

DATE IN 5.16.11	SUSPENSE	ENGINEER WVT	LOGGED IN 5.16.11	TYPE DHC	APP NO. 1113655421
-----------------	----------	--------------	-------------------	----------	--------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

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



merit 14591

Sub A ALC #47  
30-025-08798

**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.

Print or Type Name

Signature

Title

Date

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 75240

Operator

Address

State A A/C 2

47

Unit C - Sect. 5C - T22S - R36E

Lea

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14591 Property Code 24671 API No. 30-025-08798 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat - Tan Yates 7 Rivers		<del>Langlie Mattix - Queen</del>
Pool Code	79240		<del>24130</del>
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3079'-3408'		3810'-3890'
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)	1.3174 BTU		33.6 API / 1.2088 BTU
Producing, Shut-In or New Zone	Producing		SI
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: 03/12/2011 Rates: 35mcf/1bwpd	Date: Rates:	Date: Rates: 1bopd/8mcf/d
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                      %      80                      %	Oil                      Gas %                      %	Oil                      Gas 100                      %      20                      %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes ☒ No ☐  
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 Matt Ogden TITLE Regulatory Analyst DATE 05/12/2011

TYPE OR PRINT NAME Matt Ogden TELEPHONE NO. ( ) (972)628-1603

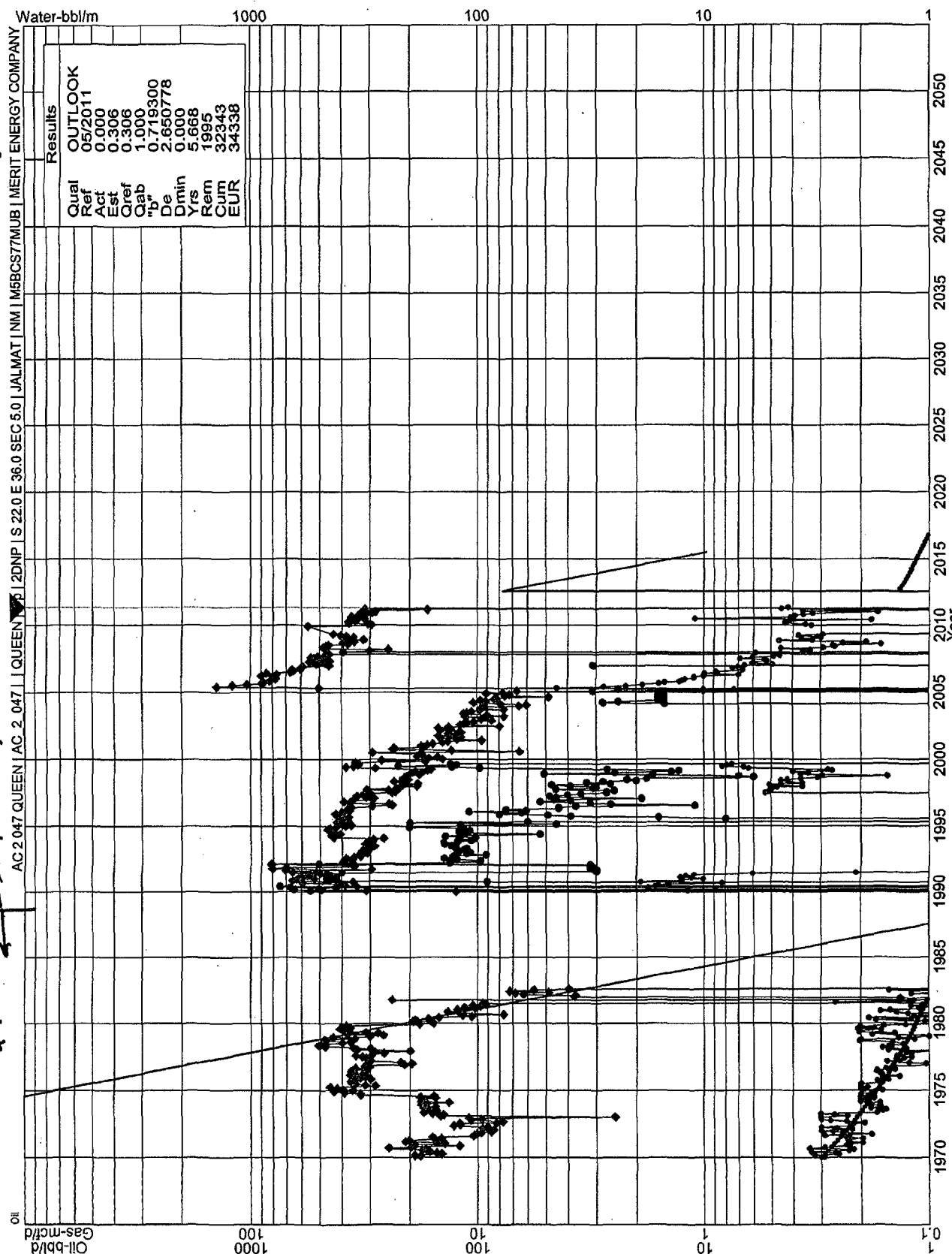
E-MAIL ADDRESS matt.ogden@meritenergy.com

