

DATE IN <u>5.16.11</u>	SUSPENSE	ENGINEER <u>WVJ</u>	LOGGED IN <u>5.16.11</u>	TYPE <u>DHC</u>	APP NO. <u>1113653577</u>
------------------------	----------	---------------------	--------------------------	-----------------	---------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

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



*PTG-W*  
*Mevit 14591*

*State A A/C 2#2*

**ADMINISTRATIVE APPLICATION CHECKLIST**

*30-025-08791*

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.**

Matt Ogden  
 Print or Type Name

Matt Ogden  
 Signature

Regulatory Analyst  
 Title

5/12/11  
 Date

Matt.Ogden@meritenergy.com  
 e-mail Address

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

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

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

APPLICATION TYPE  
☒ Single Well

District III  
1000 Rio Brazos Road, Aztec, NM 87410

Establish Pre-Approved Pools  
EXISTING WELLBORE  
☒ Yes ☐ No

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

APPLICATION FOR DOWNHOLE COMMINGLING

Merit Energy Company  
Operator

13727 Noel Rd Ste 500 Dallas, TX 75240

State A A/C 2

2

Unit L - Sect. 5L - T22S - R36E

Lea

Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 14591 Property Code 24671 API No. 30-025-08791 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat - Tan Yates 7 Rivers		St. Edward Trivison
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3140'-3488'		3567'-3968'
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
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: 30mcf/1bwpd	Date: Rates:	Date: Rates: 1.5bopd
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 0 % Gas 100 %	Oil % Gas %	Oil 100 % Gas 0 %

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  TITLE Regulatory Analyst DATE 05/12/2011

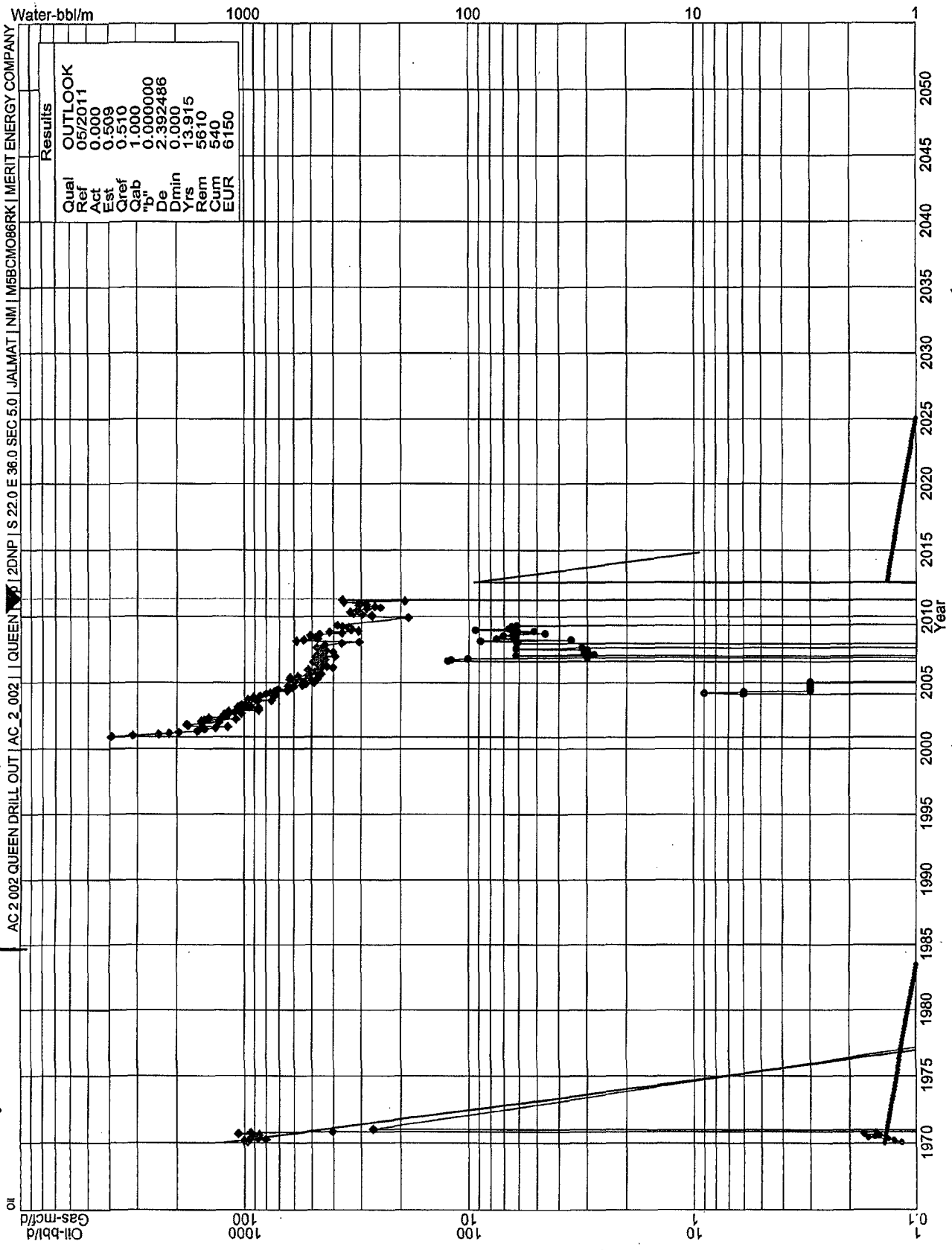
TYPE OR PRINT NAME Matt Ogden TELEPHONE NO. ( ) (972)628-1603

