

DATE IN 10/27/20	SUSPENSE	ENGINEER	LOGGED IN	TYPE DHC	APP NO. pDM2030851577
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

FAE II Operating LLC [329326]

- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



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.

David Schellstede
 Print or Type Name

[Signature]
 Signature

COO
 Title

10/25/2020
 Date

david@faenergyus.com
 e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240

District II
811 S. First St., 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

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

Form C-107A
Revised August 1, 2011

APPLICATION TYPE
 Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

FAE II Operating, LLC 11757 Katy Fwy. Ste. 1000, Houston, TX 77079

Operator **Winningham** Address **B-30-25S-37E** **Lea**
Lease **329326** Well No. **326422** Unit Letter-Section-Township-Range **30-025-28637** County **X**
OGRID No. _____ Property Code _____ API No. _____ Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	<i>Jalmat</i>		<i>Langlie Mattix</i>
Pool Code	<i>79240</i>		<i>37240</i>
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	<i>2,725' - 2,830'</i>		<i>3,002' - 3,383'</i>
Method of Production (Flowing or Artificial Lift)	<i>Artificial Lift</i>		<i>Artificial Lift</i>
Bottomhole Pressure <small>(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)</small>			
Oil Gravity or Gas BTU <small>(Degree API or Gas BTU)</small>	<i>1.133</i>		<i>35 API</i>
Producing, Shut-In or New Zone	<i>Producing</i>		<i>New Zone</i>
Date and Oil/Gas/Water Rates of Last Production. <small>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)</small>	<i>See Attached</i>	Date: Rates:	<i>See Attached</i>
Fixed Allocation Percentage <small>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)</small>	Oil <i>0 %</i> Gas <i>52 %</i>	Oil <i>%</i> Gas <i>%</i>	Oil <i>100 %</i> Gas <i>48 %</i>

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 MBates TITLE Engineering Tech DATE 10/26/2020
TYPE OR PRINT NAME Marshall Bates TELEPHONE NO. (713) 253-2885
E-MAIL ADDRESS Marshall@FAEnergyus.com

fae II operating

October 26, 2020

VIA ONLINE FILING

Mr. Dean McClure
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Application of FAE II Operating, LLC for Administrative Approval to Downhole Commingle and Sell Oil and Gas Production from the Langlie Mattix Pool for the Winningham #9 well located in Sec. 30, T-25S, R-37E, Lea County, New Mexico

Dear Mr. McClure:

FAE II Operating LLC, OGRID: 329326, requests administrative approval for downhole commingling of oil and gas production from the Langlie Mattix Pool for its Winningham #9 well located in Unit Letter B, Section 30, T-25S, R-37E, 660 feet FNL and 1,980 feet FEL, as shown in the attached C-102's for each zone.

The Winningham #9 is currently open to the Yates (Gas) interval, which translates to the JALMAT; TAN-YATES-7 RVRS pool [Pool ID: 79240]. The production curve for this interval is shown in Exhibit A. To develop a forecast for this zone, a decline curve was utilized based on the aforementioned historical production.

The zone that does not have production history in the Winningham #9 is the Yates-Seven Rivers, which translates to the LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG [Pool ID: 37240]. To develop a forecast for this zone, four (4) surrounding wells with production history from the Yates-Seven Rivers were used as an offset to prove up hole potential in the Winningham #9 by taking the historical average of the oil, gas, and water production. The resulting historical average production curve for this interval is shown in Exhibit B. From there, a decline curve was utilized based on the aforementioned historical production. Furthermore, Geology studied a Winningham #9 log, Exhibit C, and also correlated it with other logs in the surrounding area to help determine the location of the new perforations in the Yates-Seven Rivers zone for the Winningham #9.

