

RECEIVED: 12/11/20	REVIEWER: DM	TYPE: DHC	APP NO: pDM2033838526
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & 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

Applicant: FAE II Operating, LLC	OGRID Number: 329326
Well Name: Arnott Ramsay NCT-B #20	API: 30-025-47990
Pool: Jalmat Oil	Pool Code: 33820

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION
 INDICATED BELOW**

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
- A. Location – Spacing Unit – Simultaneous Dedication
- ☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [I] or [II]
- [I] Commingling – Storage – Measurement
- ☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
- ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders
- B. ☐ Royalty, overriding royalty owners, revenue owners
- C. ☐ Application requires published notice
- D. ☒ Notification and/or concurrent approval by SLO
- E. ☐ Notification and/or concurrent approval by BLM
- F. ☐ Surface owner
- G. ☐ For all of the above, proof of notification or publication is attached, and/or,
- H. ☐ No notice required

FOR OCD ONLY

- ☐ Notice Complete
- ☒ Application
Content
Complete

- 3) **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

12/10/2020

Date

(832) 220-3202

Phone Number

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 **Arnott Ramsay NCT-B** Address **L-32-25S-37E** County **Lea**
Lease **329326** Well No. **326919** Unit Letter-Section-Township-Range **30-025-47990**
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>33820</i>		<i>37240</i>
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	<i>3,130' – 3,300'</i>		<i>3,300' – 3,525'</i>
Method of Production (Flowing or Artificial Lift)	<i>Artificial Lift</i>		<i>Artificial Lift</i>
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)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	<i>33.1 API / 1,346 BTU</i>		<i>33.1 API / 1,346 BTU</i>
Producing, Shut-In or New Zone	<i>New Zone</i>		<i>New Zone</i>
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.)	<i>See Attached</i> Date: Rates:	Date: Rates:	<i>See Attached</i> Date: Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil <i>47</i> % Gas <i>71</i> %	Oil % Gas %	Oil <i>53</i> % Gas <i>29</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 12/10/2020

TYPE OR PRINT NAME Marshall Bates TELEPHONE NO. (832) 241-8080

E-MAIL ADDRESS Marshall@FAEnergyus.com

faeIIoperating

December 9, 2020

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

Re: Arnott Ramsay NCT-B #020: API 30-025-47990
Jalmat Pool: 33820
Langlie Mattix Pool: 37240

Dear Mr. McClure:

FAE II Operating LLC, as operator, will be filing applications with the New Mexico Oil Conservation Division for approval of the aforementioned commingling project. After a review of internal records, this letter serves as notice that the operator and interest owners are identical for the pools listed above.

If you have any questions, please feel free to contact the undersigned by phone at (832) 219-0809 or by email at rebecca@faenergyus.com.

Thank you for your attention to this matter.

Sincerely,

FAE II Operating, LLC

A handwritten signature in blue ink, appearing to read 'RW' with a stylized flourish at the end.

Rebecca Wing
Land

faeIIoperating

December 9, 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 Jalmat and Langlie Mattix Pools for the Arnott Ramsay NCT-B #20 well located in Sec. 32, 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 Jalmat and Langlie Mattix Pools for its Arnott Ramsay NCT-B #20 proposed well located in Unit Letter L, Section 32, T-25S, R-37E, 2,240 feet FSL and 350 feet FWL, as shown in the attached C-102's for each zone.

The Arnott Ramsay NCT-B #20 will be open to the Yates-Seven Rivers-Queen formation, which translates to both the JALMAT; TAN-YATES-7 RVRS pool [Pool ID: 33820] and the LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG [Pool ID: 37240]. Since this well has not yet been completed, the historical production curve in this formation does not exist.

To develop a production forecast, eighteen (18) surrounding wells with historical production from the Jalmat and four (4) surrounding wells with historical production in the Langlie Mattix were used as an offset by taking the average of the oil, gas, and water production. The resulting analog curves are shown in Exhibits A and B. From there, a decline curve was utilized based on the aforementioned historical production from both zones. Furthermore, Geology studied the logs in the surrounding area to help determine the location of the new perforations in the Yates-Seven Rivers-Queen formation.

