

DATE IN <u>3.16.11</u>	SUSPENSE	ENGINEER <u>DKB</u>	LOGGED IN <u>3.16.11</u>	TYPE <u>DHC</u>	APP NO. <u>1107542037</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 Energy
 14591

State ADIC #78
30-025-34910

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] ☒ NA Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ NA Offset Operators, Leaseholders or Surface Owner

[C] ☒ NA 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] ☒ NA For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☒ NA 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

78

E-05-22S-36E

Lease

Well No.

Unit Letter-Section-Township-Range

Lea

County

OGRID No. 14591 Property Code 24671 API No. 30-025-34910 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat Tansill Yates 7-Rivers <i>Gas</i>		Eunice 7 Rivers Queen South <i>oil</i>
Pool Code	79240		24130
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3188' - 3315'		3623' - 3912'
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: 03/01/2011 Rates: 5 MCFD; 0 BWPD	Date: Rates:	Date: Rates: 3 BOPD; 20 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 % 20 %	Oil Gas % %	Oil Gas 100 % 80 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes ☒ No ☐
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:

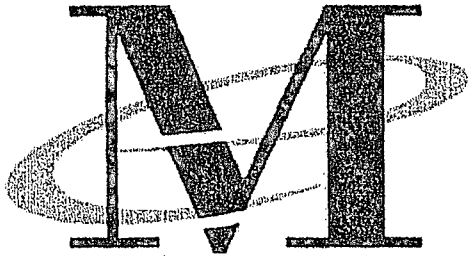
- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

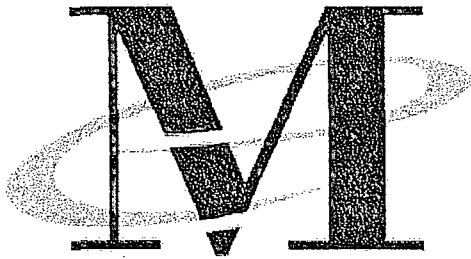
Merit Energy Company has requested approval to commingle the Queen formation (Langlie Mattix Pool) with the Tansill-Yates-Seven Rivers formation (Jalmat Pool).

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

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

Form C-102

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 30-025- 34910		2 Pool Code 79240		3 Pool Name Jalmat Tansill Yates 7 Rvrs (Pro Gas)	
4 Property Code 24671		5 Property Name State A A/C 2			6 Well Number 78
7 OGRID No. 162791		8 Operator Name Raptor Resources			9 Elevation

10 Surface Location

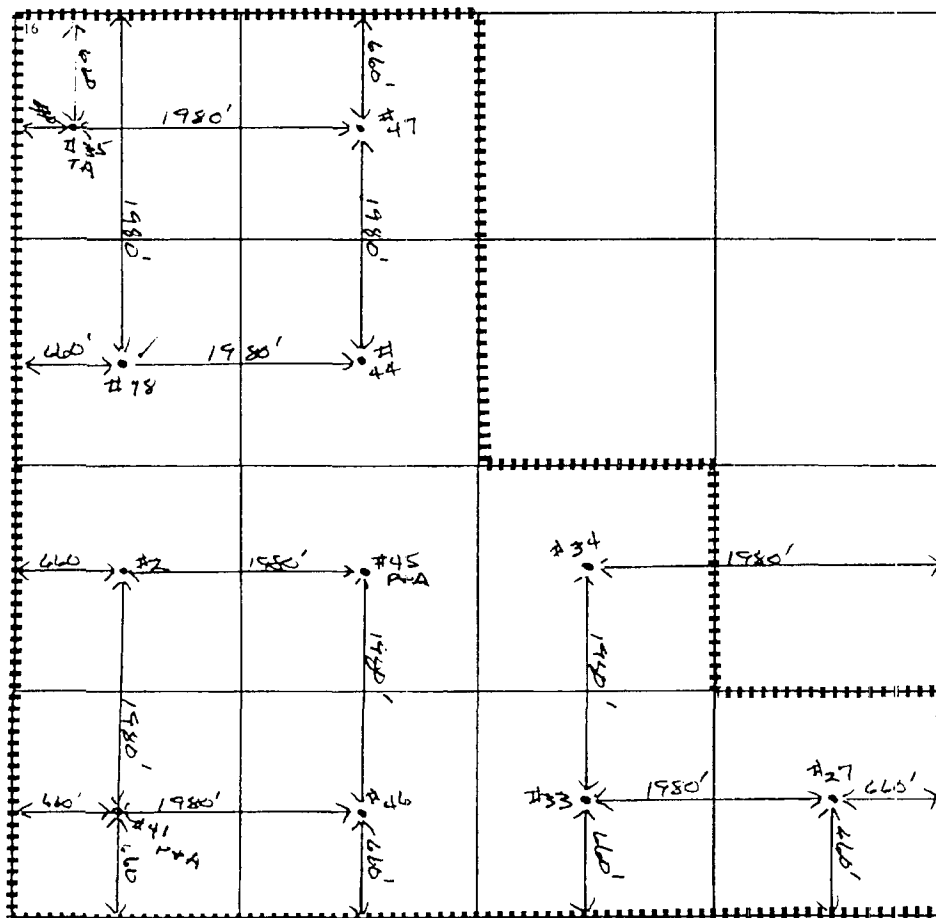
UL or lot no. E	Section 5	Township 22S	Range 36E	Lot Idn	Feet from the 1980	North/South line North	Feet from the 660	East/West line West	County Lea
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres 440.59 440.50	13 Joint or Infill	14 Consolidation Code	15 Order No. NSL-4615<SD>
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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