FORM	TOP			<b>AAC-2 #47</b>																																	
		<b>CURRENT WELLBORE DIAGRAM</b>																																			
		<b>RAPTOR RESOURCES INC</b>																																			
		<b>SU-T-R</b>	5C-22S-36E	<b>API #:</b> 30-025-08798-0000																																	
		<b>POOL:</b> JALMAT; TAN-YATES-7 RVRS (PRO GAS)																																			
		<b>CO, ST:</b> LEA, NEW MEXICO		<b>LAND TYPE:</b> STATE																																	
		<b>STATUS:</b> ACTIVE		<b>ACREAGE</b> 40.12																																	
		<b>LATEST RIG WORKOVER:</b> 6/11/01																																			
		<b>DIAGRAM REVISED:</b> 1/15/2004 BY RSL																																			
		<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <b>LOG ELEVATION:</b> N/R  <b>GROUND ELEVATION:</b> 3,601'         </div>																																			
		<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p><b>LOGS</b></p> <p>CNL</p> <p>Acoustic</p> <p>Some TansIII is shot</p> </div> <div style="width: 55%;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">CASING</th> <th style="text-align: center;">LINER</th> <th style="text-align: center;">TUBING</th> </tr> </thead> <tbody> <tr> <td>Hole</td> <td>12 1/2"</td> <td>8 3/4"</td> <td></td> </tr> <tr> <td>Pipe</td> <td>9 5/8"</td> <td>7"</td> <td>2 3/8"</td> </tr> <tr> <td>Weight</td> <td>36#</td> <td>24#</td> <td>4.7#</td> </tr> <tr> <td>Grade</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Thread</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Depth</td> <td>336'</td> <td>3,810'</td> <td>3,525'</td> </tr> <tr> <td>Mud wt</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> </div> </div>				CASING		LINER	TUBING	Hole	12 1/2"	8 3/4"		Pipe	9 5/8"	7"	2 3/8"	Weight	36#	24#	4.7#	Grade				Thread				Depth	336'	3,810'	3,525'	Mud wt			
CASING		LINER	TUBING																																		
Hole	12 1/2"	8 3/4"																																			
Pipe	9 5/8"	7"	2 3/8"																																		
Weight	36#	24#	4.7#																																		
Grade																																					
Thread																																					
Depth	336'	3,810'	3,525'																																		
Mud wt																																					
		<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p>9 5/8" @ 336'</p> <p>w/ 300 sx Cmt</p> </div> <div style="width: 55%;"> <p>TOC @ 2,030'</p> <p><b>SELECT PERFS: 21 Holes</b></p> <p>3079, 3092, 3096, 3098, 3113, 3115, 3120, 3121, 3161, 3275, 3296, 3298, 3304, 3308, 3320, 3338, 3342, 3355, 3373, 3406, 3408,</p> <p>CIBP @ 3,765' on 11/22/89</p> <p>7" @ 3,810' w/250 sx Cmt</p> <p>OH 3810-3890' } Queen Sand</p> </div> </div>																																			
YATES	3,230'																																				
7 RVRS	3,433'																																				
QUEEN	3,820'																																				
		<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p><b>TAN-YATES-7 RVRS ZONE HISTORY</b></p> <p>12/23/89 Recompleted from Queen.</p> <p>Perforated 3,275-3,408'</p> <p>Frac w/ 1092 bbl &amp; 101,420# sand.</p> <p>Perforated 3079-3161'</p> <p>Frac w/ 25,000 &amp; 33,000# sand.</p> <p>IP 25 BOPD, 24 BWPD, 76 MCFD</p> <p>12/90 Rig on well. "Csg moved" - poss shallow csg part</p> </div> <div style="width: 55%;"> <p><b>OPPORTUNITY</b></p> <p>Perf Seven Rivers RL 1/04</p> </div> </div>																																			
		<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p><b>QUEEN ZONE HISTORY</b></p> <p>7/2/60 Spud. 7/28/60 Initial Completion</p> <p>Pool EUNICE; SEVEN RIVERS-QUEEN, SOUTH</p> <p>Perforated open hole 3,810-3,890'</p> <p>Vibro-fraced 3 #3 charges @ 3,884-89'</p> <p>Frac 20,000 gal oil and 20,000 lbs sand</p> <p>IP 1090 BO, 185 BW</p> <p>11/22/89 Set CIBP @ 3,765'</p> </div> <div style="width: 55%;"> <p><b>TD 3,890'</b></p> </div> </div>																																			

