

DATE IN <u>3.16.11</u>	SUSPENSE	ENGINEER <u>DICB</u>	LOGGED IN <u>3.16.11</u>	TYPE <u>DHC</u>	APP NO. <u>1107543482</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



*Merit En. 14591*

RECEIVED OGD

*State AAK #3*

## 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.

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 #3 G-08-22S-36E Lea  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 14591 Property Code 302433 API No. 30-025-08829 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat Tansill Yates 7-Rivers	Ar	Eunice 7 Rivers Queen South
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3162' - 3622'		3690' - 3880'
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	Shut-In		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:  Rates: 10 MCFD, 10 BWPD	Date:  Rates:	Date:  Rates: 4 BOPD; 10 MCFD; 10 BWPD
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 % 50 %	Oil Gas % %	Oil Gas 100 % 50 %

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

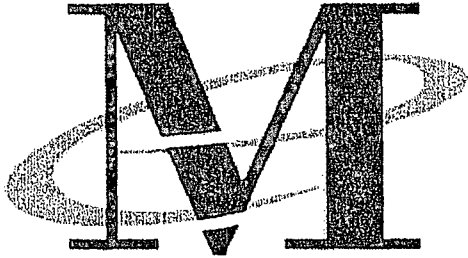
If application is to establish Pre-Approved Pools, the following additional information will be required:  
List of other orders approving downhole commingling within the proposed Pre-Approved Pools  
List of all operators within the proposed Pre-Approved Pools  
Proof that all operators within the proposed 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 03/02/2011

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

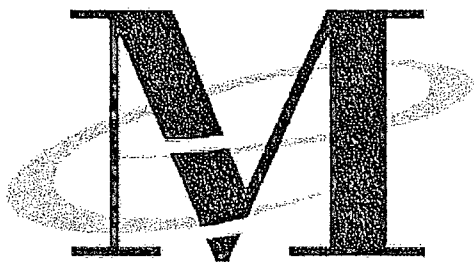
Merit Energy Company has requested approval to commingle the Queen formation (Langlie Mattix Pool) with the Tansill-Yates-Seven Rivers formation (Jalmat Pool).

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 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

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 30-025-08829		<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 3
<sup>7</sup> OGRID No. 14591		<sup>8</sup> Operator Name Merit Energy Company			<sup>9</sup> Elevation 3596'

<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
G	08	22S	36E		1980	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.

<sup>16</sup> 	<sup>17</sup> <b>OPERATOR CERTIFICATION</b> 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 	Date 03/02/2011
	Printed Name Lynne Moon	
	E-mail Address lynne.moon@meritenergy.com	
<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> 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 II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Artec, NM 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87506

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

## EXHIBIT 20

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-08829	Pool Code 79240	Pool Name JALMAT:TANSILL-YATES-7RIVERS(GAS)
Property Code 302433	Property Name STATE A A/C 2	Well Number 3
OGRID No. 194849	Operator Name PETROHAWK OPERATING COMPANY	Elevation 3596'

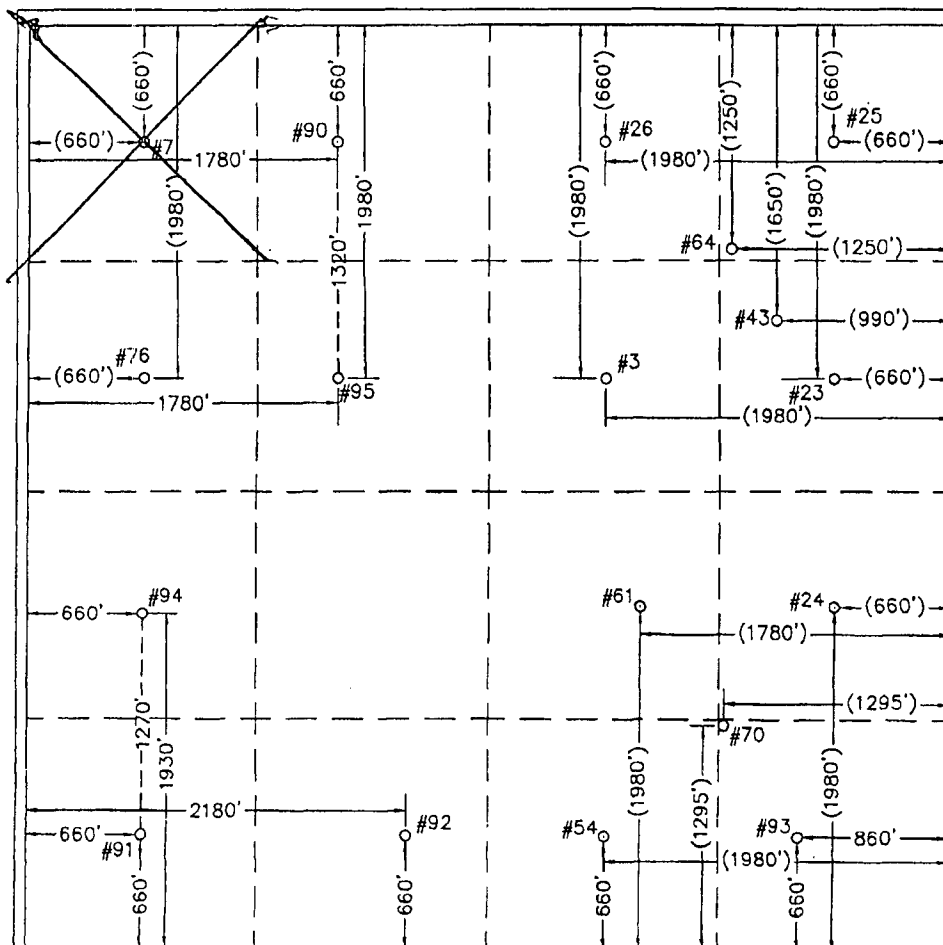
### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	8	22 S	36 E		1980	NORTH	1980	EAST	LEA