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

1-30-01
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
P.O. Box 1999, Hobbs, NM 88241-1999

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. Box 2088, Santa Fe, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34910	Pool Code 24130	Pool Name Eunice; Seven Rivers - Queen, South
Property Code 24671	Property Name STATE A A/C 2	Well Number 78
OCRID No. 162791	Operator Name RAPTOR RESOURCES, INC.	Elevation 3600

Surface Location

UL or lot No. E	Section 5	Township 22 S	Range 36 E	Lot Idn	Feet from the 1980	North/South line NORTH	Feet from the 660	East/West line WEST	County LEA
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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
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

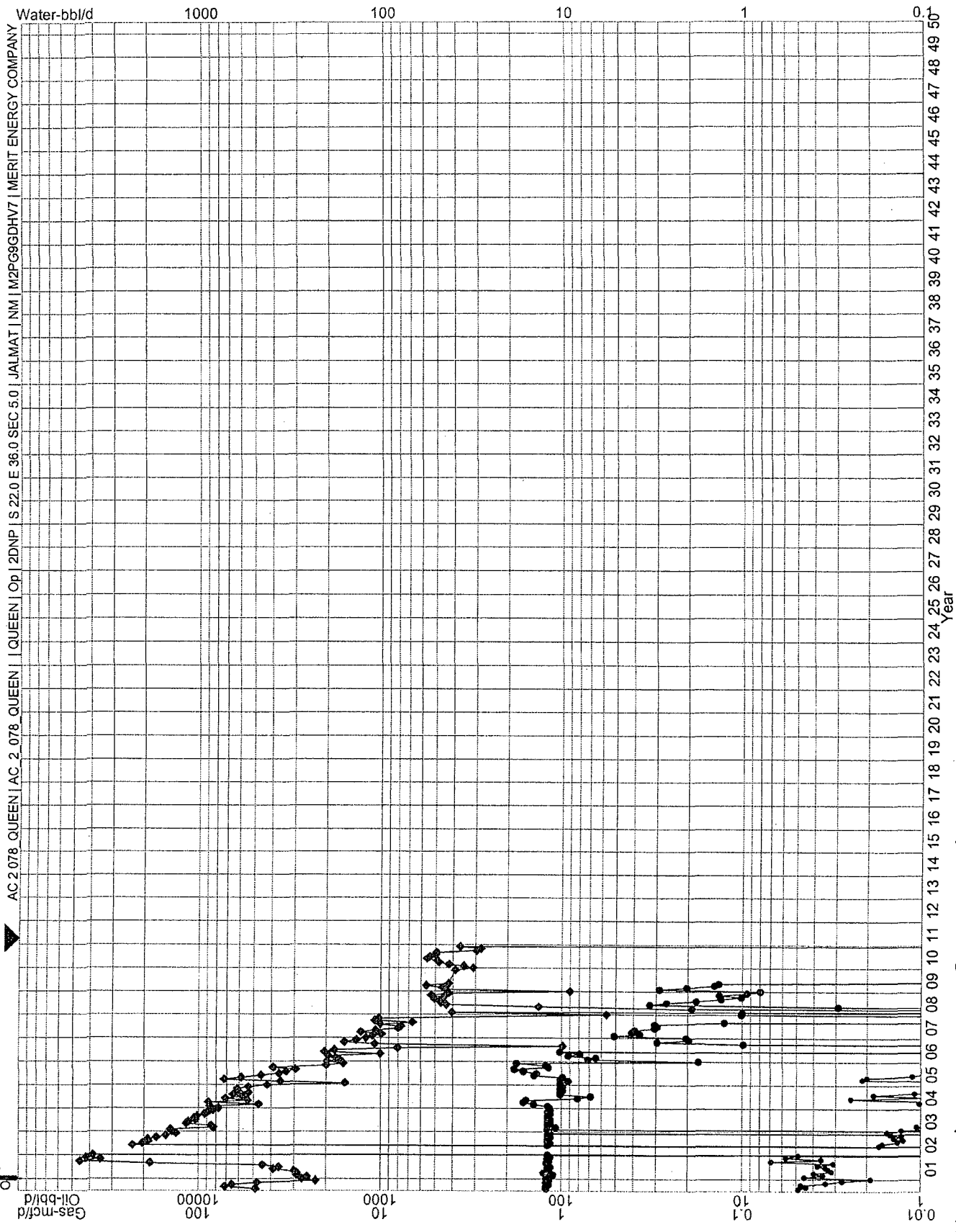
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	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 1-31-00 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. JANUARY 22, 2000 Date Surveyed Signature of State of Professional Surveyor Ronald J. Edson 1-28-2000 Certificate No. RONALD J. EDSON 3239 GARY EDSON 12841 MACOM McDONALD 12185	

