

DATE IN <u>5.16.11</u>	SUSPENSE	ENGINEER <u>WVJ</u>	LOGGED IN <u>5.16.11</u>	TYPE <u>DHC</u>	APP NO. <u>1113654790</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



PTGW
Merit 14591
Step 1576 #4

ADMINISTRATIVE APPLICATION CHECKLIST 30-025-08790

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 Print or Type Name Matt Ogden Signature Regulatory Analyst Title 5/12/11 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 4402

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

Operator Address

State 157 G 4 Unit G - Sect. 5G - T2S - R36E Lea

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

OGRID No. 14591 Property Code 24670 API No. 30-025-08790 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat - Tan Yates 7 Rivers ✓		Langlie Mattix - Queen <i>St. Evince 7 Rivers</i>
Pool Code	79240		24130 ✓
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3206'-3681'		3796'-3866'
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)	1.3174 BTU		33.6 API
Producing, Shut-In or New Zone	Producing		SI
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: 03/12/2011 Rates: 40mcf/1bwpd	Date: Rates:	Date: Rates: 2bopd
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 0 % Gas 100 %	Oil % Gas %	Oil 100 % Gas 0 %

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:

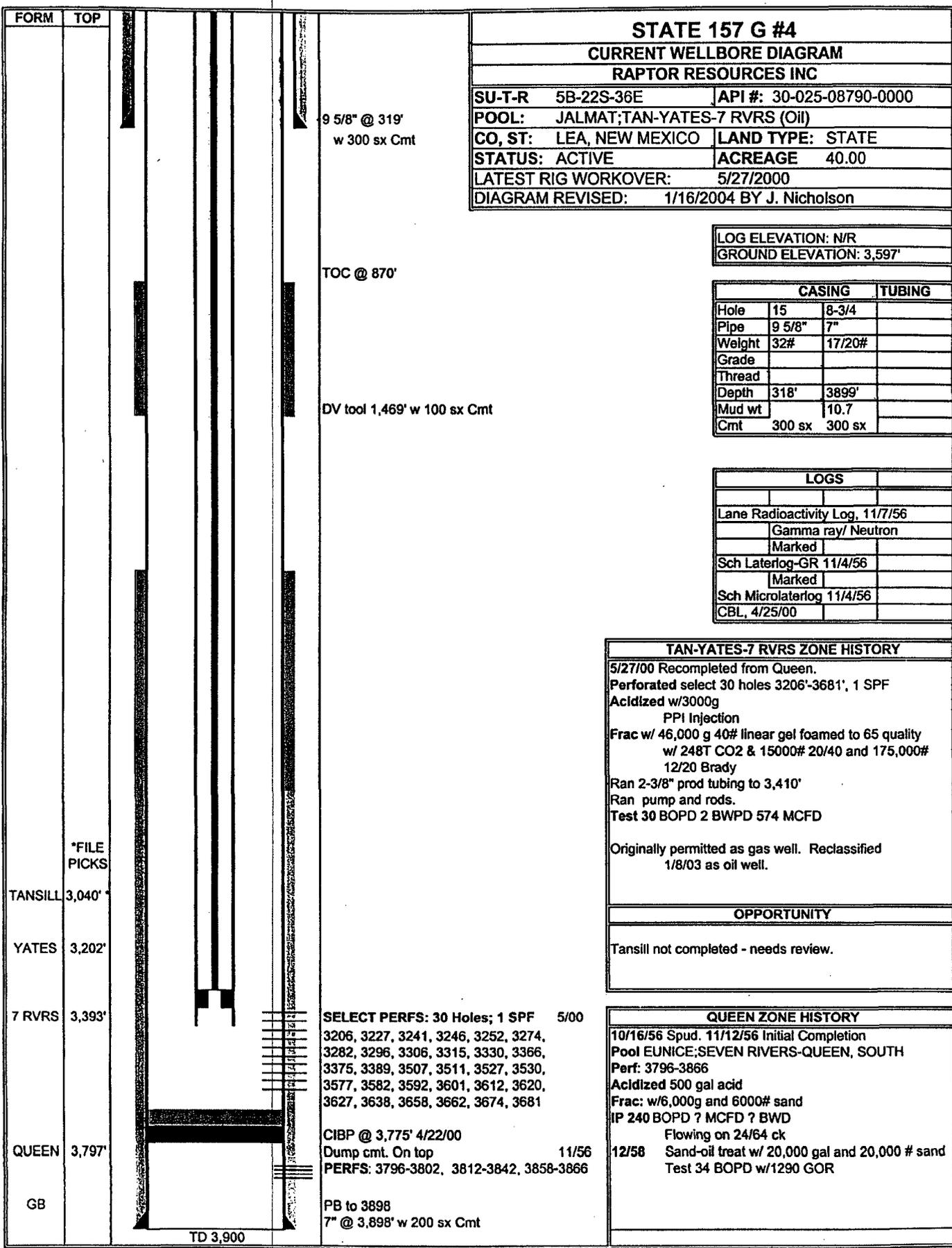
- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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 05/12/2011

