

|                    |          |                 |                      |                     |                      |
|--------------------|----------|-----------------|----------------------|---------------------|----------------------|
| DATE IN<br>7/11/11 | SUSPENSE | ENGINEER<br>WJS | LOGGED IN<br>7/19/11 | TYPE<br>DHC<br>4430 | APP NO<br>1120058943 |
|--------------------|----------|-----------------|----------------------|---------------------|----------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

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



## 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.

Matt Ogden \_\_\_\_\_ Regulatory Analyst \_\_\_\_\_ 7/11/11 \_\_\_\_\_  
 Print or Type Name Signature Title 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  
 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**

*DAC-4430*

Merit Energy Company 13727 Noel Rd Ste 500 Dallas, TX 75240

Operator Address

State A A/C 1 82 B-15-23S-36E Lea

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

OGRID No. 14591 Property Code API No. 30-025-10723 Lease Type:  Federal  State  Fee

| DATA ELEMENT  | UPPER ZONE                            | INTERMEDIATE ZONE | LOWER ZONE                  |
|---|---------------------------------------|-------------------|-----------------------------|
| Pool Name   | Jalmat Tansil Yates 7-Rivers          |                   | Eunice 7 Rivers Queen South |
| Pool Code   | 79240                                 |                   | 24130                       |
| Top and Bottom of Pay Section<br>(Perforated or Open-Hole Interval)   | 3002'-3112'                           |                   | 3602'-3634'                 |
| Method of Production<br>(Flowing or Artificial Lift)  | Artificial Lift                       |                   | Artificial Lift             |
| Bottomhole Pressure<br>(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<br>(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<br>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data) | Date: 07/10/2011<br>Rates: 40mcf/0 BO | Date:<br>Rates:   | Date:<br>Rates: 10mcf/2 BO  |
| Fixed Allocation Percentage<br>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required)                 | Oil 0 % Gas 80 %                      | Oil % Gas %       | Oil 100 % Gas 20 %          |

**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 *Matt Ogden* TITLE Regulatory Analyst DATE 07/11/2011

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

E-MAIL ADDRESS matt.ogden@meritenergy.com

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

District II  
PO Drawer DD, Artesia, NM 88211-0719

District III  
1000 Rio Brazos Rd. Aztec, NM 87410

District IV  
PO Box 2088, Santa Fe. NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Revised February 21, 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<br>30-025- 10723 |  | 2 Pool Code<br>79240                |  | 3 Pool Name<br>Jalmat: Tan-Yates-7 rrvs (Pro Gas) |                     |
| 4 Property Code<br>24669    |  | 5 Property Name<br>State "A" A/C 1  |  |   | 6 Well Number<br>82 |
| 7 OGRID No.<br>162791       |  | 8 Operator Name<br>Raptor Resources |  |   | 9 Elevation         |

10 Surface Location

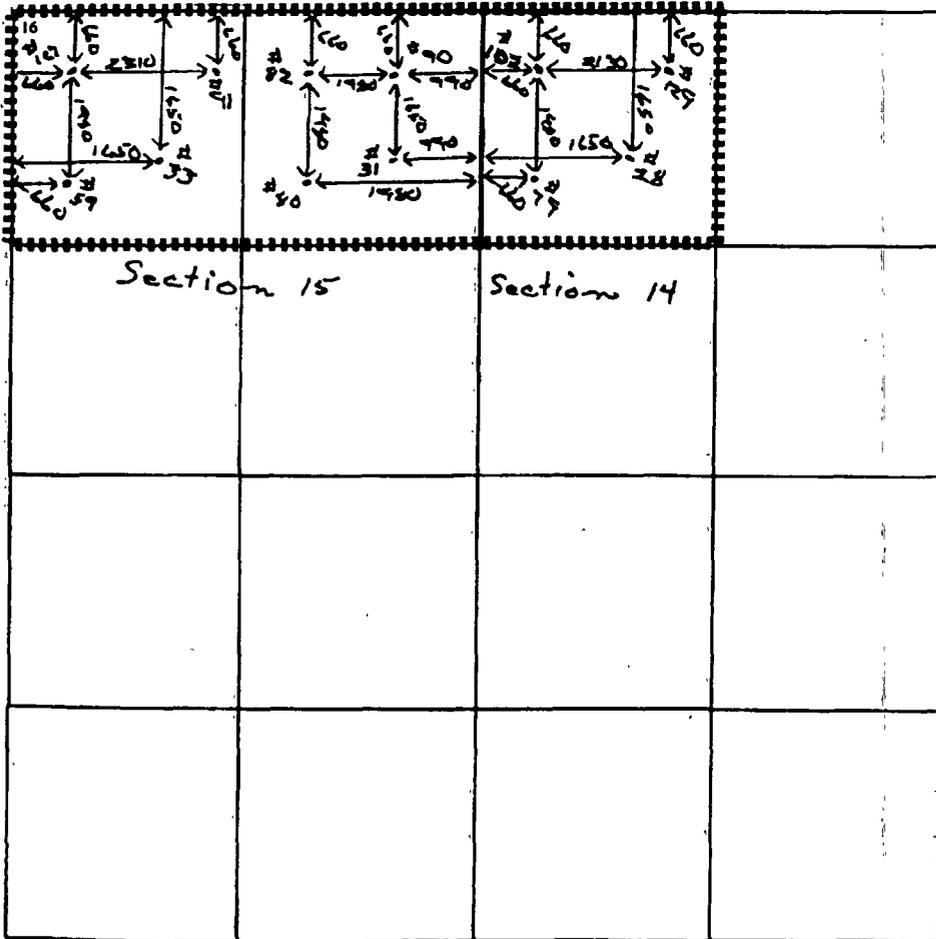
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| B             | 15      | 23S      | 36E   |         | 660           | North            | 1980          | East           | Lea    |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
|               |         |          |       |         |               |                  |               |                |        |