Overall, the forecast for the proposed downhole commingled production was formed by combining the forecasts for both zones, as shown in the Synthetic Decline Curve column of Exhibit D. This forecast for the Winningham #9 proved that an IP of 5.0 BOPD and 53 MCFPD is the expected total, and of that, 5.0 BOPD and 25 MCFPD will come from the Yates-Seven Rivers zone. The Yates (Gas) is projected to yield 0.0 BOPD and 29 MCFPD with the additional intervals that will be opened up. This information along with the percentage allocation across the zones is shown in Exhibit E.

After a review of internal records, the interest owners are identical for the aforementioned wells. As such, notification to the relevant parties of our intent to commingle production will not be necessary.

This proposed commingling of production is in the interest of conservation and will not result in reduced royalty or improper measurement of production. If there are further questions concerning this application, please feel free to contact the undersigned by email at kevin@faenergyus.com or by telephone at (832) 220-9188.

Very truly yours,

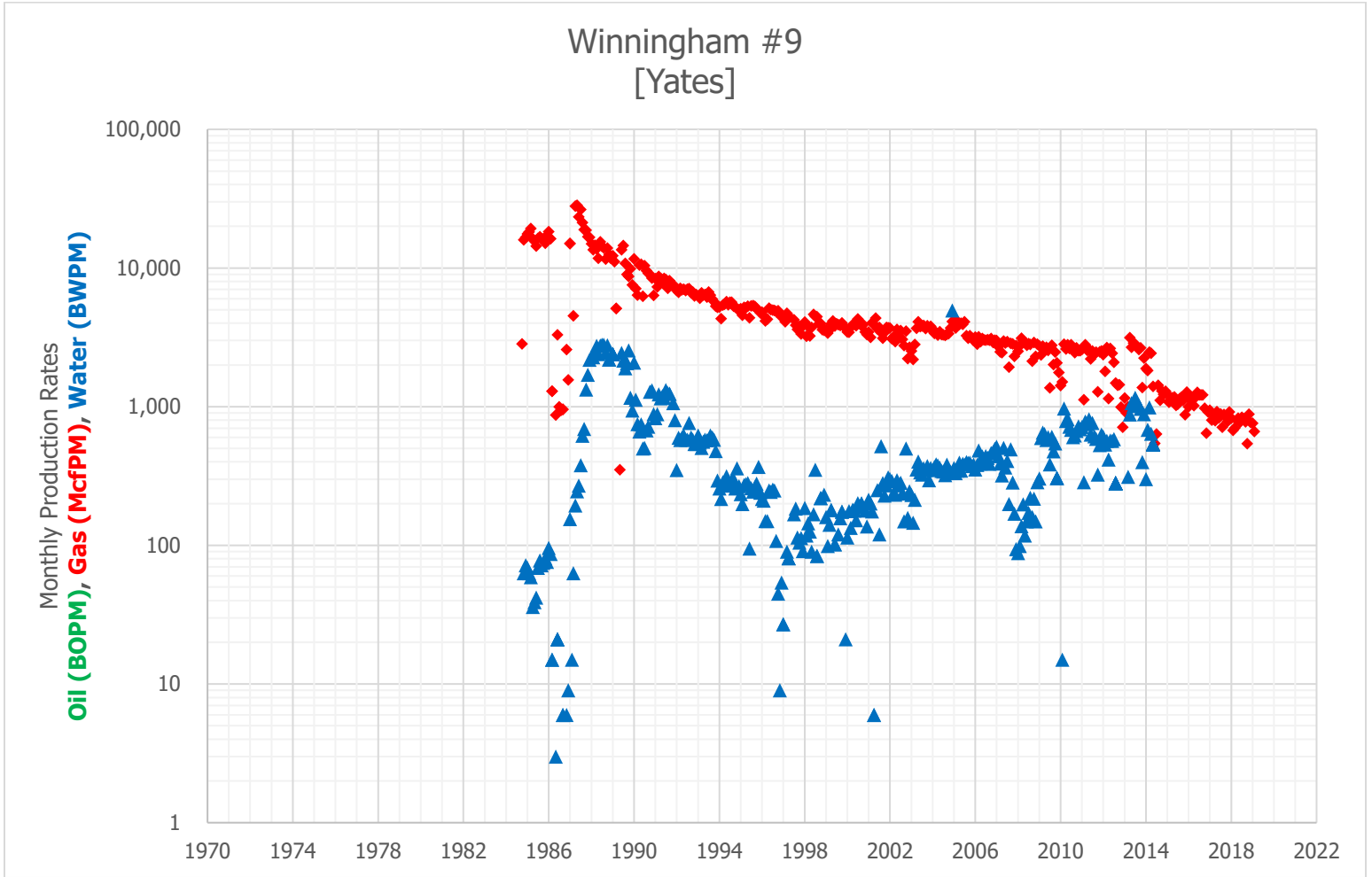


FAE II Operating, LLC

Received by OCD: 10/27/2020 8:23:46 AM

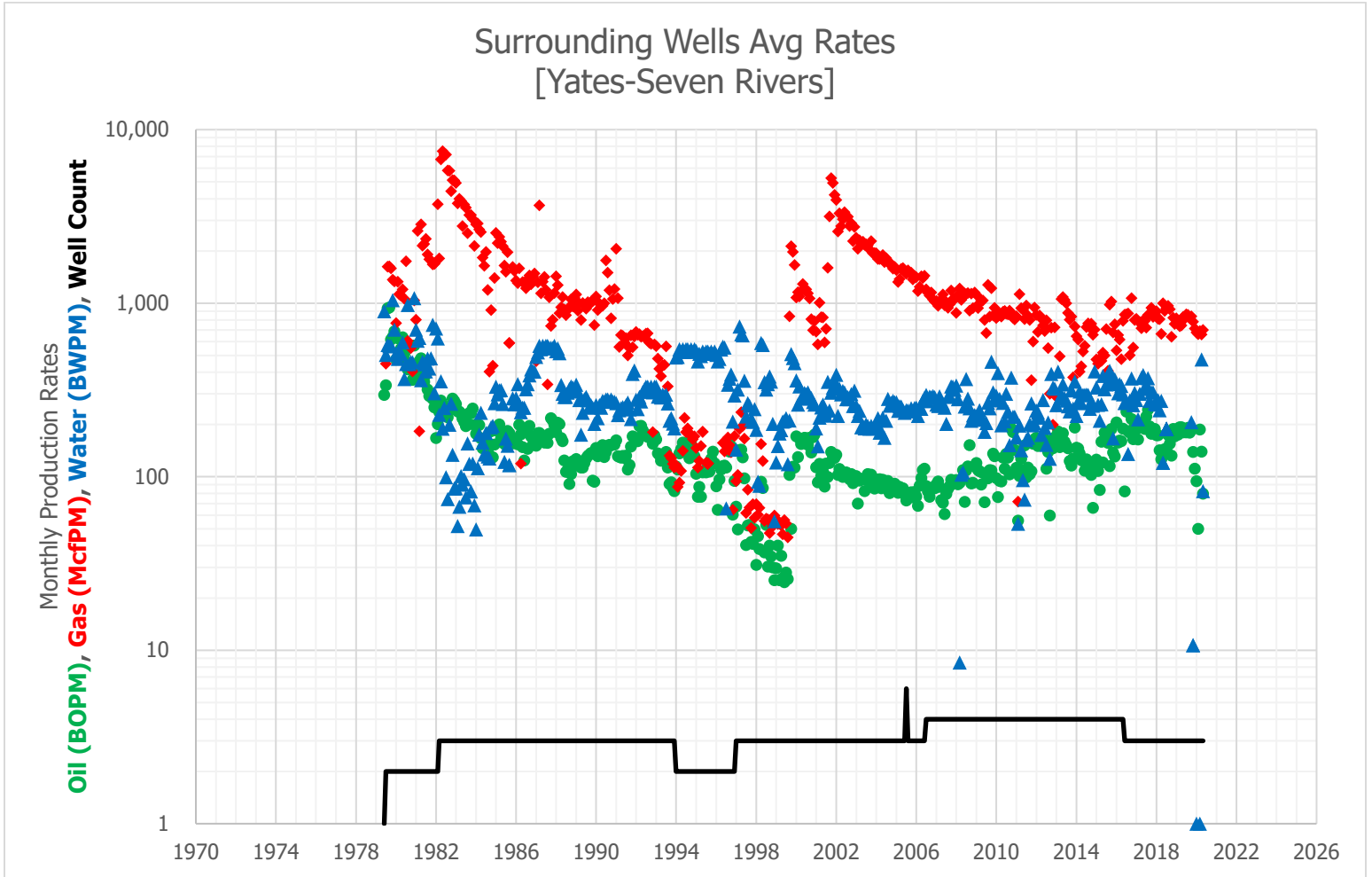
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Exhibit A – Historical Production in the Current Zone