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

E-MAIL ADDRESS matt.ogden@meritenergy.com



STATE 157 G #4	
CURRENT WELLBORE DIAGRAM	
RAPTOR RESOURCES INC	
SU-T-R 5B-22S-36E	API #: 30-025-08790-0000
POOL: JALMAT;TAN-YATES-7 RVRS (Oil)	
CO, ST: LEA, NEW MEXICO	LAND TYPE: STATE
STATUS: ACTIVE	ACREAGE 40.00
LATEST RIG WORKOVER: 5/27/2000	
DIAGRAM REVISED: 1/16/2004 BY J. Nicholson	

9 5/8" @ 319'
w 300 sx Cmt

TOC @ 870'

DV tool 1,469' w 100 sx Cmt

LOG ELEVATION: N/R
GROUND ELEVATION: 3,597'

	CASING		TUBING
Hole	15	8-3/4	
Pipe	9 5/8"	7"	
Weight	32#	17/20#	
Grade			
Thread			
Depth	318'	3899'	
Mud wt		10.7	
Cmt	300 sx	300 sx	

LOGS	
Lane Radioactivity Log, 11/7/56	
Gamma ray/ Neutron	
Marked	
Sch Laterlog-GR 11/4/56	
Marked	
Sch Microlaterlog 11/4/56	
CBL, 4/25/00	

TAN-YATES-7 RVRS ZONE HISTORY

5/27/00 Recompleted from Queen.
 Perforated select 30 holes 3206'-3681', 1 SPF
 Acidized w/3000g
 PPI Injection
 Frac w/ 46,000 g 40# linear gel foamed to 65 quality
 w/ 248T CO2 & 15000# 20/40 and 175,000#
 12/20 Brady
 Ran 2-3/8" prod tubing to 3,410'
 Ran pump and rods.
 Test 30 BOPD 2 BWPD 574 MCFD

Originally permitted as gas well. Reclassified
 1/8/03 as oil well.

OPPORTUNITY

Tansill not completed - needs review.

QUEEN ZONE HISTORY

10/16/56 Spud. 11/12/56 Initial Completion
 Pool EUNICE;SEVEN RIVERS-QUEEN, SOUTH
 Perf: 3796-3866
 Acidized 500 gal acid
 Frac: w/6,000g and 6000# sand
 IP 240 BOPD ? MCFD ? BWD
 Flowing on 24/64 ck
 12/58 Sand-oil treat w/ 20,000 gal and 20,000 # sand
 Test 34 BOPD w/1290 GOR

*FILE PICKS

TANSILL 3,040'

YATES 3,202'

7 RVRS 3,393'

QUEEN 3,797'

GB

SELECT PERFS: 30 Holes; 1 SPF 5/00

3206, 3227, 3241, 3246, 3252, 3274,
 3282, 3296, 3306, 3315, 3330, 3366,
 3375, 3389, 3507, 3511, 3527, 3530,
 3577, 3582, 3592, 3601, 3612, 3620,
 3627, 3638, 3658, 3662, 3674, 3681

CIBP @ 3,775' 4/22/00
 Dump cmt. On top 11/56
 PERFS: 3796-3802, 3812-3842, 3858-3866