E-MAIL ADDRESS matt.ogden@meritenergy.com

FORM	TOP																												
		<b>AAC-2 #2</b>																											
		<b>CURRENT WELLBORE DIAGRAM</b>																											
		<b>MISSION RESOURCES INC</b>																											
		<b>SU-T-R</b> 5L-22S-36E	<b>API #:</b> 30-025-08791-0000																										
		<b>POOL:</b> JALMAT;TAN-YATES-7 RVRS (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> 8/25/2003																											
		<b>DIAGRAM REVISED:</b> 1/9/2004 BY Robert Lee																											
		LOG ELEVATION: N/R GROUND ELEVATION: 3,602'																											
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">CASING</th> <th style="width: 15%;">LINER</th> <th style="width: 15%;">TUBING</th> </tr> </thead> <tbody> <tr> <td>Hole 15"</td> <td>13"</td> <td>8 3/4"</td> </tr> <tr> <td>Pipe 12 1/2"</td> <td>9 5/8"</td> <td>7"</td> </tr> <tr> <td>Weight 50#</td> <td>40#</td> <td>24#</td> </tr> <tr> <td>Grade</td> <td></td> <td></td> </tr> <tr> <td>Thread</td> <td></td> <td></td> </tr> <tr> <td>Depth 272'</td> <td>1,586'</td> <td>3,743'</td> </tr> <tr> <td>Mud wt</td> <td></td> <td></td> </tr> </tbody> </table>				CASING	LINER	TUBING	Hole 15"	13"	8 3/4"	Pipe 12 1/2"	9 5/8"	7"	Weight 50#	40#	24#	Grade			Thread			Depth 272'	1,586'	3,743'	Mud wt		
CASING	LINER	TUBING																											
Hole 15"	13"	8 3/4"																											
Pipe 12 1/2"	9 5/8"	7"																											
Weight 50#	40#	24#																											
Grade																													
Thread																													
Depth 272'	1,586'	3,743'																											
Mud wt																													
		Cores - 3,745-63'																											
		LOGS																											
		Collar																											
		Radioactivity																											
		TOC est 2,097'																											
		Select Perfs: 20 Holes																											
		3,140', 3,150', 3,164', 3,181',																											
		3,196', 3,214', 3,237',																											
		3,256', 3,267', 3,277', 3,283',																											
		3,293', 3,309', 3,317', 3,325',																											
		3,354', 3,412', 3,423', 3,444',																											
		3,488'																											
		CIBP @ 3,550' 6/16/94																											
		Perf 3,567-85' In 12/46																											
		Perf 3,666-3,700' In 2/47																											
		7" @ 3,743' w/250 sx Cmt																											
		3758-3859', 285 qts nitro																											
		5" slotted liner																											
		3,737-3,832' in 11/63																											
		TD 3,968'																											
		YATES 3,127'																											
		7 RVRS 3,320'																											
		QUEEN 3,750'																											
		<b>TAN-YATES-7 RVRS ZONE HISTORY</b> 10/20/00 Recompleted from Queen. Perforated select 20 holes 3,140'-3,488' Acidized 3300 gal acid w/PPI tool Ran 3-1/2" work tbg, set pkr at 3,036' Frac w/46,000 gal 40# gel foamed to 65 quality w 280 T CO2 15,000# 20/40 sand and 175,000# 12/20 Brady sand. Ran 2-3/8" prod tubing to 3,137' Ran 2" x 1-1/2" x 12' pump and rods. IP 0 BOPD 2 BWPD 559 MCFD																											
		<b>OPPORTUNITY</b> None seen. Entire zone perf, frac in 2000. RL 1/9/04																											
		<b>QUEEN ZONE HISTORY</b> 1936 Spud. 09/18/36 Initial Completion Pool EUNICE;SEVEN RIVERS-QUEEN, SOUTH Perforated Open hole 3,745-63', 3,815-27' Acidized 2000 gal 11/2/36. Shot 285 qts nitro 3,758- 3,859' 11/18/36. Acidized 5000 gal 11/25/36. IP 132 BOPD 650 MCFD 12/46 Sqz OH w/20 sx TOC @ 3,735'. Perf 3,567-85' w/109 shots. Acidize 500 gal. IP 14 BOPD 5280 MCFPD 2/47 Perfed 3,666-72' (30 shots), 3,677-85' (32 shots) 3,690-3,700' (40 shots). Acidized w/500 gal mud acid & 1000 gal 20% acid. Swabbed 1 BOPH & 40 BWPH. 11/52 Well test was 0 BOPD, 240 MCFPD, 400 BWPD, 700# CP, 120# TP. Shortly before this test the well made 2 BWPD. 11/21/52 Set pkr @ 3,608' to tst perfs @ 3,567-3,585'. Swabbed 48 hrs. FL stayed @ 2,600'. Tstd perfs @ 3,666-3,700'. Well unloaded wtr. 11/63 Sqzd perfs @ 3,567-3,700', drilled out to 3,842' & ran slotted liner. Acidized 3,737-3,832' w/ 3000 gal. Fraced w/20,000 gal oil & 20,000# sand & 500# Adomite. Production 7 BOPD, 465 MCFPD, 8 BWPD. 12/70 Last month of production. 6/16/94 Set CIBP @ 3,550' w/2 sx Cmt. Well T&A'd. Cored - 3,745-63'																											