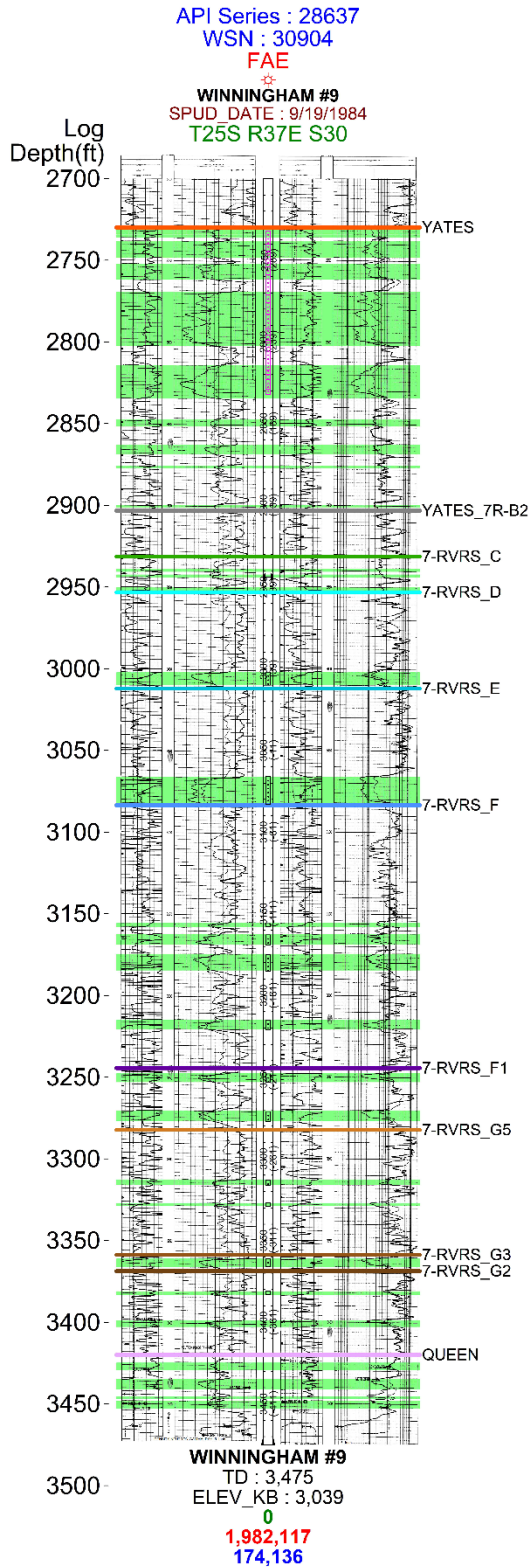
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Exhibit B – Historical Average Production in the Proposed Zone



