

DATE IN: 3/16/11	SUSPENSE	ENGINEER: DKB	LOGGED IN: DHC	TYPE: DHC	APP NO: 1107542543
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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



*Merit Energy*  
 14591

*STATE A/C #25*

**ADMINISTRATIVE APPLICATION CHECKLIST** 30-025-08834

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.**

Lynne Moon  
 Print or Type Name

*Lynne Moon*  
 Signature

Regulatory Manager  
 Title

03/02/2011  
 Date

lynne.moon@meritenergy.com  
 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. Suite 500 Dallas, Texas 75240  
Operator Address  
State A A/C 2 25 A-08-22S-36E DHC 4262 Lea  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 14591 Property Code 24671 API No. 30-025-08834 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat Tansill Yates 7-Rivers 602		Eunice 7 Rivers Queen South 012
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3140' - 3608'		3711' - 3855'
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: 03/01/2011 Rates: 155 MCFD; 0 BWPD	Date: Rates:	Date: Rates: 3 BOPD; 50 MCFD; 4 BWP.
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 % 75 %	Oil Gas % %	Oil Gas 100 % 25 %

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.

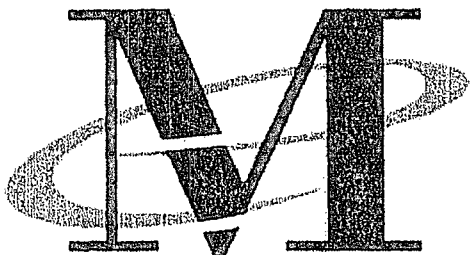
PRE-APPROVED POOLS

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 Lynne Moon TITLE Regulatory Manager DATE 03/04/2011  
TYPE OR PRINT NAME Lynne Moon TELEPHONE NO. ( ) (972)628-1569  
E-MAIL ADDRESS lynne.moon@meritenergy.com



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

Date: March 22, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
RE. Jalmat Field: 8 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).

Each of these wells that we are asking to commingle do 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

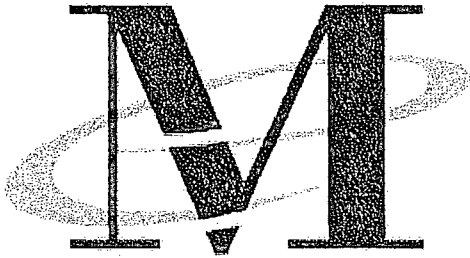
Sincerely,

Matt Van Eaton  
Associate Landman

[matt.vaneaton@meritenergy.com](mailto:matt.vaneaton@meritenergy.com)

Phone: 972-628-1557

Fax: 972-628-1885



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

Date: March 22, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
RE. **Jalmat Field: 8 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 8 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 NMOCDD 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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-08834	Pool Code 79240	Pool Name JALMAT:TANSILL-YATES-7RIVERS(GAS)
Property Code	Property Name STATE A A/C 2	Well Number 25
OGRID No. 194849	Operator Name PETROHAWK OPERATING COMPANY	Elevation 3596'