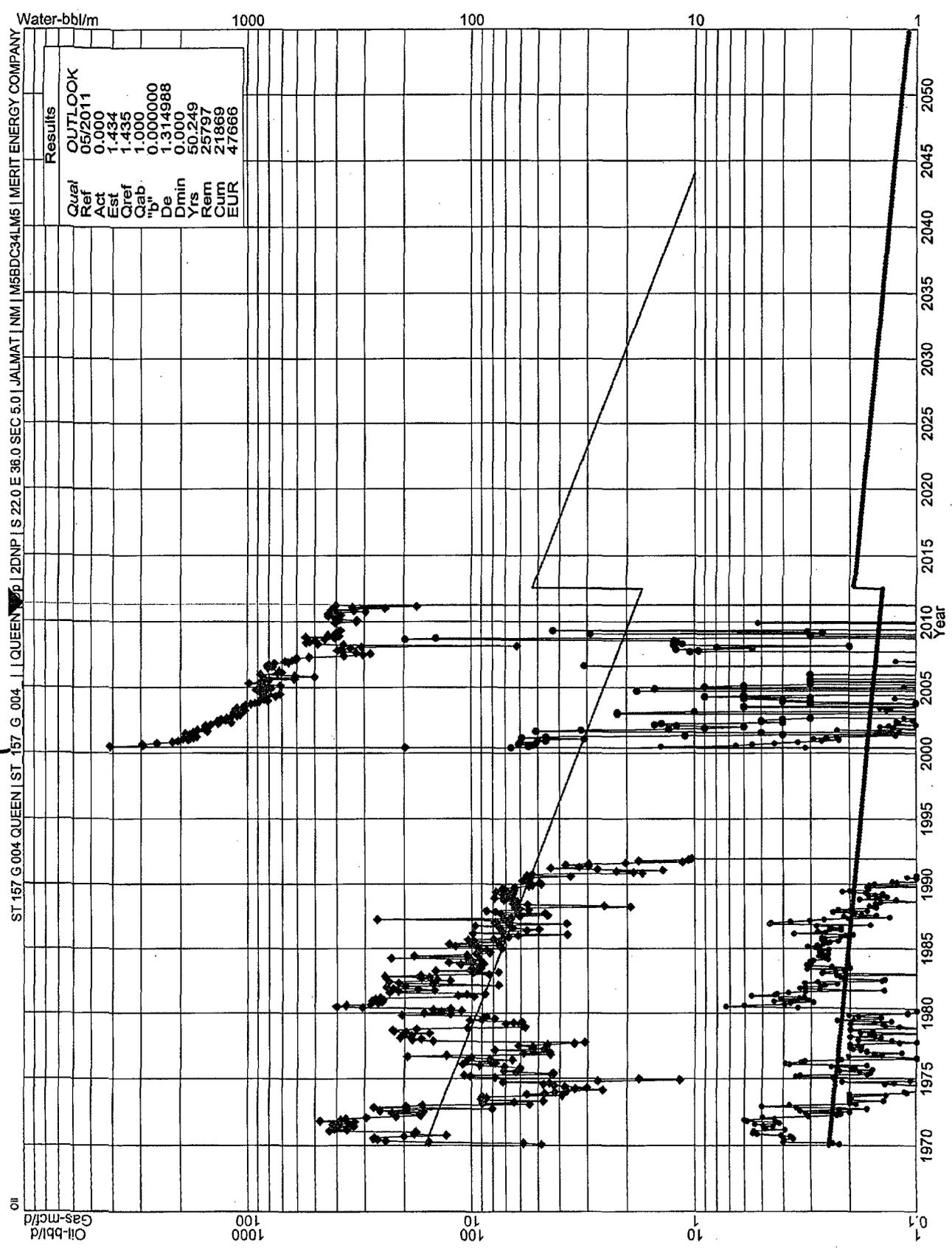
PB to 3898
 7" @ 3,898' w 200 sx Cmt

TD 3,900

Est Queen flow
2.8 bpd
0 mcf/d

Current flow
40 mcf/d

QUEEN ← → TRAPS - YATES



DIL 1000 QUEEN GAS 10000 TRAPS - YATES

District I
 PO Box 1980, Hobbs, NM 88241-1980
 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

Form C-11

Revised February 21, 1991
 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 30-025-08790		2 Pool Code 79240		3 Pool Name Jalmat, Tnsl, Yts, 7-Rivers (Pro Gas)	
4 Property Code 24670		5 Property Name State 157 G			6 Well Number 4
7 OGRID No. 162791		8 Operator Name Raptor Resources, Inc,			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	5	22S	36E		990	North	1980	East	Lea