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Exhibit C – Well Log



API	Source	Perf Type	Top Perf	Btm Perf
30025286370000	CJH	Proposed	3002	3010
30025286370000	CJH	Proposed	3066	3083
30025286370000	CJH	Proposed	3156	3158
30025286370000	CJH	Proposed	3163	3169
30025286370000	CJH	Proposed	3175	3185
30025286370000	CJH	Proposed	3215	3221
30025286370000	CJH	Proposed	3248	3253
30025286370000	CJH	Proposed	3271	3277
30025286370000	CJH	Proposed	3313	3316
30025286370000	CJH	Proposed	3327	3329
30025286370000	CJH	Proposed	3361	3366
30025286370000	CJH	Proposed	3381	3383

Perf Interval

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Exhibit D – Historical Production and Decline Curve

Surrounding Wells Averaged Rates					Winningham #9				Synthetic Decline Curve			
Avg Prod: Yates-Seven Rivers					Historical Prod: Yates [Dry Gas]							
Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Well Count	Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Month	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)
1/1/2015	125	475	327	4	1/1/2015		1,237		1	163.6	1,625	210
2/1/2015	108	448	259	4	2/1/2015		1,076		2	162.8	1,621	209
3/1/2015	84	482	210	4	3/1/2015		1,123		3	162.0	1,617	208
4/1/2015	159	465	261	4	4/1/2015		1,163		4	161.2	1,613	208
5/1/2015	121	519	381	4	5/1/2015		1,177		5	160.5	1,609	207
6/1/2015	179	500	319	4	6/1/2015		1,021		6	159.7	1,605	206
7/1/2015	169	708	340	4	7/1/2015		1,041		7	158.9	1,601	206
8/1/2015	156	407	347	4	8/1/2015		1,144		8	158.2	1,597	205
9/1/2015	115	981	408	4	9/1/2015		1,171		9	157.4	1,593	204
10/1/2015	188	1,020	384	4	10/1/2015		1,115		10	156.7	1,589	204
11/1/2015	138	678	166	4	11/1/2015		877		11	155.9	1,585	203
12/1/2015	131	755	364	4	12/1/2015		1,276		12	155.2	1,581	202
1/1/2016	205	535	344	4	1/1/2016		1,001		13	154.4	1,577	202
2/1/2016	157	655	302	4	2/1/2016		1,122		14	153.7	1,573	201
3/1/2016	161	617	342	4	3/1/2016		1,163		15	153.0	1,569	200
4/1/2016	160	476	334	4	4/1/2016		1,016		16	152.2	1,565	200
5/1/2016	189	792	299	4	5/1/2016		1,171		17	151.5	1,561	199
6/1/2016	82	858	267	3	6/1/2016		1,273		18	150.8	1,557	198
7/1/2016	237	863	-	3	7/1/2016		1,216		19	150.1	1,553	198
8/1/2016	183	871	135	3	8/1/2016		1,219		20	149.3	1,549	197
9/1/2016	179	502	274	3	9/1/2016		1,219		21	148.6	1,546	196
10/1/2016	215	1,069	368	3	10/1/2016		976		22	147.9	1,542	196
11/1/2016	164	555	259	3	11/1/2016		644		23	147.2	1,538	195
