

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>1113654478</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

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



Meritt 14371

State A AK2 #7

ADMINISTRATIVE APPLICATION CHECKLIST *30-025-18830*

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@energy.nm.gov
 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

7

Unit D - Sect. 8D - T22S - R36E

Lea

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 14591 Property Code. 24671 API No. 30-025-08830 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat - Tan Yates 7 Rivers		Langlie-Mattix - Queens
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3151'-3398'		3740'-3875'
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		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: 25mcf/1bopd	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 Gas 80 % 100 %	Oil Gas % %	Oil Gas 20 % 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 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

Jones, William V., EMNRD

From: Ogden, Matt [Matt.Ogden@meritenergy.com]
Sent: Thursday, May 26, 2011 12:54 PM
To: Jones, William V., EMNRD
Cc: Keener, Brett; Mull, Donna, EMNRD; Kautz, Paul, EMNRD; Gonzales, Elidio L, EMNRD
Subject: RE: Downhole Commingle Applications from Merit Energy Company

Mr. Jones,

I believe your records are incorrect and the #7 well is Jalmat Gas. The well does not produce any oil and only produces gas.

I will notify the district office of the same.

Please let me know if there is anything additional needed.

Thank you,

Matt Ogden
Regulatory Analyst/South Division
Merit Energy Company
972-628-1603 (Direct)
972-628-1903 (Fax)



From: Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]
Sent: Tuesday, May 24, 2011 6:00 PM
To: Ogden, Matt
Cc: Mull, Donna, EMNRD; Kautz, Paul, EMNRD; Gonzales, Elidio L, EMNRD
Subject: RE: Downhole Commingle Applications from Merit Energy Company

Matt:
Thanks for this – I have substituted the correct South Eunice Seven Rivers Queen Oil pool C-102's.

Our records show the #7 well is Jalmat Oil instead of Jalmat Gas. If this is not correct let me know and our district office.

If it truly is Jalmat Oil, then please email me another C-102 for that horizon showing the 40 acre spacing. The Jalmat rules say "oil" is spaced on 40 acres. If there is any nonstandard spacing unit permit for this #7 well allowing more than 40 acres let me know.

Regards,

Will Jones
New Mexico
Oil Conservation Division
[Images](#) [Contacts](#)

From: Ogden, Matt [<mailto:Matt.Ogden@meritenergy.com>]
Sent: Tuesday, May 24, 2011 2:55 PM
To: Jones, William V., EMNRD
Cc: Van Eaton, Matt; Keener, Brett
Subject: RE: Downhole Commingle Applications from Merit Energy Company

Mr. Jones,

My apologies for the delay in responding to you. I have attached the corrected C-102 forms for your review.

The originals are also being mailed to your office.

Thank you,

Matt Ogden
Regulatory Analyst/South Division
Merit Energy Company
972-628-1603 (Direct)
972-628-1903 (Fax)



From: Jones, William V., EMNRD [<mailto:William.V.Jones@state.nm.us>]
Sent: Tuesday, May 17, 2011 6:31 PM
To: Ogden, Matt; Van Eaton, Matt
Cc: Brooks, David K., EMNRD; Ezeanyim, Richard, EMNRD; Mull, Donna, EMNRD; Kautz, Paul, EMNRD
Subject: Downhole Commingle Applications from Merit Energy Company

Hello Matt and Matt:

We have several pending apps here from Merit for Sections 5, 8, 9 of T22S, R36E
These ask to downhole commingle the Jalmat Gas with the "Langlie Mattix-Queen"

According to my records, the three Sections involved are actually within the Jalmat Oil Pool or Jalmat Gas Pool for shallower than Queen production and in the South Eunice-Seven Rivers Queen Oil Pool for Queen production. It appears that all are in the Jalmat Gas except the State A A/C 2 #7 is producing from the Jalmat Oil – so the acreage plat for that well may be 40 acres instead of bigger – please send another C-102 or let me know why it is greater than 40 acres.

The South Eunice-Seven Rivers Queen Oil Pool should be spaced on 40 acres – if I am incorrect on that, let me know?

Please correct the C-102 plats for these applications to show the correct number of acres in each spacing unit and outline the acreage on the C-102.
If you have any documentation showing why these acreages are bigger than 40 acres for oil wells please send copies.