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

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. Patti  
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 \_\_\_\_\_  
Signature & Seal of \_\_\_\_\_ LVA

*M. J. [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.

Acct 2 - #3

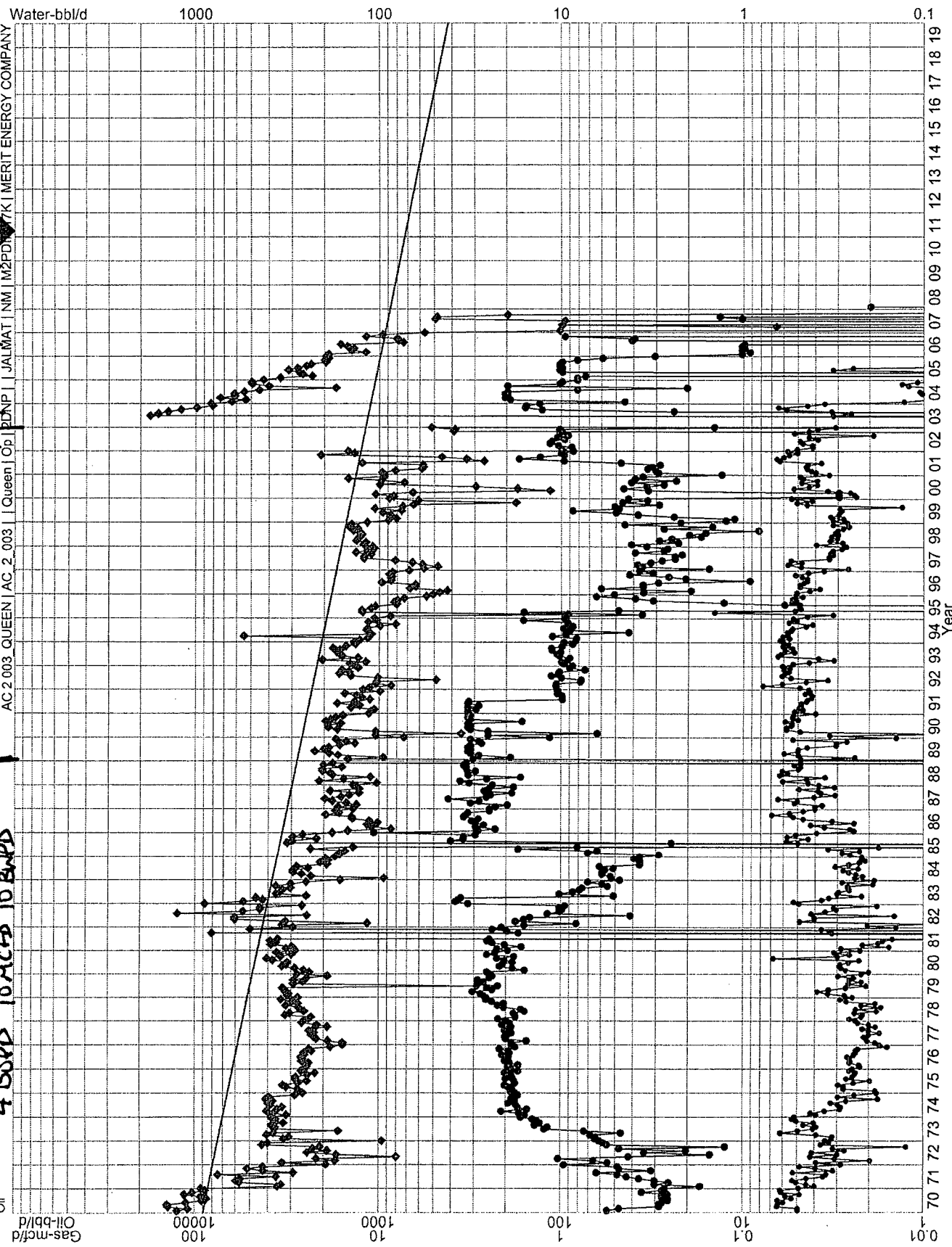
LAST PRODUCTION

YATES/7RIVERS

10 MCFD 3BWD 0 BOPD

QUEEN  
7RIVERS

4 BOPD 10 MCFD 10 BWD



Allocation OIL 100% QUEEN  
Gas 50% QUEEN 50% V.M. 170 m.

# Wellbore Diagram

Lease & Well No. **State A A/C 2 # 3**  
Field Name **Jalmat**  
Location **1980' FNL 1980' FEL; Unit G, Sec. 08, T22S, R36E**

Status **Active**  
County & State **Lea County, NM**  
API No. **30-025-08829**  
Pool Name **Jalmat: Tansill Yates Seven Rivers**

## Well Information

Spud: **1937** Ground Elevation: **3,593'**  
Completed: **\_\_\_\_\_** KB Elevation: **\_\_\_\_\_** Total Depth: **\_\_\_\_\_**

## Pipe Data

Surface						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
	247 ft	12"	50.0#			
Intermediate						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
	1509 ft	9-5/8"	36.0#			
Production						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
	3690 ft	7"	24.0#			

Downhole Tubulars (Top to Btm):	
111 jts 2 3/8"	
41-7/8" 97-3/4" 2" x 1 1/2" x 12' RWTC	

## Well History

**2/3/1937** Acidize Open Hole // IP: 281 BOPD  
**10/6/1959** clean out well from 3680-3880 / RIH with 225' 5 1/2" x 14# Slotted Liner from 3655-3880 ft  
**10/31/1959** 39 BOPD  
**8/21/1989** Set 7" Watson RBP @ 3590'-retrieved  
Perf 3402-08 w/2 spf / Acidize and test  
Set 7" RBP @ 3440' / Perf 3417-21 / Acidize w/1100 gals 15% NEFE // Retrieved RBP // Commingled Production  