Est QUEEN  
1.56080  
8 MCFD

Current Prod  
35 MCFD

QUEEN → TRAPS - YATES



OIL 10000 QUEEN  
GAS 2000 QUEEN  
8500 TRAPS - YATES

## NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-128  
Revised 5/1/57

## WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

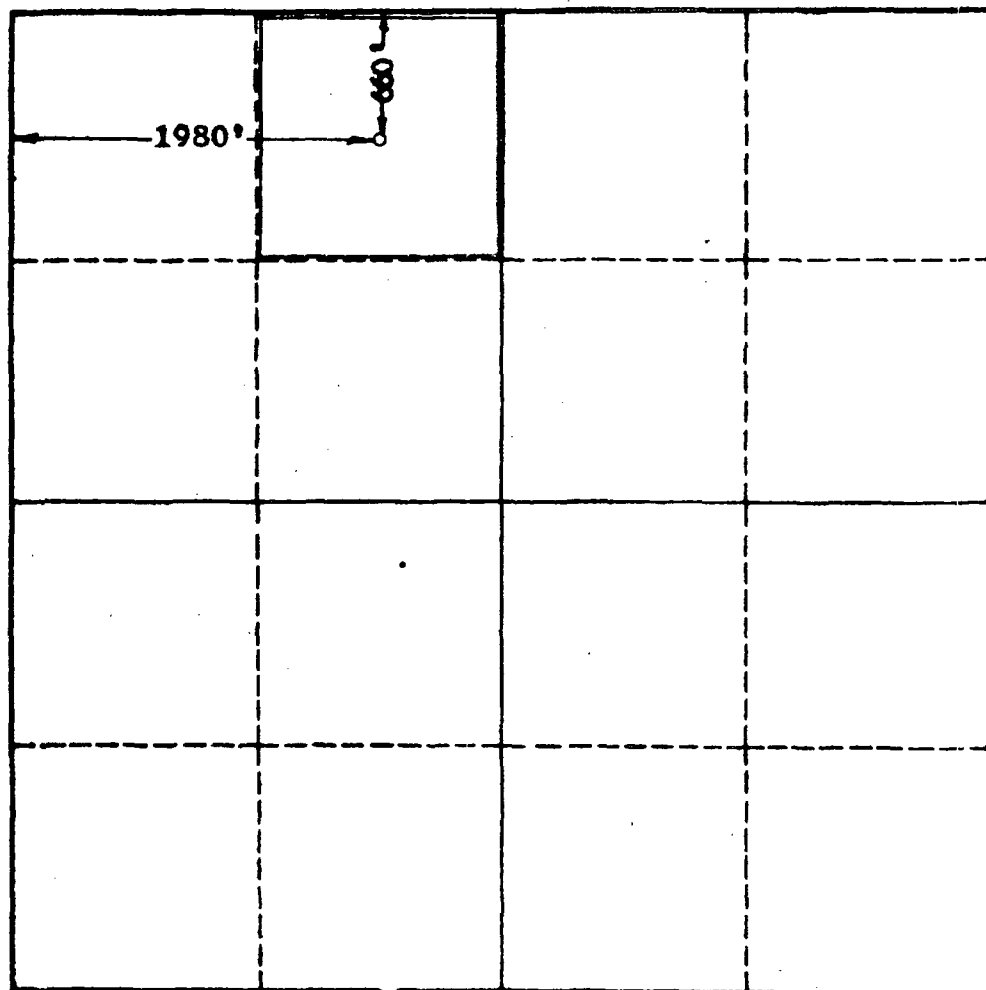
## SECTION A

Operator <b>Texas Pacific Coal &amp; Oil Co.</b>			Lease <b>St. of N.M. 31<sup>st</sup> Acct. 562</b>		Well No. <b>47</b>
Unit Letter <b>C</b>	Section <b>5</b>	Township <b>22S</b>	Range <b>36E</b>	County <b>Lea</b>	
Actual Footage Location of Well: <b>660</b> feet from the <b>North</b> line and <b>1980</b> feet from the <b>West</b> line					
Ground Level Elev.	Producing Formation <b>Queen</b>		Pool <b>South Burles</b>		Dedicated Acreage: <b>40</b> Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES ☒ NO ☐ ("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ☐ NO ☐ If answer is "yes," Type of Consolidation \_\_\_\_\_
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