12/1/2016	194	800	303	3	12/1/2016		918		24	146.5	1,534	194
1/1/2017	188	811	276	3	1/1/2017		944		25	145.8	1,530	194
2/1/2017	164	787	214	3	2/1/2017		800		26	145.1	1,526	193
3/1/2017	193	775	300	3	3/1/2017		866		27	144.4	1,523	193
4/1/2017	196	717	372	3	4/1/2017		792		28	143.7	1,519	192
5/1/2017	205	798	385	3	5/1/2017		922		29	143.0	1,515	191
6/1/2017	188	791	320	3	6/1/2017		833		30	142.4	1,511	191
7/1/2017	223	723	340	3	7/1/2017		887		31	141.7	1,507	190
8/1/2017	243	857	370	3	8/1/2017		711		32	141.0	1,504	189
9/1/2017	195	863	274	3	9/1/2017		880		33	140.3	1,500	189
10/1/2017	177	940	306	3	10/1/2017		848		34	139.7	1,496	188
11/1/2017	184	834	306	3	11/1/2017		785		35	139.0	1,492	188
12/1/2017	188	877	265	3	12/1/2017		918		36	138.3	1,489	187
1/1/2018	173	900	260	3	1/1/2018		829		37	137.7	1,485	186
2/1/2018	174	812	276	3	2/1/2018		675		38	137.0	1,481	186
3/1/2018	142	808	242	3	3/1/2018		703		39	136.3	1,478	185
4/1/2018	126	664	274	3	4/1/2018		799		40	135.7	1,474	184
5/1/2018	134	1,000	120	3	5/1/2018		829		41	135.0	1,470	184
6/1/2018	144	903	-	3	6/1/2018		775		42	134.4	1,467	183
7/1/2018	143	936	188	3	7/1/2018		838		43	133.8	1,463	183
8/1/2018	174	966	-	3	8/1/2018		818		44	133.1	1,459	182
9/1/2018	155	921	-	3	9/1/2018		780		45	132.5	1,456	181
10/1/2018	132	640	-	3	10/1/2018		541		46	131.8	1,452	181
11/1/2018	188	826	-	3	11/1/2018		886		47	131.2	1,448	180
12/1/2018	171	760	-	3	12/1/2018		771		48	130.6	1,445	180
1/1/2019	188	819	-	3	1/1/2019		761		49	130.0	1,441	179
2/1/2019	175	763	-	3	2/1/2019		664		50	129.3	1,437	178
3/1/2019	193	736	-	3	3/1/2019		761		51	128.7	1,434	178
4/1/2019	193	745	-	3	4/1/2019		751		52	128.1	1,430	177
5/1/2019	180	835	-	3	5/1/2019		748		53	127.5	1,427	177
6/1/2019	184	816	-	3	6/1/2019		752		54	126.9	1,423	176
7/1/2019	180	861	-	3	7/1/2019		795		55	126.3	1,420	176
8/1/2019	191	854	-	3	8/1/2019		758		56	125.7	1,416	175
9/1/2019	180	824	-	3	9/1/2019		696		57	125.1	1,413	174
10/1/2019	186	839	206	3	10/1/2019		717		58	124.5	1,409	174
11/1/2019	139	781	11	3	11/1/2019		719		59	123.9	1,406	173
12/1/2019	111	714	-	3	12/1/2019		736		60	123.3	1,402	173
1/1/2020	94	677	1	3	1/1/2020		732	-				
2/1/2020	50	662	1	3	2/1/2020		557	-				
3/1/2020	187	691	1	3	3/1/2020		760	-				
4/1/2020	139	659	473	3	4/1/2020		708	726				
5/1/2020	80	702	83	3	5/1/2020		762					
					6/1/2020		726					

