

DATE IN <b>3.16.11</b>	SUSPENSE	ENGINEER <b>DKB</b>	LOGGED IN <b>3.16.11</b>	TYPE <b>PTG-W</b> <b>4263</b>	APP NO. <b>1107542234</b>
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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 A/C 2 #54*

## ADMINISTRATIVE APPLICATION CHECKLIST **30-025-08841**

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 54 O-08-22S-36E DH-4263 Lea  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 14591 Property Code 24671 API No. 30-025-08841 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat Tansill Yates 7-Rivers		Eunice 7 Rivers Queen South
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3480' - 3666'		3781' - 3863'
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: 20 MCFD; 80 BWPD	Date:  Rates:	Date:  Rates: 10 BOPD; 20 MCFD; 60 BW
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.

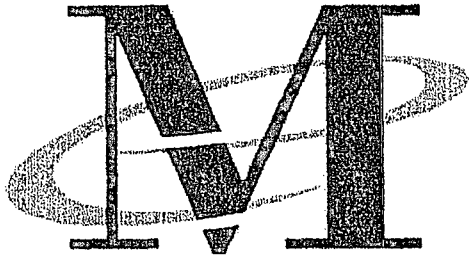
PRE-APPROVED POOLS

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 03/04/2011  
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

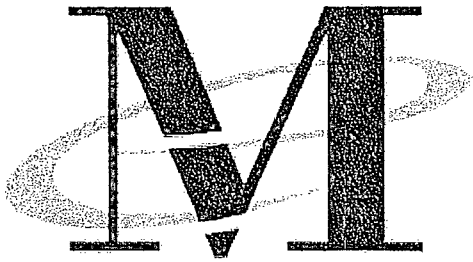
Merit Energy Company has requested approval to commingle the Queen formation (Langlie Mattix Pool) with the Tansill-Yates-Seven Rivers formation (Jalmat Pool).

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 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

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 87505

## State of New Mexico

Energy, Minerals &amp; Natural Resources Department

Form C-102

Revised August 15, 2000

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

## EXHIBIT 20

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-08841</b>	Pool Code 79240	Pool Name JALMAT:TANSILL-YATES-7RIVERS(GAS)
Property Code 24671	Property Name STATE A A/C 2	Well Number <b>54</b>
OGRIID No. 194849	Operator Name PETROHAWK OPERATING COMPANY	Elevation 3596'

## Surface Location

UL or lot No. <b>0</b>	Section 8	Township 22 S	Range 36 E	Lot Idn	Feet from the 660	North/South line SOUTH	Feet from the <b>1980</b>	East/West line <b>EAST</b>	County LEA
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## Bottom Hole Location If Different From Surface

UL or lot No. SAME	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>600</b>	Joint or Infill INFILL	Consolidation Code	Order No. <b>SD-06-13</b>						

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

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# NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

