Yates-Seven Rivers formation (Jalmat Pool).

Commingling the Jalmat Pool with the Langlie Mattix Pool in P 3 T23S R36E and C 10 T22S R36E in Lea County is in the interest of both royalty owners and the conservation. Commingling will extend the life of each well and optimize recovery from Both Pools. The 2 well's commercial value will be extended 30 years based on estimated reserves from the Queen formation, and will ultimately allow uncommercial Jalmat Pool reserves to be recovered via production from the Queen. The Queen Completions are uneconomic if it is required by the NMOCD to seal off the Jalmat Pool from the Langlie Mattix Pool. Operationally, fluid samples will be collected before and after commingling. Scale inhibitors will be continuously pumped during operations. The fluid level will be maintained below the Jalmat pool both to optimize production and reduce any scaling tendencies.

Please let me know if you have any questions

Sincerely,

Brett Keener  
Operations Engineer  
[brett.keener@meritenergy.com](mailto:brett.keener@meritenergy.com)  
Phone: 972-628-1592  
Fax: 972-682-1892



**Merit Energy Company**  
**13727 Noel Road, Suite 500**  
**Dallas, TX 75240**

Date: June 27, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
RE. Jalmat Field: State AAC-1 #69, & 81  
Lea County, New Mexico

Merit Energy Company has requested approval to commingle the Yates formation ( Jalmat Pool) with the Queen formation (Langlie-Mattix) .

This well that we are asking to commingle does have "identically owned" (working/royalty/orri) interest from the surface to the base of the queen formation.

Please let me know if you have any questions

Sincerely,

Matt Van Eaton  
Associate Landman  
[matt.vaneaton@meritenergy.com](mailto:matt.vaneaton@meritenergy.com)  
Phone: 972-628-1557  
Fax: 972-682-1857