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Exhibit E – Decline Curve Production Rates and Zone Allocation Percentage

Zone (1)	Zone (2)	Oil IP (BOPD)	Gas IP (MCFD)	Water IP (BWPD)
Jalmat	Yates (Gas)	0	29	0
Langlie Mattix	Yates-Seven Rivers	5	25	7
	Total	5	53	7
Jalmat	Yates-Seven Rivers (Dry Gas)	0%	52%	5%
Langlie Mattix	Seven Rivers-Queen (Oil)	100%	48%	95%
	Total (%)	100%	100%	100%

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

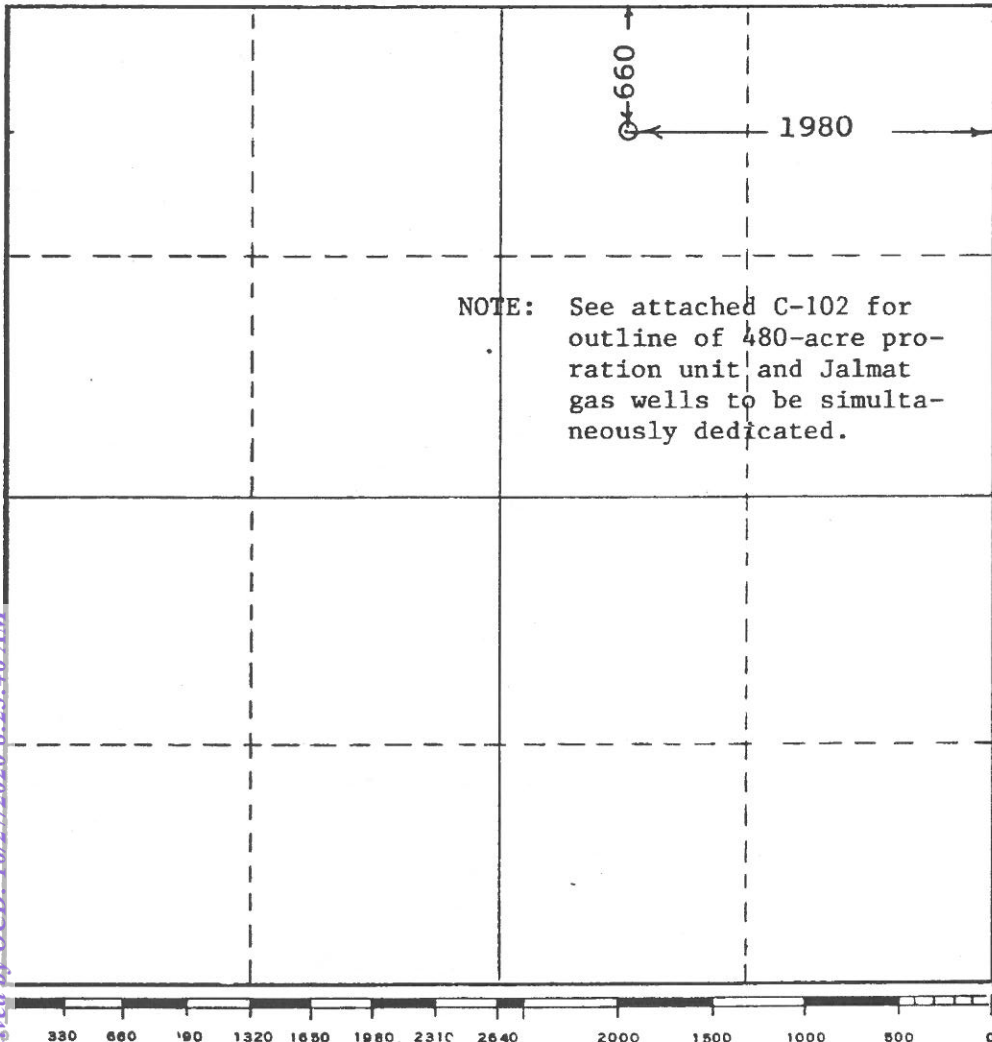
Operator FAE II Operating, LLC		Lease Winningham			Well No. 9
Unit Letter B	Section 30	Township 25 South	Range 37 East	County Lea	
Actual Footage Location of Well: 660 feet from the North line and 1980 feet from the East line					
Ground Level Elev. 3027.0	Producing Formation Yates-Seven Rivers		Pool Jalmat (Gas)	Dedicated Acreage: 480 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

M. Bates
Name
Marshall Bates

Position
Engineering Tech

Company
FAE II Operating, LLC

Date
10/20/2020

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 knowledge and belief.