FORM O-128  
Revised 5/1-57

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

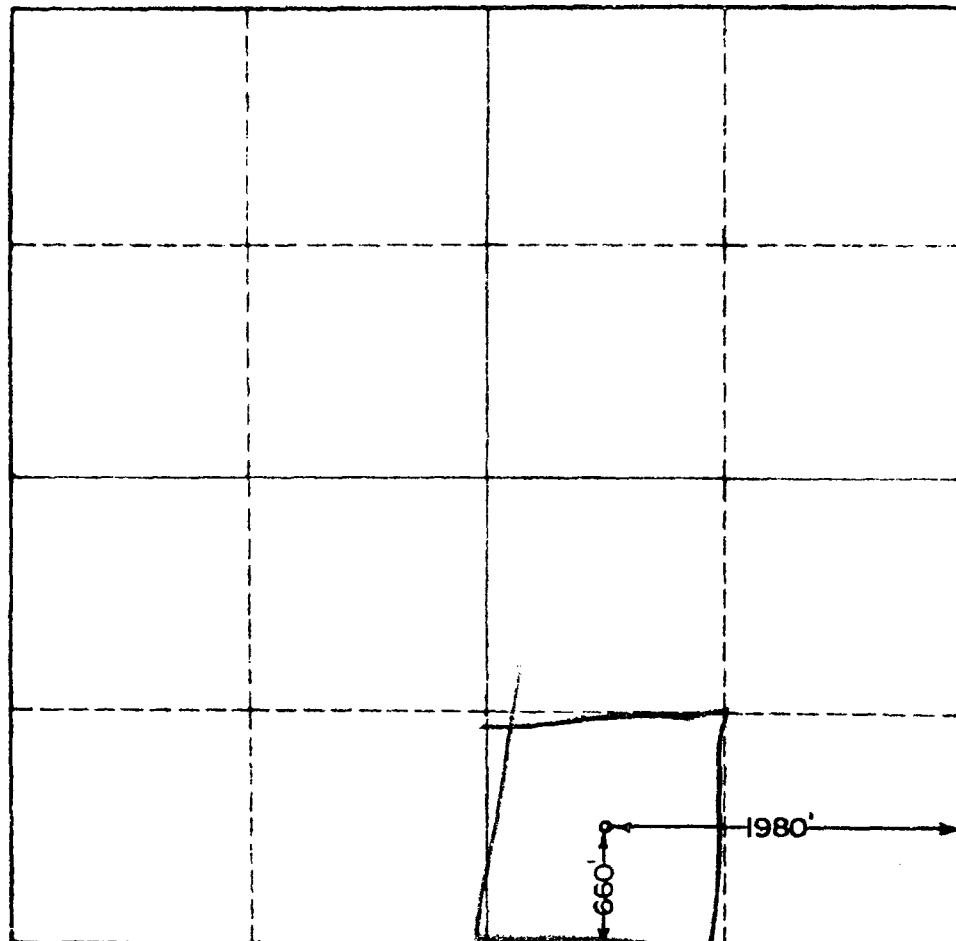
## SECTION A

Operator <b>Texas Pacific Coal &amp; Oil Co.</b>		Lease <b>State "A" Account No. 2</b>		Well No. <b>54</b>
Unit Letter <b>0</b>	Section <b>8</b>	Township <b>22 South</b>	Range <b>36 East</b>	County <b>Lea</b>
Actual Footage Location of Well: <b>660</b> feet from the <b>South</b> line and <b>1980</b> feet from the <b>East</b> line				
Ground Level Elev. <b>3601.1</b> <b>3589.7</b>	Producing Formation <b>7-Rivers</b>	Pool <b>South Dennis</b>	Dedicated Acreage <b>40</b> Acres	

- 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.)
- 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 \_\_\_\_\_
- If the answer to question two is "no," list all the owners and their respective interests below.

Owner	Land Description

## SECTION B

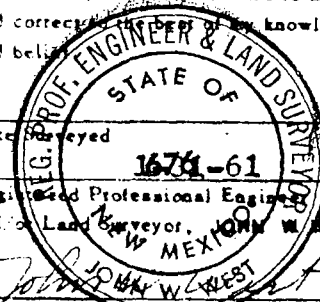


## CERTIFICATION

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

Name *[Signature]*  
Position  
**Manager of Production**  
Company  
**Texas Pacific Coal & Oil Co.**  
Date  
**February 2, 1961**

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.

