

DATE IN 3.23.12	SUSPENSE	ENGINEER WVT	LOGGED IN 3.23.12	TYPE DHC 4548	APP NO. 1208350834
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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



State A AC 1 #57  
 30-025-09.344

**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 \_\_\_\_\_

B-13-235-36E  
 RECEIVED 030  
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- [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: Matt Ogden      Signature: [Handwritten Signature]      Title: Regulatory Analyst      Date: 2/22/12  
 e-mail Address: mat.ogden@newtenergy.com

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised August 1, 2011

District II  
811 S. First St., Artesia, NM 88210

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

District III  
1000 Rio Brazos Road, Aztec, NM 87410

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 Address

State A A/C 1 Lease 57 Well No. B-13-23S-36E Unit Letter-Section-Township-Range Lea County

OGRID No. 14591 Property Code API No. 30-025-09344 Lease Type: Federal  State  Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat Tansil Yates 7-Rivers <i>LM</i>		<del>Emice 7 Rivers Queen-80</del>
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2808'-3392'		3454'-3624'
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: 02/20/2012 Rates: 0.5BO; 35MCF	Date: Rates:	Date: Rates: 1BO; 15 MCF
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 35 % Gas 70 %	Oil % Gas %	Oil 65 % Gas 30 %

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:

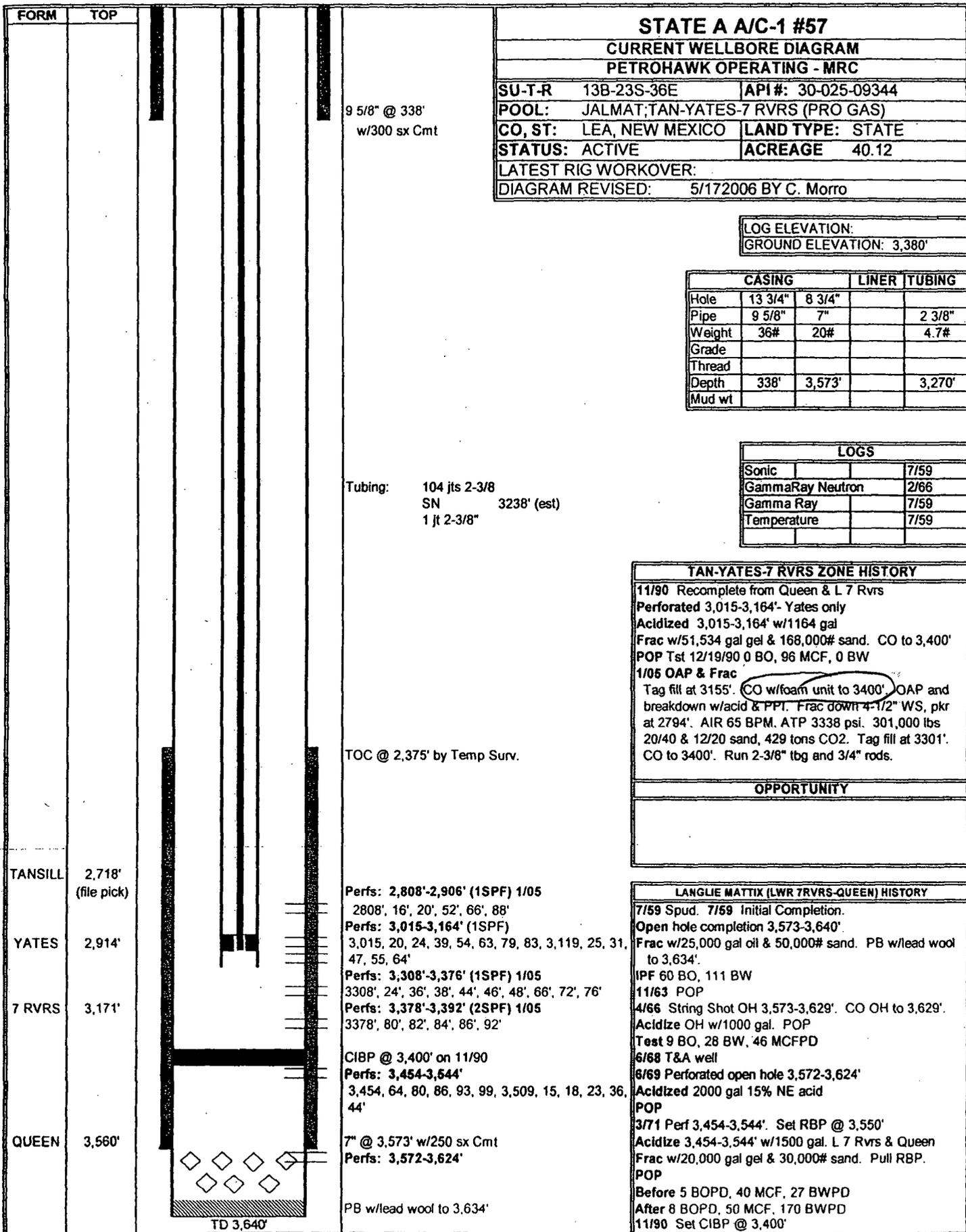
- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE *[Signature]* TITLE Regulatory Analyst DATE 02/22/2012