### Surface Location

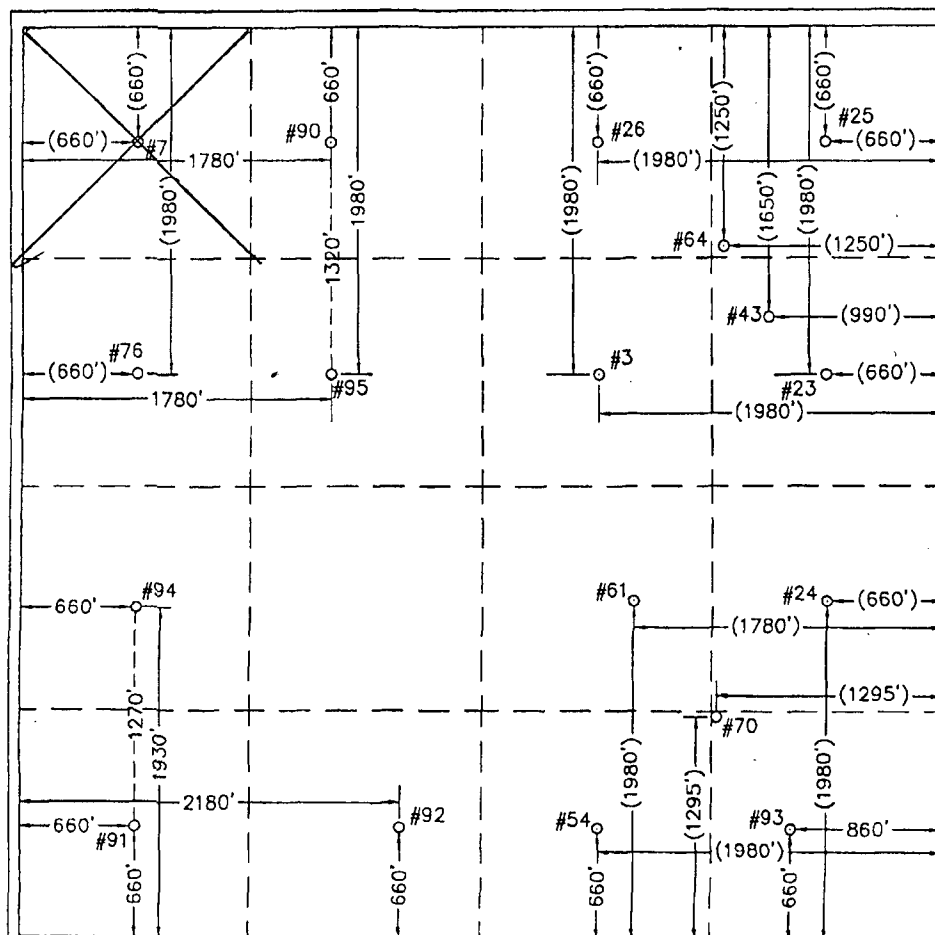
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	22 S	36 E		660	NORTH	660	EAST	LEA

## Bottom Hole Location If Different From Surface

[illegible]

Dedicated Acres 600	Joint or Infill INFILL	Consolidation Code	Order No. SD-06-13
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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



### OPERATOR CERTIFICATION

I hereby certify the the information  
contained herein is true and complete to the  
best of my knowledge and belief

*Nancy K. Bell*  
Signature

NANCY K. GATTI

Printed Name \_\_\_\_\_

REGULATORY MANAGER

Title 04/28/06

Date \_\_\_\_\_

### 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

June 9, 2005

Date Surveyed..... 1944

Signature & Seal of Professional Surveyor

*Handwritten signature*

W.O. Num. 2005-0469

Certificate No. MACON McDONALD 12185

WELL LOCATIONS SHOWN HEREON WITH DIMENSIONS IN PARENTHESIS WERE PROVIDED BY MISSION RESOURCES CORPORATION AND ARE NOT FIELD SURVEYED.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
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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 30-025-08834		<sup>2</sup> Pool Code 24130		<sup>3</sup> Pool Name Eunice 7 Rivers Queen South	
<sup>4</sup> Property Code 24671		<sup>5</sup> Property Name State A A/C 2			<sup>6</sup> Well Number 25
<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.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	08	22S	36E		660	North	660	East	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	<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.

