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NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

11	113 CHECKEI	OT IS WAINE		IRE PROCESSING AT		/EL IN SANTA FE	AND REGULATIONS
Applic	рно]]	n-Standa -Downho PC-Pool ([W	ole Commingling] Commingling] FX-Waterflood Ex [SWD-Salt Wat	[CTB-Lease C [OLS - Off-Lease (pansion] [PM) ter Disposal] [IF	ommingling] Storage] [O (-Pressure Mai PI-Injection Pro	LM-Off-Lease Measuren intenance Expansion]	mingling] nent]
[1]			ocation - Spacing	ck Those Which A 3 Unit - Simultane ISP SD		ı	
		[B] <u>C</u>	ne Only for [B] or Commingling - Sto 図 DHC □ C	orage - Measureme	ent PC	OLS OLM	
	[[C] Iı		al - Pressure Increa		Oil Recovery EOR PPR	
	[[D] C	Other: Specify				
[2]				O: - Check Those valty or Overriding		, or Does Not Apply est Owners	
	[[B]	Offset Operate	ors, Leaseholders	or Surface Ow	ner	
	[[C]	Application is	One Which Requ	ires Published	Legal Notice	
	[[D] [nd/or Concurrent . Management - Commission			
	[[E]	For all of the a	above, Proof of No	otification or P	ublication is Attached, a	nd/or,
	[F] N	Waivers are A	ttached			
3]			RATE AND CO ON INDICATE		RMATION R	EQUIRED TO PROCE	ESS THE TYPE
	al is <mark>accu</mark> r	ate and c	complete to the be		ge. I also und	d with this application fo erstand that no action w the Division.	
		Note: Sta	1		ıal with manageri	ial and/or supervisory capaci	ty.
	Moon		Lyu	moon		gulatory Manager	03/02/2011
Print or	Type Name	•	Signature		Titl	le	Date
					1	nne moon@meritenergy	com

e-mail Address

District I

District II

1301 W. Grand Avenue. Artesia. NM 88210

District III
1000 Rio Brazos Road, Aziec, NM 87410

District IV

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-107A Revised June 10, 2003

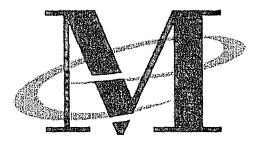
Oil Conservation Division

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION TYPE X Single Well Establish Pre-Approved Pools

EXISTING WELLBORE

1220 S. St. Francis Dr., Santa Fe, NM 87505	APPLICATION FOR DO	WNHOLE COMMINGLING	_X_YesNo				
Merit Energy Company		727 Noel Rd. Suite 500 Dallas,	Гехаs 75240				
Operator State A A/C 2	A 24 I-08-22	ddress)KC- 4360 Lea				
Lease		r-Section-Township-Range	County				
OGRID No. 14591 Property Co			FederalXStateFee				
DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE				
Pool Name	Jalmat Tansill Yates 7-Rivers	702	Eunice 7 Rivers Queen South C				
Pool Code	79240		24130				
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3160' - 3596'		3666' - 3841'				
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	Date: 03/01/2011	Date:	Date:				
estimates and supporting data.)	Rates:45 MCFD; 3 BWPD	Rates:	Rates: 3 BOPD; 20 MCFD; 10 BV				
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 % 69 %	Oil Gas	Oil Gas % 100 % 31 %				
	ADDITIO	NAL DATA					
Are all working, royalty and overriding If not, have all working, royalty and over the control of the control o	g royalty interests identical in all co	mmingled zones?	YesX_No YesNo				
Are all produced fluids from all comm			YesX_No				
Will commingling decrease the value of	of production?		YesNoX				
If this well is on, or communitized with or the United States Bureau of Land M			YesX_ No				
NMOCD Reference Case No. applicab	le to this well:						
Production curve for each zone for For zones with no production histo Data to support allocation method Notification list of working, royalt	gled showing its spacing unit and act rat least one year. (If not available, ory, estimated production rates and or formula. Ly and overriding royalty interests for documents required to support com	attach explanation.) supporting data. or uncommon interest cases.					
	PRE-APPRO	OVED POOLS					
If application is		the following additional information	will be required:				
List of other orders approving downho List of all operators within the propose Proof that all operators within the prop Bottomhole pressure data.	d Pre-Approved Pools						
I hereby certify that the information	n above is true and complete to t	the best of my knowledge and be	lief.				
SIGNATURE SIGNATURE	2000 TITLE F	Regulatory Manager	DATE_03/04/2011				
TYPE OR PRINT NAME Lynne N	<u>Aoon</u>	TELEPHONE NO. (_) (972)628-1569				
E-MAIL ADDRESS_ lynne.moo	n@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.