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

E-MAIL ADDRESS matt.ogden@meritenergy.com



**STATE A A/C-1 #57**

**CURRENT WELLBORE DIAGRAM  
PETROHAWK OPERATING - MRC**

SU-T-R	13B-23S-36E	API #:	30-025-09344
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: 5/172006 BY C. Morro			

LOG ELEVATION:
GROUND ELEVATION: 3,380'

	CASING	LINER	TUBING
Hole	13 3/4"	8 3/4"	
Pipe	9 5/8"	7"	2 3/8"
Weight	36#	20#	4.7#
Grade			
Thread			
Depth	338'	3,573'	3,270'
Mud wt			

LOGS		
Sonic		7/59
GammaRay Neutron		2/66
Gamma Ray		7/59
Temperature		7/59

9 5/8" @ 338'  
w/300 sx Cmt

Tubing: 104 jts 2-3/8  
SN 3238' (est)  
1 jt 2-3/8"

TOC @ 2,375' by Temp Surv.

**TAN-YATES-7 RVRS ZONE HISTORY**

11/90 Recomplete from Queen & L 7 Rvrs  
Perforated 3,015-3,164'- Yates only  
Acidized 3,015-3,164' w/1164 gal  
Frac w/51,534 gal gel & 168,000# sand. CO to 3,400'  
POP Tst 12/19/90 0 BO, 96 MCF, 0 BW  
1/05 OAP & Frac  
Tag fill at 3155'. CO w/foam unit to 3400'. OAP and  
breakdown w/acid & PPI. Frac down 4-1/2" WS, pkr  
at 2794'. AIR 65 BPM. ATP 3338 psi. 301,000 lbs  
20/40 & 12/20 sand, 429 tons CO2. Tag fill at 3301'.  
CO to 3400'. Run 2-3/8" tbg and 3/4" rods.

**OPPORTUNITY**

**LANGLIE MATTIX (LWR 7RVRS-QUEEN) HISTORY**

7/59 Spud. 7/59 Initial Completion.  
Open hole completion 3,573-3,640'.  
Frac w/25,000 gal oil & 50,000# sand. PB w/lead wool  
to 3,634'.  
IPF 60 BO, 111 BW  
11/63 POP  
4/66 String Shot OH 3,573-3,629'. CO OH to 3,629'.  
Acidize OH w/1000 gal. POP  
Test 9 BO, 28 BW, 46 MCFPD  
6/68 T&A well  
6/69 Perforated open hole 3,572-3,624'  
Acidized 2000 gal 15% NE acid  
POP  
3/71 Perf 3,454-3,544'. Set RBP @ 3,550'  
Acidize 3,454-3,544' w/1500 gal. L 7 Rvrs & Queen  
Frac w/20,000 gal gel & 30,000# sand. Pull RBP.  
POP  
Before 5 BOPD, 40 MCF, 27 BWPD  
After 8 BOPD, 50 MCF, 170 BWPD  
1/90 Set CIBP @ 3,400'

TANSILL 2,718'  
(file pick)

YATES 2,914'

7 RVRS 3,171'

QUEEN 3,560'