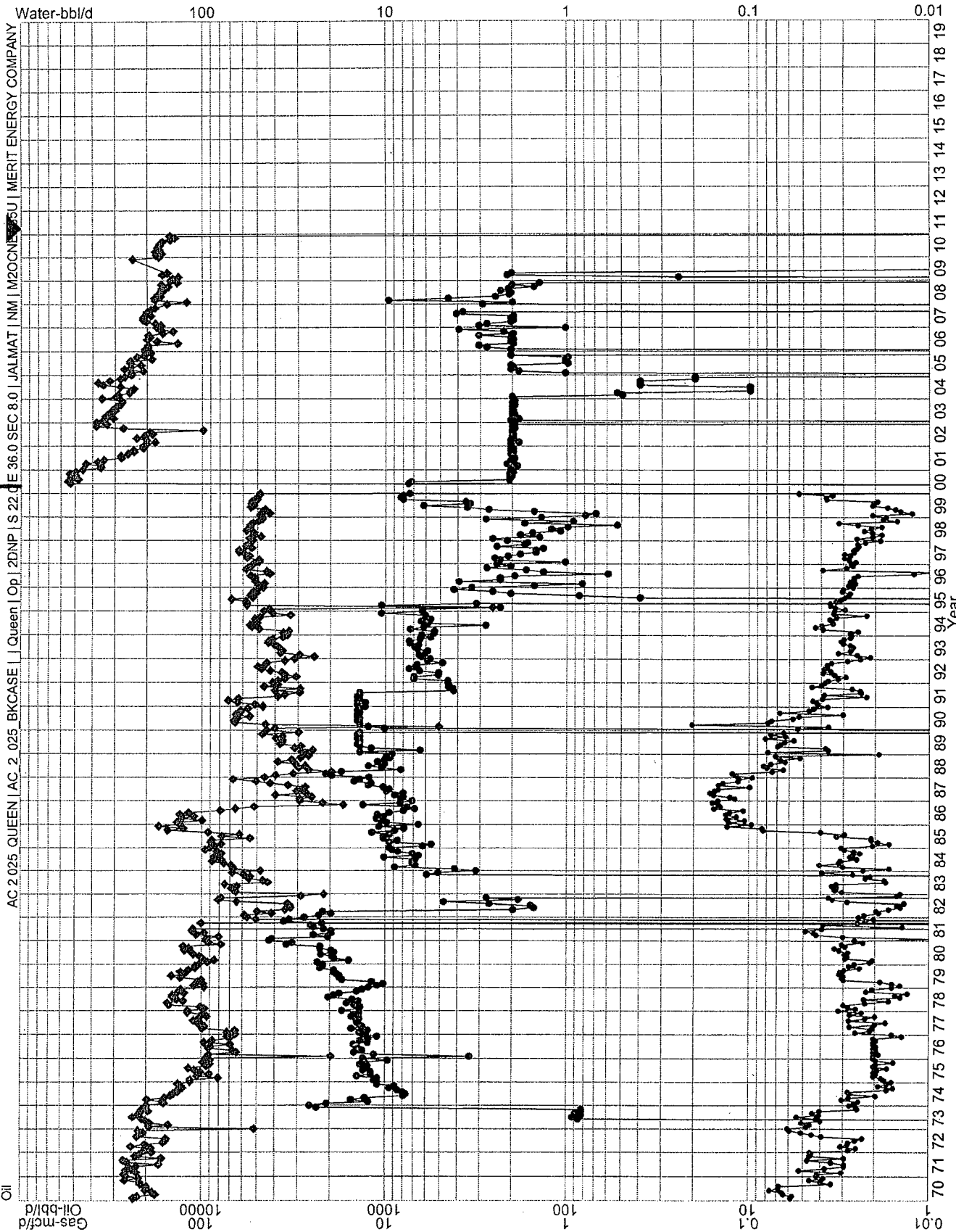
<div style="position: relative; height: 400px;"> <div style="position: absolute; top: 100px; left: 100px; transform: rotate(-90deg);">660'</div> <div style="position: absolute; top: 100px; left: 150px;">660'</div> <div style="position: absolute; top: 100px; left: 180px;">#25</div> </div>	<sup>17</sup> OPERATOR CERTIFICATION	
	<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>Lynne Moon</i> 03/04/2011 Signature Date</p> <p>Lynne Moon Printed Name</p> <p>lynne.moon@meritenergy.com E-mail Address</p>	
	<sup>18</sup> SURVEYOR CERTIFICATION	
	<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>	