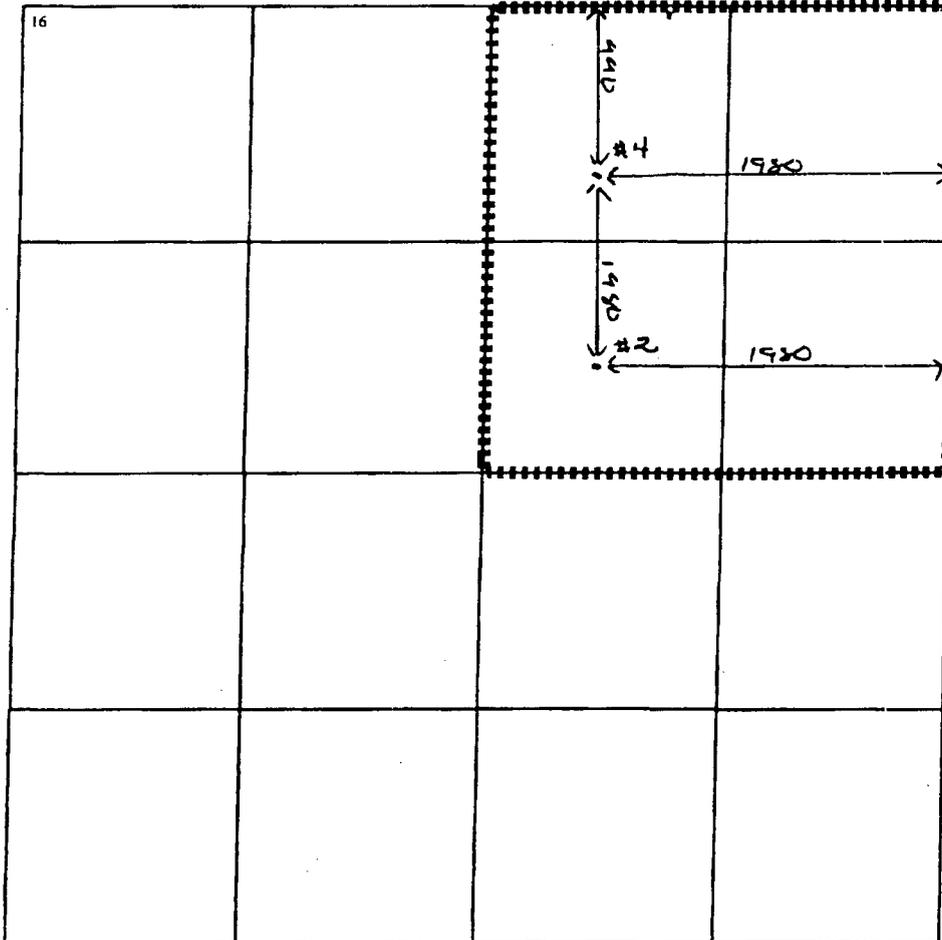
11 Bottom Hole Location If Different From Surface

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 160	13 Joint or Infill	14 Consolidation Code	15 Order No.
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Applied For

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 - Raptor
 Title

12-10-99
 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

¹ API Number 30-025-08790		² Pool Code 24130		³ Pool Name Eunice 7 Rivers Queen, South	
⁴ Property Code 24670		⁵ Property Name State 157 G			⁶ Well Number 4
⁷ OGRID No. 14591		⁸ Operator Name Merit Energy Company			⁹ Elevation 3597'

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	5	22S	36E		990	N	1980	E	Lea

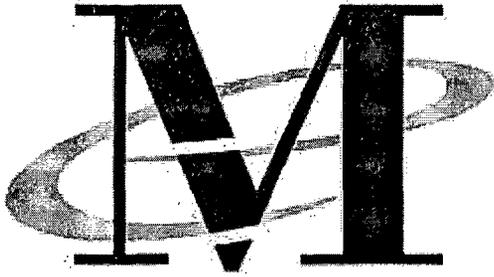
¹¹ Bottom Hole Location If Different From Surface

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 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

¹⁶ 	<p>¹⁷ 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: 05/24/2011</p> <p>Matt Ogden</p> <p>Printed Name</p> <p>matt.ogden@meritenergy.com</p> <p>E-mail Address</p>
	<p>¹⁸ 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>



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

Date: May 12, 2011
To: New Mexico Oil Conservation Division
Attention: William V Jones P.E.
**RE. Jalmat Field: 12 Commingling Applications
Lea County, New Mexico**

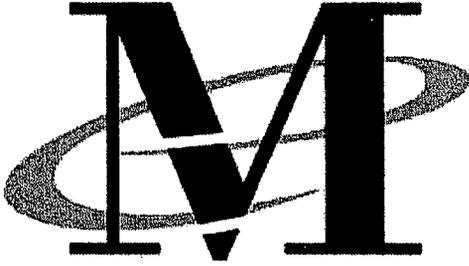
Merit Energy Company has requested approval to commingle the Queen formation (Langlie Mattix Pool) with the Tansill-Yates-Seven Rivers formation (Jalmat Pool).

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 12 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
Phone: 972-628-1592
Fax: 972-682-1892



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

Date: May 12, 2011
To: New Mexico Oil Conservation Division
Attention: William V Jones P.E.
RE. **Jalmat Field: State 157 G#2 & G#4, State A A/C 2 #1, State AAC-2 #2, #4, #7, #31, #34, #46, #47, & #70 Yates-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
Phone: 972-628-1557
Fax: 972-682-1857