Perfs: 2,808'-2,906' (1SPF) 1/05

2808', 16', 20', 52', 66', 88'

Perfs: 3,015-3,164' (1SPF)

3,015, 20, 24, 39, 54, 63, 79, 83, 3,119, 25, 31,  
47, 55, 64'

Perfs: 3,308'-3,376' (1SPF) 1/05

3308', 24', 36', 38', 44', 46', 48', 66', 72', 76'

Perfs: 3,378'-3,392' (2SPF) 1/05

3378', 80', 82', 84', 86', 92'

CIBP @ 3,400' on 11/90

Perfs: 3,454-3,544'

3,454, 64, 80, 86, 93, 99, 3,509, 15, 18, 23, 36,  
44'

7" @ 3,573' w/250 sx Cmt

Perfs: 3,572-3,624'

PB w/lead wool to 3,634'

TD 3,640'

Well File

Current

OCD File

Queen ← → Rivers-Yates

35 MCFD  
1/2 BOPD

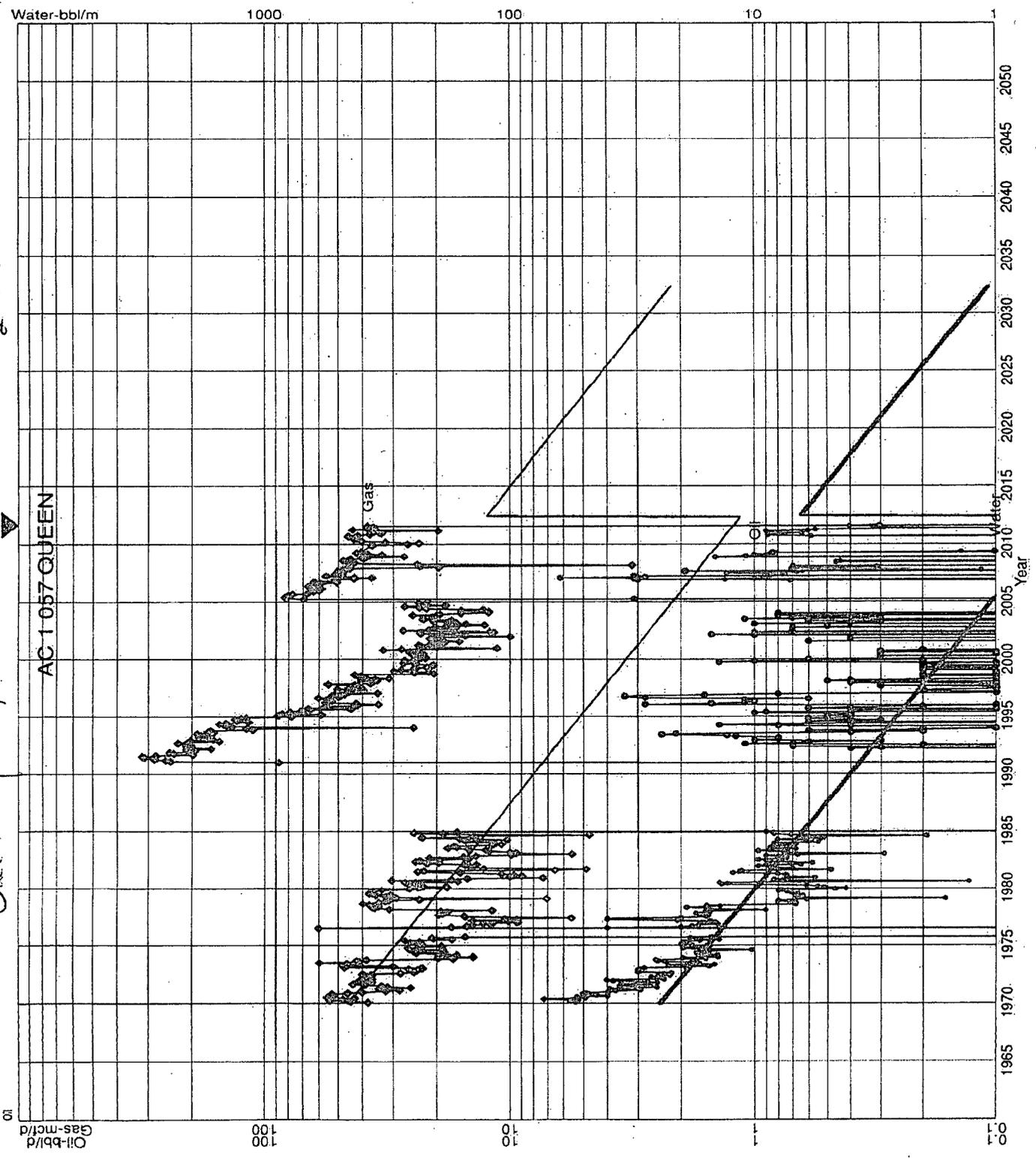
15 MCFD  
1 BOPD

Oil-bbl/d	OUTLOOK12	Gas-mct/d	OUTLOOK12	Water-bbl/m	OUTLOOK12
Qual=	6/2012	Qual=	6/2012	Ref=	6/2012
Ref=	9748	Ref=	617334	Cum=	951
Cum=	2183	Cum=	43026	Ref=	
Rem=	11931	Rem=	660361	Ref=	
EUR=	19.997	EUR=	19.997	Ref=	
Yrs=	0.6	Yrs=	12.4	Ref=	
Qref=	8.609375	Qref=	8.336283	Ref=	
De=	0.000	De=	0.000	Ref=	
Dmin=	0.000000	Dmin=	0.000000	Ref=	
b=	0.1	b=	2.2	Ref=	
Qab=		Qab=		Ref=	

Allocation

30% Queen  
Gas: 70% Rivers-Yates

Oil: 65% Queen  
35% Rivers-Yates



AC-1057 QUEEN

Gas

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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 August 1, 2011  
Submit one copy to appropriate  
District Office  
 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-09344		<sup>2</sup> Pool Code 24130		<sup>3</sup> Pool Name Eunice 7 Rivers Queen South	
<sup>4</sup> Property Code		<sup>5</sup> Property Name State A A/C 1			<sup>6</sup> Well Number 57
<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
B	13	22S	36E		660	North	1980	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 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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><sup>17</sup> OPERATOR CERTIFICATION</p> <p><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></p> <p>Signature:  Date: 02/22/2012</p> <p>Printed Name: Matt Ogden</p> <p>E-mail Address: matt.ogden@meritenergy.com</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p><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></p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p>
	<p>Certificate Number</p>