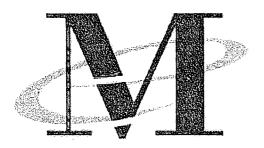
Please let me know if you have any questions

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 1 1625 N. French Dr., Hobbs, NM 68240 State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

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

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 **EXHIBIT 20**

☐ AMENDED REPORT

DISTRICT IV Santa Fe, NM 87505

30-025-08833	Pool Code	Pool	Name	
	79240	JALMAT:TANSILL-YAT	ES-7RIVERS:(GAS)	
Property Code		Property Name STATE A A/C 2		
OGRID No.	Ope	Elevation		
194849	PETROHAWK OPERAT	3596'		

WELL LOCATION AND ACREAGE DEDICATION PLAT

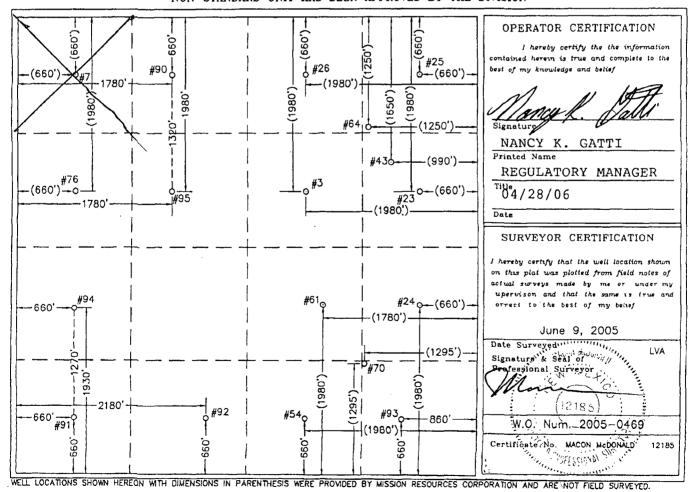
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	8	22 S	36 E		1980	SOUTH	660	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					1980				
Dedicated Acres	Joint o	r Infill Co	nsolidation	Code Or	der No.) :			
600	INF	ILL			51	1-06-1	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



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 2	API Numbe	r	T	² Pool Code		³ Pool Name					
30-025-08833		'	2413			Eunice 7 Rivers Queen South					
⁴ Property C			1 2		⁵ Property			8 1	⁶ Well Number		
24671		State A A/G	ℂ 2					24	24		
7OGRID N	No.			******	⁶ Operator	Name			⁹ Elevation		
14591		Merit Ener	gy Com	oany				3596'	3596'		
					¹⁰ Surface	Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from th	e North/South line	Feet from the	East/West line	County		
I	08	22S	22S 36E		1980	South	660	East	Lea		
		·	¹¹ Bo	ttom Hol	e Location	If Different Fro	m Surface				
UL or lot no. Section Township Range Lot Idn Feet fr				Feet from th	e North/South line	Feet from the	East/West line	County			
12 Dedicated Acres 13 Joint or Infill 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.

16	1			17 000000000000000000000000000000000000
16				¹⁷ OPERATOR CERTIFICATION
				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.
			c	June Noon 03/04/2011
			_	Signature Date
				Lynne Moon
				Printed Name
				lynne.moon@meritenergy.com
				E-mail Address
				18SURVEYOR CERTIFICATION
				I hereby certify that the well location shown on this plat was
			660'	plotted from field notes of actual surveys made by me or under
			#24	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:
		ò		
		980		
		`		
				Certificate Number