**5/9/2003** Set CIBP @ 3642' w/5' cmnt / Perf Yates 7 Rivers: 3162, 76, 82, 3200, 07, 33, 56, 62, 72, 80, 87, 3324, 3330  
3339, 3474, 3496, 3526, 36, 44, 48, 54, 62, 72, 3604, 3622 / Acidize new perfs with PPI Tool  
MIRU Schlumberger; CO2 Frac 280,000 lbs 12/20 and 20/40 sand  
**6/8/2003** IP: 3 BO 235 MCF 120 BW /// Test positive for Iron Sulfide  
**7/7/2003** Pump stuck -- work free Replace pump / Tag @ 3579'  
**8/18/2003** Pump stuck -- work free; RIH with bailer, CO sand from 3612-3642

## 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; ND WH. NU BOP's and test. NU 6 1/8" Varel Bit; 6 DCS (utilize slips and safety clamp); PU Tbg off ground - replace if nec  
RIH w/tbg to 3600' / MIRU Air Foam Unit, Frac Tank (fill with 2% KCL), Rig Tank, Power Swivel; Manifold - RU Flowline from each csg port to Tank  
Eliminate excessive bends or 90's in the flowline - sand will cut out valves and flowlines; use both csg ports  
Circ well w/Air & Mist Pump to 3635' / Tag Cmmt / DO cmnt & CIBP / Collect samples (sand, paraffin, scale) CK returns for O&G Kill tbg w/3% KCL  
Tag Top of Liner @ 3655' / TOH - Rack back tubing / LD DCs and Bit / RIH Open ended to 3880' Circulate well with Air for a minimum of 2 hrs  
Rack back tubing / NU BP, MA, Perf Sub, Seat Nipple, and RIH w/ TBG (Install TAC above perfs)  
Land Tbg @ 3640' / Install Tubing Head / RU Rod Equipment / PU 12' GA, 40 Ring PA Plunger Pump, On/Off Tool, RIH w/rods  
NU HH, Connect Power Source, CK Pump Action (6" above tag-do not tag pump initially)-load tubing if necessary  
Clean Location; RDMO W/O Rig  
Production will be commingled  
Yates / 7 Rivers: Avg Production: 10 MCFD, 3 BWPD  
Queen Projected Production: 4 BOPD, 10 MCFD, 10 BWPD  
Expected Commingle Production: 4 BOPD, 20 MCFD, 13 BWPD

## Current Status