Acct 2# 7B

QUEEN
20MCFD
3 BOPD
10BOPD

TANSILL-YATES SMCFD O BOPD O BOPD



Allocation OIL: 100% QUEEN GAS 80% QUEEN
20% TANSILL-YATES

Wellbore Diagram

Lease & Well No. **State A A/C 2 # 78**
Field Name **Jalmat**
Location **1980' FNL 660' FWL; Unit E, Sec. 05, T22S, R36E**

Status **Active**
County & State **Lea County, NM**
API No. **30-025-34910**
Pool Name **Jalmat: Tansill Yates Seven Rivers**

Well Information

Spud: **3/2/2000** Ground Elevation: **3,600'** D.F. Elevation: _____
Completed: _____ KB Elevation: _____ Total Depth: _____

Pipe Data

Surface						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
12-1/4"	630 FT	8-5/8"	24.0#		240 sx	
Production						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments
7-7/8"	4000 FT	5-1/2"	17#		850 sx	

Downhole Tubulars (Top to Bttm):

105 jts 2 3/8" SN @ 3327' MJ
1 1/4" x 16' PR, ponys, 48-7/8", 84-3/4", 2" x 1 1/2" x 12' RWTC

Well History

5/2/2000 Perf: 3623,26,38,48,78,3711,30,3815,17,35,51,74,78,83,90,3901,12
2000 gal Acid; N2 & CO2 Frac w/62000# 20/40 and 98000# 12/20 / ISIP: 3050 15:2690
IP: 9 BOPD, 377 MCFD, 70 BWPD / Clean out well w/Air foam Unit: PBTD: 3947 ft

7/11/2000 Install TD300 ESP and 111 jts 2 3/8" EOT @ 3583

7/17/2000 9 BO 385 BW 70 MCFD

10/11/2000 Set RBP @ 3604' / perf 7 Rivers 3455,79, 84, 92, 99, 3512, 3536, 62, 70, 86, 93, 97 / Tested Water
Squeeze and Remove RBP; Test Squeeze to 500 psig / Install 45 hp sub pump; 3 BO 295 BW 55 MCF

12/1/2000 L/D ESP / Install Pump and Rods with 228 Weatherford Torque Master (86" Stroke)

4/18/2001 TOH w/Rods and Tubing / Clean out MJ / TIH w/Prod String

5/8/2001 Water contains Iron sulfide; 22.3% Acid Insolubles

8/1/2001 Set CIBP @ 3410' / Perf Yates: 3188,95, 97 99, 3216, 3220, 3226, 3228, 3243, 3245, 3247, 3249, 3265, 72, 78, 84
3289, 94, 96, 3315 with 1 spf // Acidize with 2000 gals and Frac with CO2: 660000 gals gel
52000# 20/40 and 250,600# 12/20 // IP: 5 BOPD 62 BWPD 337 MCFD

10/12/2001 Replace pump

10/25/2001 RU Foam Unit; CO sand from 3281 to 3410 / Install rod string

11/30/2001 Replace pump

2/5/2002 PBTD @ 3330 ft / split in tbg

3/12/2002 split in tbg - replace

6/7/2002 Bail sand out of hole

11/5/2002 PBTD @ 3410' / Pump 1500 gals 15% HCL down tbg

3/10/2003 MJ full of iron sulfide

9/1/2007 RU Weatherford foam unit; tag fill @ 3320' / Circ sand to pit from 3320 to 3406'

4/21/2008 well not pumping; replace pump

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 4 3/4" 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 3410' / Tag CIBP / DO CIBP / Collect samples (sand, paraffin, scale) CK returns for O&G Kill tbg w/2% KCL
RIH to 3947' / 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 3575 ft
Land Tbg @ 3575' / ND BOPs NU Tubing Head / RU Rod Equipment
PU 12' GA, 40 Ring PA Plunger Pump, On/Off Tool, RIH w/rods, N
Clean Location; RDMO W/O Rig
Production will be commingled and allocated
Yates / 7 Rivers: Avg Production: 5 MCFD, 0 BWPD