## SECTION B



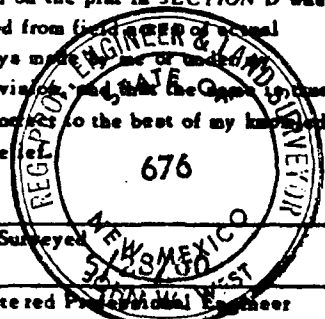
## CERTIFICATION

I hereby certify that the information in SECTION A above is true and complete to the best of my knowledge and belief.

Name *[Signature]*  
Position  
**Manager of Production**  
Company  
**Texas Pacific Coal & Oil Co.**  
Date  
**June 1, 1960**

I hereby certify that the well location shown on the plat in SECTION B 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 knowledge and belief.

Date Surveyed **5/23/60**  
Registered Professional Engineer and/or Land Surveyor, **JOHN W. WEST**  
Certificate No. *[Signature]*  
**N.M. - P.E. & L.S. NO. 676**



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

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 30-025-08798	<sup>2</sup> Pool Code 24130	<sup>3</sup> Pool Name Eunice 7 Rivers Queen, South
<sup>4</sup> Property Code 302433	<sup>5</sup> Property Name State A A/C 2	<sup>6</sup> Well Number 47
<sup>7</sup> OGRID No. 14591	<sup>8</sup> Operator Name Merit Energy Company	<sup>9</sup> Elevation 3601'