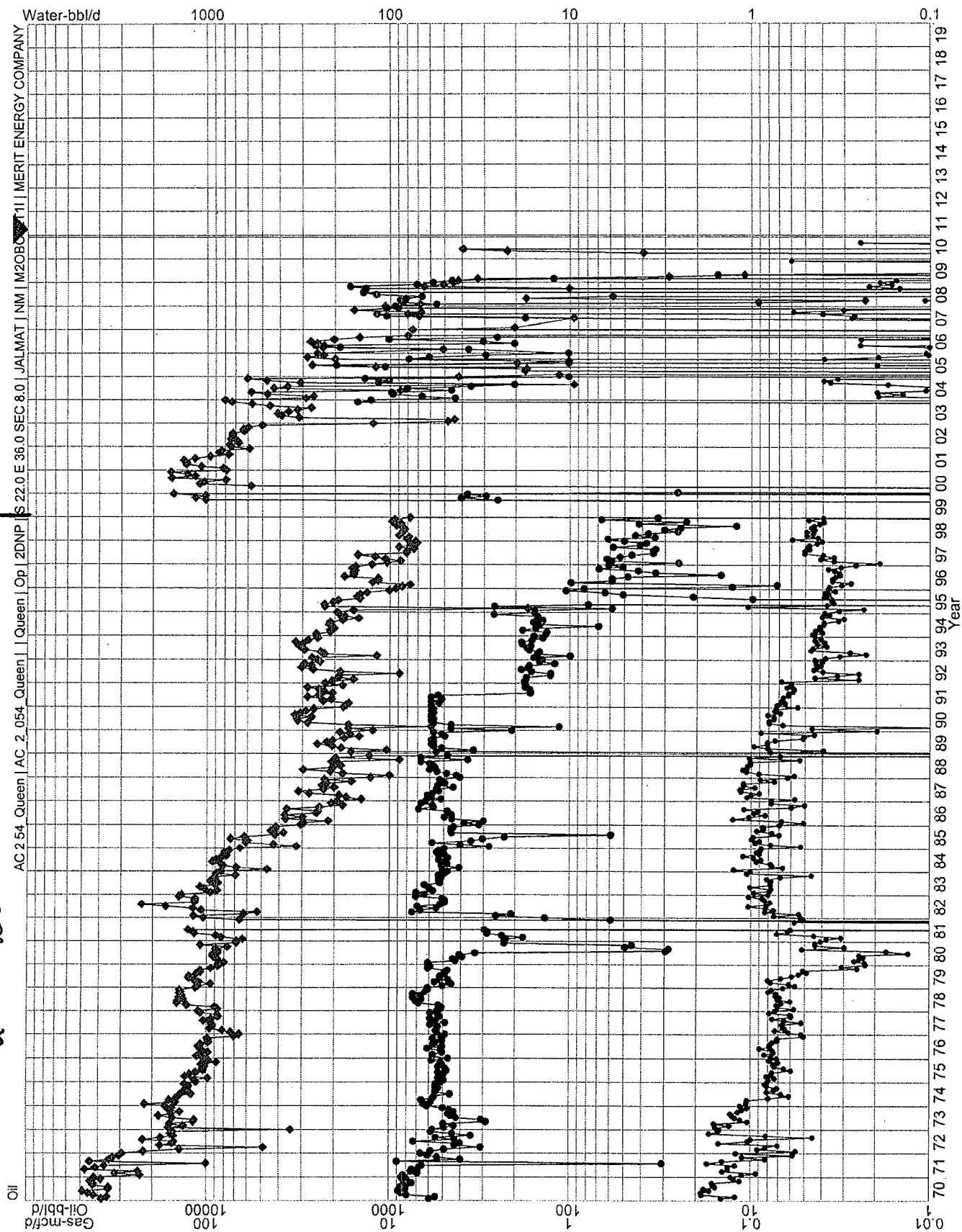


Date Surveyed  
**16761-61**  
Registered Professional Engineer and Land Surveyor, **JOHN W. WEST**  
Certificate No.  
**N.M. - P.E. & L.S. NO. 676**

Act 2 #257

QUEEN  
20MCFD 10000 103WPD

TANSILL - YATES - 7 RIVERS  
20MCFD 0600 806WPD



Allocation OIL 100% QUEEN GAS 50% QUEEN  
50% TANSILL-YATES-7 RIVERS

# Wellbore Diagram

Lease & Well No. **State A A/C 2 # 54**  
Field Name **Jalmat**  
Location **660' FSL 1980' FEL; Unit O, Sec. 08, T22S, R36E**

Status **Active**  
County & State **Lea County, NM**  
API No. **30-025-08841**  
Pool Name **Jalmat: Tansill Yates Seven Rivers**

## Well Information

Spud: **2/12/61** Ground Elevation: **3,602'** D.F. Elevation: \_\_\_\_\_  
Completed: \_\_\_\_\_ KB Elevation: \_\_\_\_\_ Total Depth: \_\_\_\_\_

## Pipe Data

Surface						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
	299 ft	9-5/8"			300 sx	
Production						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
	3781 ft	7"				

Downhole Tubulars (Top to Bttm):	
114 jts 2 3/8"	
144-3/4" rods, 2" x 1 1/2" x RWTC	

## Well History

- 2/28/1961** Stimulate Queen formation w/20000 gals lease oil 500# Adomite and 20,000# Sand  
IP: 338 BOPD, 112 BWPD with 420# ftp
- 4/11/1984** Pump Scale squeeze
- 8/17/1999** Set CIBP @ 3760' w/10' Cement / Perf 7 Rivers: w/2 spf 3480,82,84, 96, 98, 3501, 30, 32, 34, 60, 62, 80, 82  
3628, 30, 60, 62, 64, 66 // Acidize and Frac // IP: 156 MCFD
- 12/2/1999** Replace Pump
- 1/27/2000** Replace Pump / Lwr tubing - tag @ 3617' / run bomb  
Several W/O to replace pump and tbg and rods
- 2/24/2003** MJ full of iron sulfide
- 8/21/2003** RIH w/sand bailer from 3660-3710'

## 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 Equipment; Unseat Pump and TOH with Rods / ND WH, NU BOPs and Test / Rack Back Tubing  
NU 6 1/8" Varel Bit, 6 DCs, Tally Tbg in Hole, Tag CIBP or Fill / RU Air Foam Unit w/Mist Pump / Spot 500 bbl frac tank and fill w/2% KCL  
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 3760' / Tag CIBP / DO CIBP / Collect samples (sand, paraffin, scale) CK returns for O&G Kill tbg w/2% KCL  
RIH to 3863' (Note: may have to trip out and lay down bit-RIH Open ended) / CO Fill; Cir well with Air for minimum 2 hrs  
Rack back tubing / NU BP, MJ, Perf Sub; Seat Nipple, and RIH w/ TBG w/TAC to 3750 ft  
Land Tbg @ 3750' / ND BOPs NU Tubing Head / RU Rod Equipment  
PU 12' GA, 40 Ring PA Plunger Pump, On/Off Tool, RIH w/rods, h  
Clean Location; RDMO W/O Rig  
Production will be commingled and allocated  
Yates / 7 Rivers: Avg Production: 20 MCFD, 80 BWPD  
Queen Projected Production: 10 BOPD, 20 MCFD, 60 BWPD