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

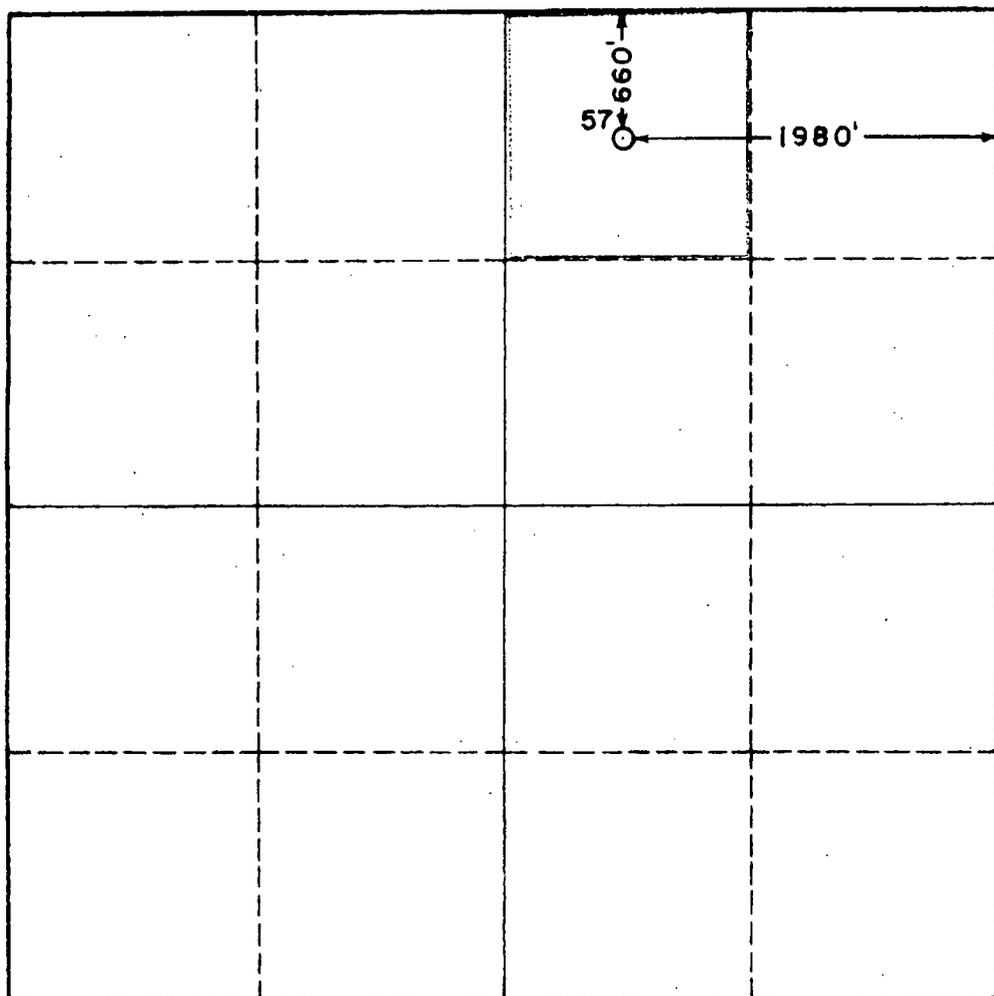
**SECTION A**

Operator <b>Texas Pacific Coal &amp; Oil Co.</b>		Lease <b>State "A" Account No. 1</b>		Well No. <b>57</b>
Unit Letter <b>B</b>	Section <b>13</b>	Township <b>23</b>	Range <b>36</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>East</b> line				
Ground Level Elev. <b>3380.6</b>	Producing Formation <b>7-Rivers</b>		Pool <b>Langlie-Mattix</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**



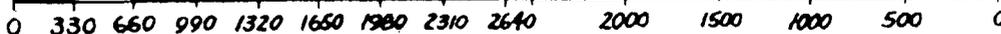
**CERTIFICATION**

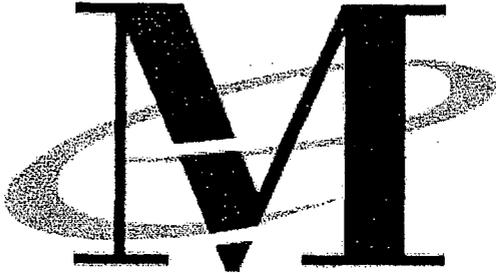
I hereby certify that the information in SECTION A above is true and complete to the best of my knowledge and belief.

Name	<i>[Signature]</i>
Position	<b>Manager of Production</b>
Company	<b>TEXAS PACIFIC COAL &amp; OIL CO.</b>
Date	<b>June 8, 1959</b>

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	<b>JUNE 3, 1959</b>
Registered Professional Engineer and/or Land Surveyor,	<b>JOHN W. WEST</b>
<i>[Signature]</i>	
Certificate No.	<b>N. M. - P. E. &amp; L. S. NO. 678</b>





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

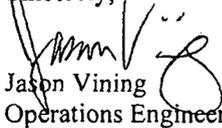
Date: February 23, 2012  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
RE: **Jalmat Field: 13 Commingling Applications  
Lea County, New Mexico**

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

All of these wells are located in Lea County, C Sec 10, B-D-E-G-M Sec 13, G Sec 15, E- Sec 23, I-K-L-O- Sec 24 T23S R36E and D Sec 9 T22S R36E. Commingling the Jalmat Pool with the Langlie Mattix Pool is in the interest of both royalty owners and the conservation, and it will extend the life of each well and optimize recovery from both Pools. The 13 well's commercial value will be extended 20 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,



Jason Vining  
Operations Engineer  
jason.vining@meritenergy.com  
Phone: 972-628-1606  
Fax: 972-682-1906



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

Date: February 23, 2012  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
RE. **Jalmat Field: AC-1 #50,52,54,57,60,66,71,72,74,80,81, 107 & AC-2 #29-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