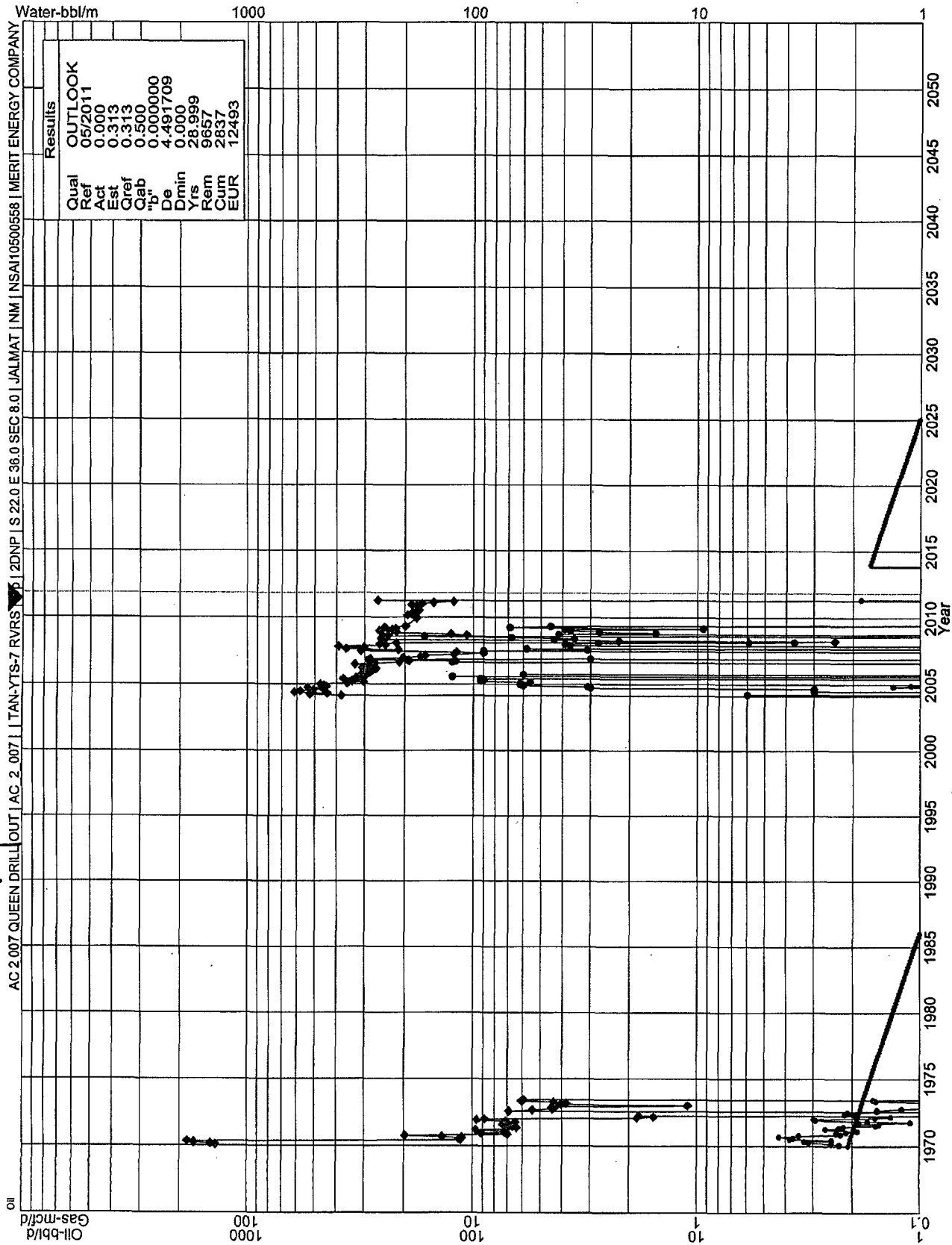
Frequently if acreage dedications vary, there is different royalty owners and therefore the interests would not be considered "identical".

Since the acreage dedications were not always correct on your applications, after the C-102's are corrected or checked, please re-check with your Landman as to whether the ownership is identical from the 7 rivers to the Queen.