Current Prod 30 MOPD  
Est Queenland 1.5 BOPD

Queen 7 EVAS - YATES



Allocation OIL 100% QUEEN  
GAS 100% TRIPS - YATES

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 October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

'API Number 30-025-08791	'Pool Code 79240	'Pool Name JALMAT;TAN-Y-7R (GAS)
'Property Code 302433	'Property Name STATE A A/C 2	'Well Number 2
'OGRID No. 194849	'Operator Name PETROHAWK OPERATING COMPANY	'Elevation

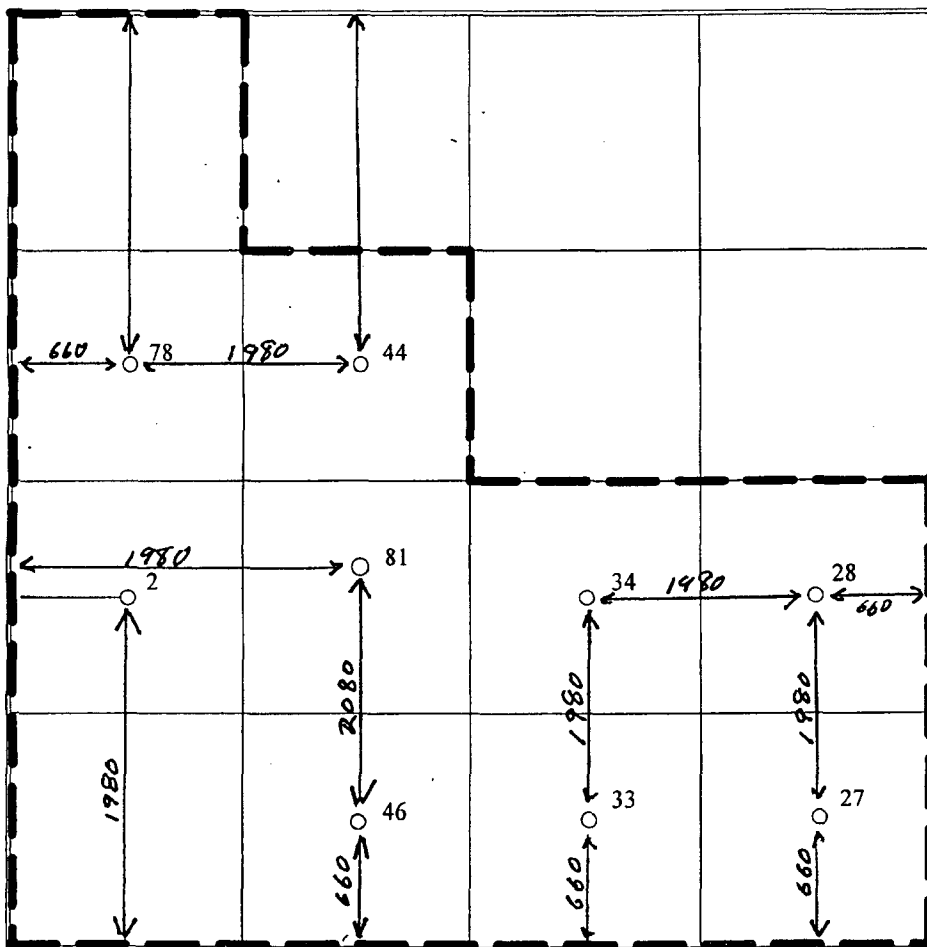
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	5	22S	36E		1980	SOUTH	660	WEST	LEA