Wellbore Diagram

	<u>Lea</u>	ise & Well No.	State A	A/C 2 # 24				<u>Status</u>	Active	
		Field Name	Jalmat					County & State	Lea County, N	IM
		Location	1980' FSI	. 660' FEL; Ur	it I, Sec. 08, T	22S, R36E		API No.		
								<u>Pool Name</u>	Jalmat: Tansil	l Yates Seven Rivers
Well Informa					_		0.504		lyventSaigs	
,	1943				_	-	3,584'			
Completed:	·	- '	KB Elevation.		_	Total Depth:				
Pipe Data										
Surface				-						
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments				
	418 ft	10"				<u> </u>				OCD Tops (MD)
Production						· · · · · · · · · · · · · · · · · · ·				Tansill
Hole size	Depth	Size (OD)	Weight	Grade	Sx. Cmt	Comments		A		Yates
	3727 ft	7"	24.0#							7 Rivers
										Queen
Downhole Tu	bulars (Top to Bt	tm):								San Andres Glorieta
113 jts 2 3/8", Sf		···•								Bone Spring
1	, 8-7/8", 132-3/4°	, 2" x 1 1/2" x 12'	RWTC				:			Bone SS
										Abo
										Wolfcamp
Well History								_		Strawn
1/7/1943	Acidize Open I	lole w/5000 gals	;							Atoka
1/8/1965	Run 4 1/2" Line	er from 3612' - 38	886'; Cmnt w/5	0 sks/ Perforat	e: 3666,86,3700	39,3802,14,32,41	1spf			
	Acidize and Fra	ac w/35000 gals	lease oil, 35,00	00# sand 27 bp	m // IP: 65 BO,	553 MCFD, 5 BW	<i>I</i>			
1/25/1985	RIH w/ 3-7/8" b	oit clean out to 38	301' / RIH w/ 3	15/16" cutrite s	shoe; mill from 3	801 to 3841' / CC) fill to 3863 ft			
	Perf 3758-90, 3	3800-04, 3810-5	0 // Acidize per	fs 3612-3850 v	//4000 gals 15%	6 NEFE + 81 BS				
2/20/1985	8 BOPD 143 B	WPD 34 MCFD;	F/L @ 3658'							
<u>12/31/1997</u>	Pump 800 gals	15% HCL dwn	annulus							
10/26/1999	_	10' / Perf 7 River ac; IP: 172 MCFI		2, 14, 21, 28, 3	0, 32, 34, 56, 58	3, 60, 62, 64, 69,8	5,87,89,92,96 w/2	spf		
2/21/2001	TIH and Retrie	ve RBP / Set CII	3610/S	et 7" RBP @ 3-	450					
	Perf Yates: 316	60, 64, 77, 82, 3	202, 07, 12, 32	, 36, 63, 70, 78	, 84, 3301, 14, 3	25, 31, 42, 87 w/1	spf			
	Frac Yates CO	2 / Circ out fill wi	ith Air foam uni	t / Retrieve RB	P / Install prod s	string				
	IP: 3 BO 213 N	ICFD 3 BW								
3/28/2008	Replace split the	og						representation of the second		-
10 1 W 1 1	Procedures !		I					7.4.3	1.5	
A. 3. 3. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	Signature 1 1 William St. Co.	51-51 7 AME 141-51	IIRU W/O Rig.	RU H2S Equipm	nent - Pre-job sft	ty mtg / Disc Pwr	supply Lock/out Ta	ag/out for		
ND HH; RU Roc	d Equipment; Un	seat Pump and T	OH with Rods ,	ND WH, NU B	OPs and Test / F	Rack Back Tubing				,
NU 6 1/8" Vare	Bit, 6 DCs, Tally	Tbg in Hole, Tag	CIBP or Fill / R	U Air Foam Uni	t w/Mist Pump ,	/ Spot 500 bbl fra	c tank and fill w/2°	% KCL		
RU Flowlines fro	om each csg port	to gas buster ta	nk Eliminate e	cessive bends	or 90's - sand wi	ill cut out valves a	nd flowlines			Yates
Circ well w/Air	& Mist Pump to	3610'/ Tag Cmnt	/ DO CIBP / Co	llect samples (s	and, paraffin, so	cale) CK returns fo	or O&G Kill tbg w/2	2% KCL		3160-3387
Tag Top of Line	r @ 3612' / ТОН	- Rack back tubir	ng / LD DCs and	l Bit / RIH open	ended to 3886'	/ CO Fill; Cir well	with Air for minim	um 2 hrs		Acidize and Frac
Rack back tubin	g / NU BP, MJ, P	erf Sub; Seat Nip	ple, and RIH w	/ TBG w/TAC to	3615 ft					
Land Tbg @ 361	L5' / ND BOPs N	U Tubing Head /	RU Rod Equip	ment				~,**		
PU 12' GA, 40 R	ing PA Plunger P	ump, On/Off To	ol, RIH w/rods,	r				-		7 Rivers
Clean Location;	RDMO W/O Rig								▎▎▐▐▗	3507-3596
Production will	be commingled	and allocated ba	sed on subtrac	tion method						Acidize and Frac
Yates / 7 Rivers	: Avg Production	: 45 MCFD, 3 BW	/PD					ĺ		

Queen Projected Production: 3 BOPD, 20 MCFD, 10 BWPD

4 1/2" Liner 3612-3886 Queen Perfs 3666-3841 Acidize & Frac

CIBP @ 3610

XXCIBPXX