Date Surveyed
3-1-1984

Registered Professional Engineer and/or Land Surveyor
Truman Gaskin
Truman Gaskin

Certificate No.
2126

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

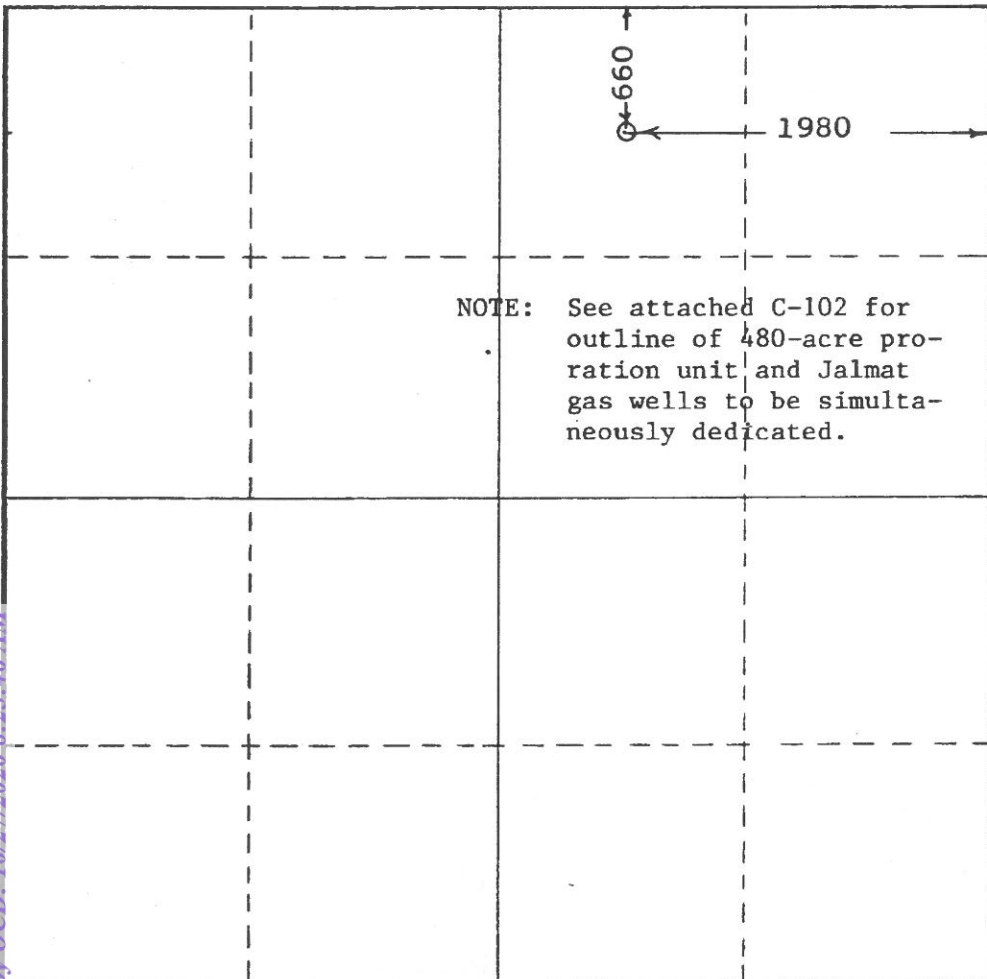
Operator FAE II operating, LLC		Lease Winningham			Well No. 9
Unit Letter B	Section 30	Township 25 South	Range 37 East	County Lea	
Actual Footage Location of Well: 660 feet from the North line and 1980 feet from the East line					
Ground Level Elev: 3027.0	Producing Formation Seven Rivers - Queen		Pool Langlie Mattix	Dedicated Acreage: 480 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

M Bates

Name	Marshall Bates
Position	Engineering Tech
Company	FAE II operating, LLC
Date	10/20/2020

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 knowledge and belief.

Date Surveyed	3-1-1984
Registered Professional Engineer and/or Land Surveyor	<i>Truman Gaskin</i> Truman Gaskin
Certificate No.	2126