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

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
'Dedicated Acres 440.5		'Joint or Infill		'Consolidation Code		'Order No. NSP-1636-C and SD-200804 (dated February 6, 2008)			

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.



<sup>17</sup> OPERATOR CERTIFICATION

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

Signature: *Eddie Seay* Date: 02/13/2008

Eddie Seay Agent

Printed Name

**RECEIVED**

<sup>18</sup> SURVEYOR CERTIFICATION

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.

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number

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 30-025-08791	<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 2
<sup>7</sup> OGRID No. 14591	<sup>8</sup> Operator Name Merit Energy Company	<sup>9</sup> Elevation 3602'

<sup>10</sup> Surface Location

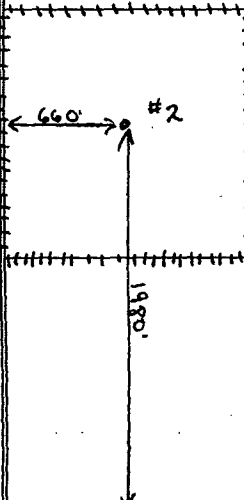

UL or lot no. L	Section 5	Township 22S	Range 36E	Lot Idn	Feet from the 1980	North/South line S	Feet from the 660	East/West line W	County Lea
--------------------	--------------	-----------------	--------------	---------	-----------------------	-----------------------	----------------------	---------------------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

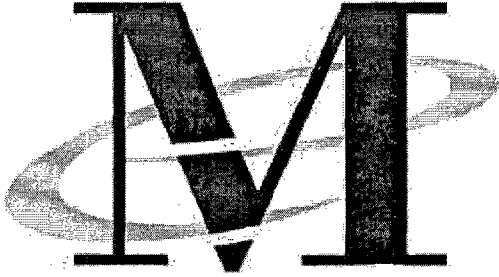
<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	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.

<sup>16</sup> 	<sup>17</sup> OPERATOR CERTIFICATION <i>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.</i>  Signature Date 05/24/2011 Matt Ogden Printed Name matt.ogden@meritenergy.com E-mail Address			
	<sup>18</sup> SURVEYOR CERTIFICATION <i>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.</i> Date of Survey Signature and Seal of Professional Surveyor: Certificate Number			



**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**

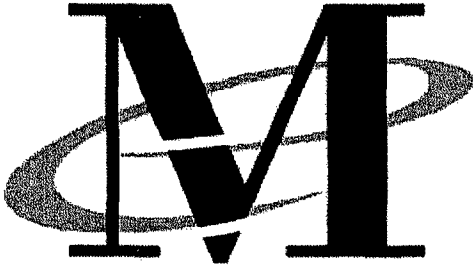
Merit Energy Company has requested approval to commingle the Queen formation (Langlie Mattix Pool) with the Tansill-Yates-Seven Rivers formation (Jalmat Pool).

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