Act 2 - 25

QUEEN

~~20000 20 MCFD 10 BBL/D~~  
2.5 BWD 50 MCFD 4 BWD

YATES / 7 RIVERS  
155 MCFD 0 BWD



Allocation: OIL 100% QUEEN

GAS 25% QUEEN  
75% YATES / 7 RIVERS

Lease & Well No. State A A/C 2 # 25  
Field Name Jalmat  
Location 1980' FNL 660' FEL; Unit M, Sec. 09, T22S, R36E

Status Active  
County & State Lea County, NM  
API No. 30-025-08834  
Pool Name Jalmat: Tansill Yates Seven Rivers

## Well Information

Spud: 1943 Ground Elevation:            D.F. Elevation: 3,603'  
Completed:            KB Elevation:            Total Depth:           

## Pipe Data

Surface						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
	456 ft	10"	40.0#			
Production						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
	3701 ft	5-1/2"	17#			

Downhole Tubulars (Top to Bttm):	
113 jts 2 3/8" tbg; SN, Notched sub; EOT 3619' (2003 tubing)	
1.5" x 22' PR, ponys, 3-7/8", 142-3/4" / 2" x 1.5" x 12'	

## Well History

9/15/1955 Frac Open Hole w/20,000 gals oil, 20,000# sand / IP:50 BOPD  
1965 install PU  
4/29/2000 Set 5 1/2" RBP @ 3660 ft / Perf Yates-7Rivers: 3140,52,58,80,84,89,3232,38,44,50,58,66,98,3304,16,3446,69  
92,96,3500,06,13,24,32,38,42,46,64,68,72,84,88,96,3608 / Acidize each perf w/PPI tool  
Frac w/46000 40# gel, 65% CO2 258 tons, 15,000# 20/40 175000# 12/20 in 8 stages; ISIP: 1242  
IP: 500 MCFD  
9/1/2002 RIH w/pkr; produce 60 MCFD; Set RBP @ 3062' / Cement Squeeze csg leaks from 575-900 / DO and Remove RBP  
9/11/2002 120 MCFD w/56 BWPD

## Procedures

Collect Oil & Wtr Samples Submit to X-Chem / MIRU W/O Rig. RU H2S Equipment - Pre-job sfty mtg / Disc Pwr supply Lock/out Tag/out  
ND HH; RU Rod Equip; Unseat Pump and TOH w/ Rods / ND WH, NU BOPs and Test / Spot 500 bbl frac tnk & fill w/2% KCL  
Kill well w/2% KCL / Rack Back Tubing; NU Latch tool, Tally Tbg in Hole / RU Air Foam Unit w/Mist Pump & Gas Buster tank  
RU Flowlines from each csg port to gas buster tank Eliminate excessive bends or 90's - sand will cut out valves and flowlines  
Circ well w/Air & Mist Pump to 3660' / Tag RBP / L/O RBP and TOH / LD RBP / LD Latch Tool / TIH Open Ended  
RIH to 3855 ft / CO Fill; Cir well with Air for minimum 2 hrs / Collect samples (sand, paraffin, scale) CK returns for O&G Kill tbg w/2% KCL  
Rack back tubing / NU BP, MJ, Perf Sub; Seat Nipple, and RIH w/ TBG w/TAC to 3650 ft +/-  
Land Tbg @ 3650' / ND BOPs NU Tubing Head / RU Rod Equipment  
PU 12' GA, 40 Ring PA Plunger Pump, On/Off Tool, RIH w/rods, N  
Clean Location; RDMO W/O Rig  
Production will be commingled and allocated based on subtraction method  
Yates / 7 Rivers: Avg Production: 155 MCFD, 3 BWPD  
Queen Projected Production: 2.5 BOPD, 50 MCFD, 04 BWPD