|                           |                   |                       |              |
|---------------------------|-------------------|-----------------------|--------------|
| 12 Dedicated Acres<br>480 | 13 Joint or Infil | 14 Consolidation Code | 15 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



17 OPERATOR CERTIFICATION

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

*Bill R. Keathly*  
Signature

Bill R. Keathly  
Printed Name

Regulatory Agent  
Title

5-8-00  
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**

|   |  |  |  |   |                                |
|---|--|--|--|---|--------------------------------|
| <sup>1</sup> API Number<br>30-025-10723 |  | <sup>2</sup> Pool Code<br>24130                    |  | <sup>3</sup> Pool Name<br>Eunice 7 Rivers Queen South |                                |
| <sup>4</sup> Property Code              |  | <sup>5</sup> Property Name<br>State A A/C 1        |  |   | <sup>6</sup> Well Number<br>82 |
| <sup>7</sup> OGRID No.<br>14591         |  | <sup>8</sup> Operator Name<br>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             | 15      | 23S      | 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<br>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>16</p>   | <p><b><sup>17</sup> OPERATOR CERTIFICATION</b></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>Signature<br/>Matt Ogden</p>   | <p>Date<br/>07/11/2011</p> |
|   | <p>Printed Name<br/>E-mail Address<br/>matt.ogden@meritenergy.com</p>   |                            |
| <p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></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>  |

**STATE A A/C-1 #82**  
**CURRENT WELLBORE DIAGRAM**  
**MISSION RESOURCES**

|                                   |                                    |            |              |
|-----------------------------------|------------------------------------|------------|--------------|
| SU-T-R                            | 15B-23S-36E                        | API #:     | 30-025-10723 |
| POOL:                             | JALMAT; TAN-YATES-7 RVRS (PRO GAS) |            |              |
| CO, ST:                           | LEA, NEW MEXICO                    | LAND TYPE: | STATE        |
| STATUS:                           | ACTIVE                             | ACREAGE    |              |
| LATEST RIG WORKOVER:              |                                    |            |              |
| DIAGRAM REVISED: 5/17/2004 BY JAN |                                    |            |              |

9 5/8" @ 329'  
w/300 sx Cmt

Cored 3,584-3,635'

LOG ELEVATION: 3,411' KB  
GROUND ELEVATION: 3,399'

|        | CASING | LINER  | TUBING |
|--------|--------|--------|--------|
| Hole   | 12"    | 8-3/4" |        |
| Pipe   | 9 5/8" | 7"     | 2 7/8" |
| Weight | 32#    | 20#    |        |
| Grade  |        |        |        |
| Thread |        |        |        |
| Depth  | 329'   | 3,602' | 3,176' |
| Mud wt |        |        |        |

| LOGS           |  |       |
|----------------|--|-------|
| Sonic          |  | 2/60  |
| Temp Surv      |  | 2/60  |
| GR-CCL-Neutron |  | 11/89 |

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

11/89 Recomplete from Queen.  
**Perforated 3,002-3,112'**  
**Acidized w/1000 gal 15%**  
**Frac w/52,000 gal gel & 103,940# 12/20 sand POP**