<sup>10</sup> Surface Location

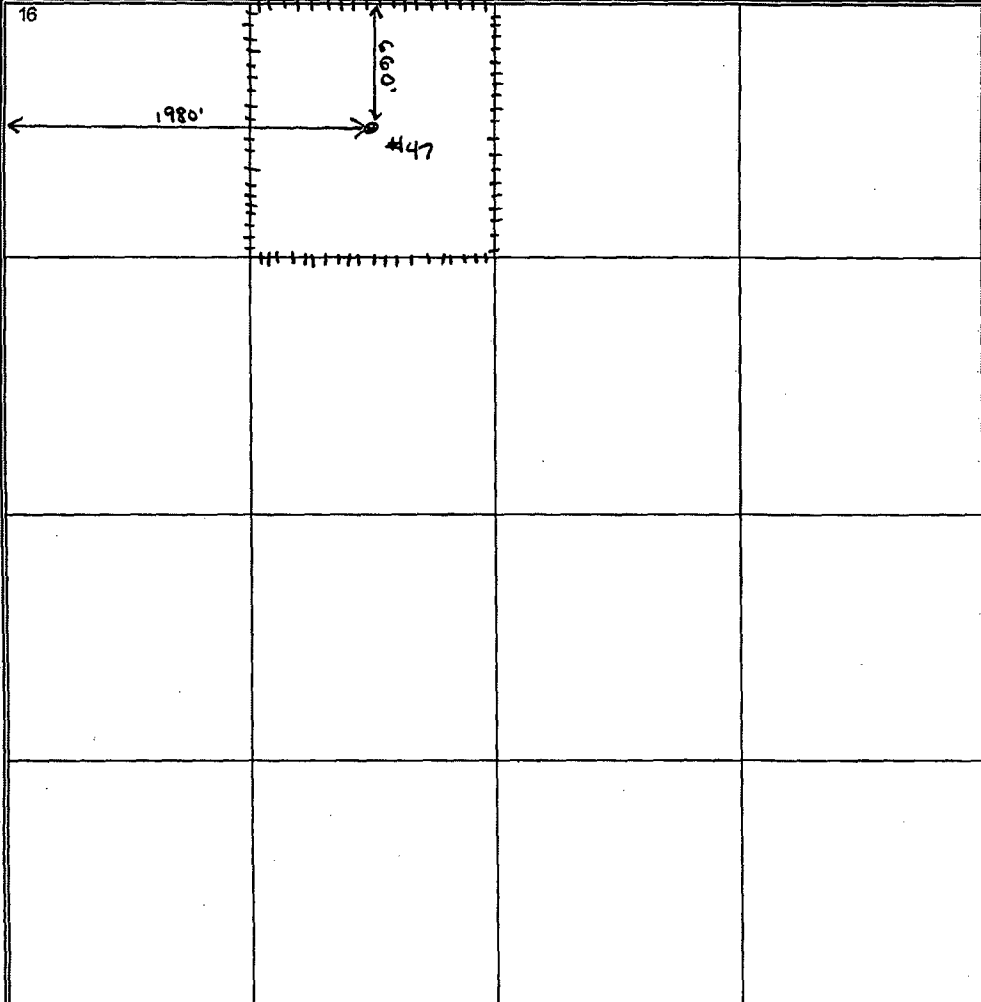

UL or lot no. C	Section 5	Township 22S	Range 36E	Lot 1dn	Feet from the 660	North/South line N	Feet from the 1980	East/West line W	County Lea
--------------------	--------------	-----------------	--------------	---------	----------------------	-----------------------	-----------------------	---------------------	---------------

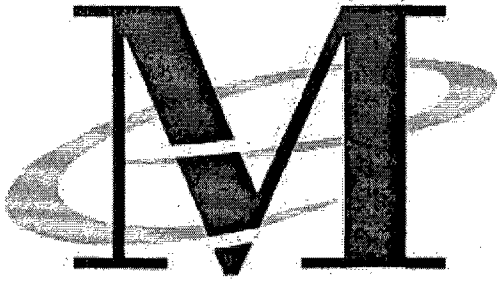
<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

<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.

	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <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> 05/24/2011</p> <p>Signature Date</p> <p>Matt Ogden</p> <p>Printed Name</p> <p>matt.ogden@meritenergy.com</p> <p>E-mail Address</p>
	<p><sup>18</sup> 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>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p>
	<p>Certificate Number</p>



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

Date: May 12, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
**RE. Jalmat Field: 12 Commingling Applications**  
**Lea County, New Mexico**

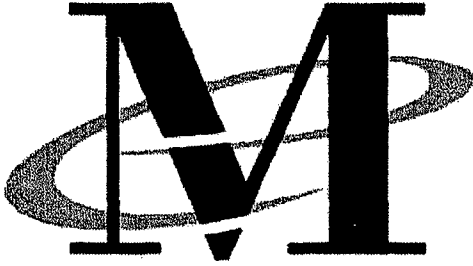
Merit Energy Company has requested approval to commingle the Queen formation (Langlie Mattix Pool) with the Tansill-Yates-Seven Rivers formation (Jalmat Pool).

Commingling the Jalmat Pool with the Langlie Mattix Pool in S 5-9 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 12 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: May 12, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
RE. Jalmat Field: State 157 G#2 & G#4, State A A/C 2 #1, State AAC-2 #2, #4, #7, #31,  
#34, #46, #47, & #70 Yates-Queen Commingling  
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