Current Prod
 25 MCFD
 5 BBLD

Est Queen
 1.75 BBLD

QUEEN
 7000 - YATES



GAS 1000 - YATES

OIL 2090 QUEEN
 8000 - YATES

FORM	TOP																				
			STATE A A/C 2 #7 CURRENT WELLBORE DIAGRAM RAPTOR RESOURCES INC																		
			SU-T-R 8D-22S-36E API #: 30-025-08830 POOL: JALMAT; TAN-YATES-7 RVRS (Oil) CO, ST: LEA, NM LAND TYPE: STATE STATUS: ACTIVE ACREAGE 40.00 LATEST RIG WORKOVER: 10/2003 DIAGRAM REVISED: 1/29/2004 BY J. Nicholson																		
			LOG ELEVATION: GROUND ELEVATION: 3610'																		
			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Casing</th> <th style="width: 10%;">Tubing</th> </tr> </thead> <tbody> <tr> <td>Hole</td> <td></td> </tr> <tr> <td>Pipe</td> <td>12-1/2" 9-5/8" 7" 2-3/8"</td> </tr> <tr> <td>Weight</td> <td>50# 36# 24#</td> </tr> <tr> <td>Grade</td> <td></td> </tr> <tr> <td>Thread</td> <td></td> </tr> <tr> <td>Depth</td> <td>226' 1439 3750' 3372'</td> </tr> <tr> <td>Mud wt</td> <td></td> </tr> <tr> <td>Cmt</td> <td>200 sxs 600 sxs 200 sxs</td> </tr> </tbody> </table>	Casing	Tubing	Hole		Pipe	12-1/2" 9-5/8" 7" 2-3/8"	Weight	50# 36# 24#	Grade		Thread		Depth	226' 1439 3750' 3372'	Mud wt		Cmt	200 sxs 600 sxs 200 sxs
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Welex GR-Neutron	4/5/64																				
		<p>12-1/2" @ 226' w 200 sx Cmt</p> <p>9-5/8" @ 1,439" w/600 sxs</p> <p>Reported hole in casing 7773. Producing under a pkr. at that time. Casing tested OK 10/03.</p>																			
		<p>*FILE PICK</p> <p>TANSILL 3,075'</p> <p>YATES 3,250'</p> <p>7 RVRS 3,416'</p> <p>QUEEN NDE</p> <p>GB</p>																			
		<p>TAN-YATES-7 RVRS ZONE HISTORY</p> <p>Re-enter well 10-2-03 Set CIBP @ 3623'. 7" casing tested OK. Ran CBL TOC @ 2920'. Perf 3151-3398'. Acidized: Treat each perf w/PPI tool and total of 2000g 15% Ferchek acid Frac: w/ 1049 bbls gel foamed to 70 quality w/ 270T CO2 carrying 14,677# 20/40 and 160,550# 12/20 Brady Initial gas 20 to 25% CO2 Test: 11/6/03 1 BO, 63 MCFD, 6 BWPD, 6% CO2.</p>																			
		<p>OPPORTUNITY</p> <p>7R not completed. However, zone low on structure and Yates had modern, large frac.</p>																			
		<p>QUEEN ZONE HISTORY</p> <p>12/11/37 Spud. 1/20/38 Initial Completion Completed openhole - 3750'-3875'. Acid: 3000g on 1/20/38 Flowing initially @ 300 BOPD per '64 summary. Well dead on 2/64. Not on pump. Set 4-1/2" hydril flush joint liner 3695-3875'. 28 sxs cmt. Perf 3740 to 3864'. Spot acid on perfs. SOT w/20,000 gals oil & 40,000# sand & 1/40# adomite. Tested 4/22/64 18 BOPD, 18 BWPD, 554 MCFD.</p>																			
		<p>SELECT PERFS: 10/03 3151, 3198, 3206, 3217, 3222, 3232, 3242, 3254, 3260, 3283, 3288, 3295, 3310, 3316, 3324, 3336, 3355, 3366, 3382, 3398</p> <p>2-3/8" Tubing @ 3372'</p> <p>CIBP @ 3623' 10/6/2003</p> <p>SELECT PERFS: 3740, 3766, 3786, 3798, 3807, 3826, 3836, 3864 7" @ 3,750' w 200 sx Cm 1/38 5-1/2" Liner 3695-3875' 4/64</p>																			
		<p style="text-align: center;">TD 3875'</p>																			

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
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 08830		Pool Code 79240	Pool Name JALMAT TNSL YTS 7-RVRS (PRO-GAS)
Property Code 011793 24671	Property Name STATE A A/C 2		Well Number 7
OGRID No. 162791	Operator Name RAPTOR RESOURCES, INC.		Elevation

¹⁰ Surface Location

UL or lot no. D	Section 8	Township 22S	Range 36E	Lot Idn	Feet from the 660	North/South line N	Feet from the 600	East/West line W	County LEA
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¹¹ 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 160		Joint or Infill		Consolidation Code		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

¹⁶ 				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature RUSSELL DOUGLASS Printed Name PRESIDENT Title 6-3-99 Date	
				¹⁸ 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

¹ API Number 30-025-08830		² Pool Code 24130		³ Pool Name Eunice 7 Rivers Queen, South	
⁴ Property Code 302433		⁵ Property Name State A A/C 2			⁶ Well Number 7
⁷ OGRID No. 14591		⁸ Operator Name Merit Energy Company			⁹ Elevation 3610'

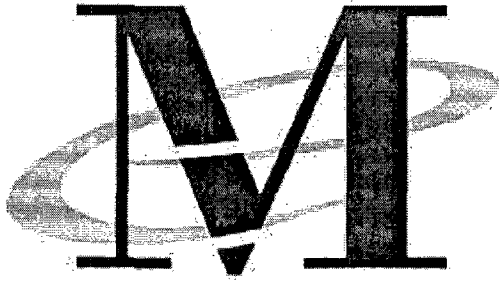
¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot 1 dn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	22S	36E		660	N	600	W	Lea

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot 1 dn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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>¹⁷ 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><i>[Signature]</i> 05/24/2011 Signature Date</p> <p>Matt Ogden Printed Name</p> <p>matt.ogden@meritenergy.com E-mail Address</p>
				<p>¹⁸ 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 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
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
Phone: 972-628-1557
Fax: 972-682-1857