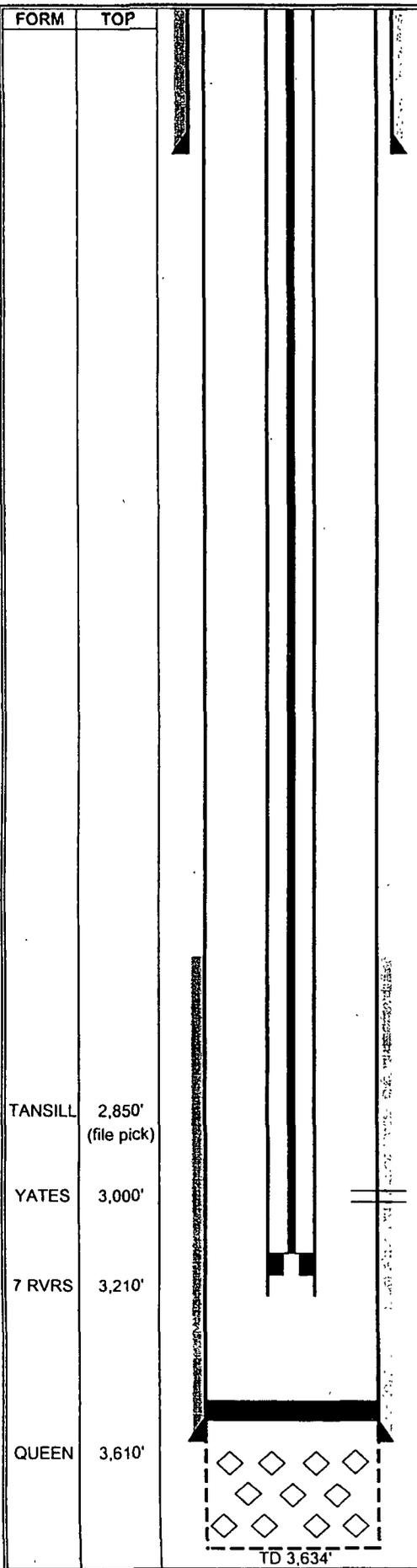
Tested 618 MCFD, 8 BWPD

**OPPORTUNITY**

No 7R completion. Review needed.

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

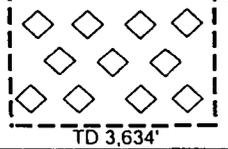
Spud 1/31/60 Initial Completion. 2/16/60  
**Open hole completion 3,602-3,634'**. Sand jet @ 3,612'  
**Frac SOT w/10,000 gal oil & 10,000# sand**  
**Swab Tstd 103 BO & 17 BWPD POP**  
 6/68 T&A well.  
 11/89 Set CIBP @ 3,560'.



TOC @ 2,080' by Temp Surv.

**PERFS 3,002-3,112' on 11/89**  
 3002, 3006, 3016, 3024, 3046, 3051  
 3062, 3064, 3088, 3094, 3106, 3112

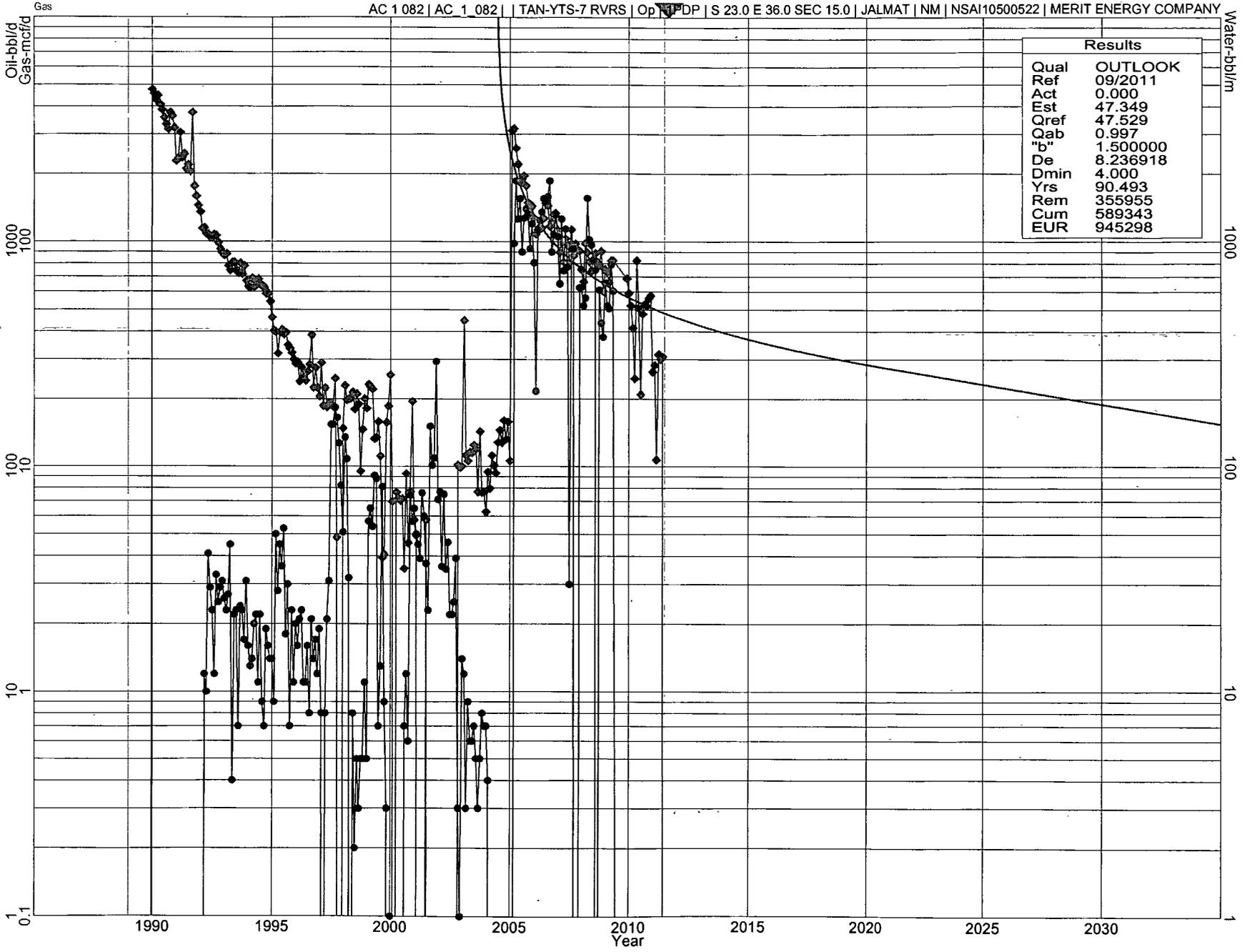
CIBP @ 3,560' on 11/89  
7" @ 3,602' w/250 sx Cmt



Allocation  
OIL 100% QUAD 2BUPD

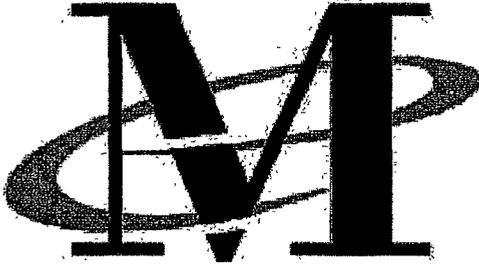
Gas 20% QUAD 10MCFD  
80% YTS-TRRS \$0 Metal

AC 1 082 | AC 1 082 | TAN-YTS-7 RVRS | Op DP | S 23.0 E 36.0 SEC 15.0 | JALMAT | NM | NSAI10500522 | MERIT ENERGY COMPANY



| Results |          |
|---------|----------|
| Qual    | OUTLOOK  |
| Ref     | 09/2011  |
| Act     | 0.000    |
| Est     | 47.349   |
| Qref    | 47.529   |
| Qab     | 0.997    |
| "b"     | 1.500000 |
| De      | 8.236918 |
| Dmin    | 4.000    |
| Yrs     | 90.493   |
| Rem     | 355955   |
| Cum     | 589343   |
| EUR     | 945298   |

Water-bbl/m



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

Date: July 13, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
RE. **Jalmat Field: AAC-1 #82 -Queen Commingling  
Lea County, New Mexico**

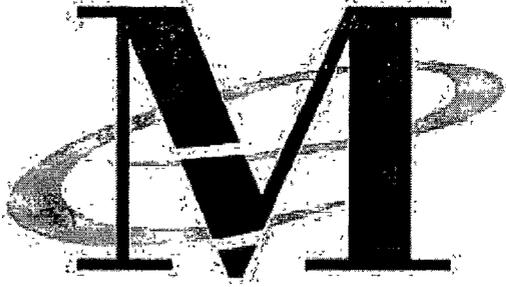
Merit Energy Company has requested approval to commingle the Yates formation ( Jalmat Pool) with the Queen formation (Langlie-Mattix) .

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



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

Date: July 11, 2011  
To: New Mexico Oil Conservation Division  
Attention: William V Jones P.E.  
**RE. Jalmat Field: 3 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 G 15/23 T22S R36E and B 15 T23S 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 3 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