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 C. This forecast for the Arnott Ramsay NCT-B #20 proved that an IP of 9.8 BOPD and 23.4 MCFPD is the expected total, and of that, 5.2 BOPD and 6.8 MCFPD will come from the Langlie Mattix zone. The Jalmat is projected to yield 4.6 BOPD and 16.6 MCFPD with the additional intervals that will be opened up. This information along with the percentage allocation across the zones is shown in Exhibit D.

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 marshall@faenergyus.com or by telephone at (832) 241-8080.

Very truly yours,



FAE II Operating, LLC

Exhibit A – Historical Average Production in the Proposed Zone

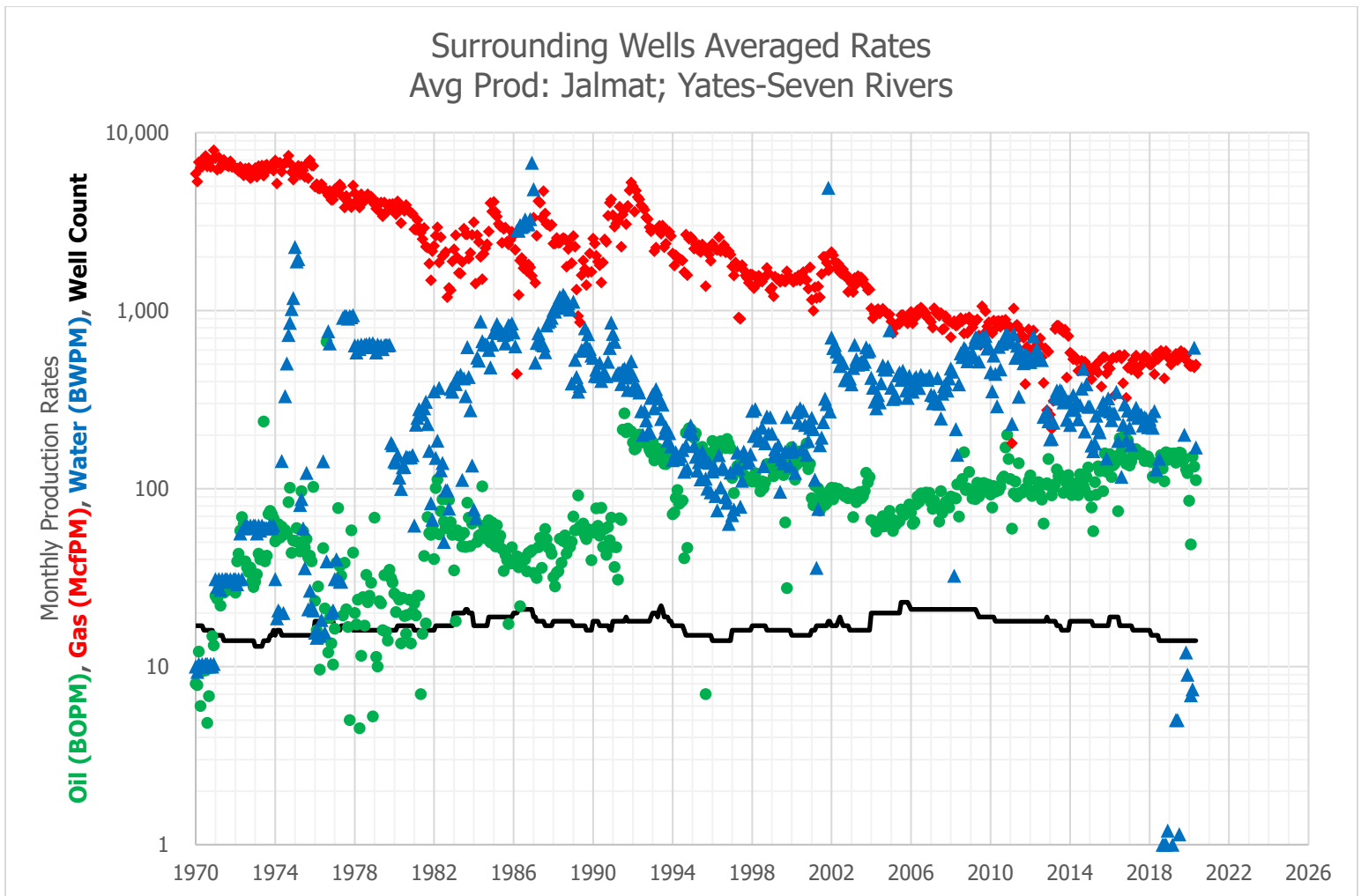
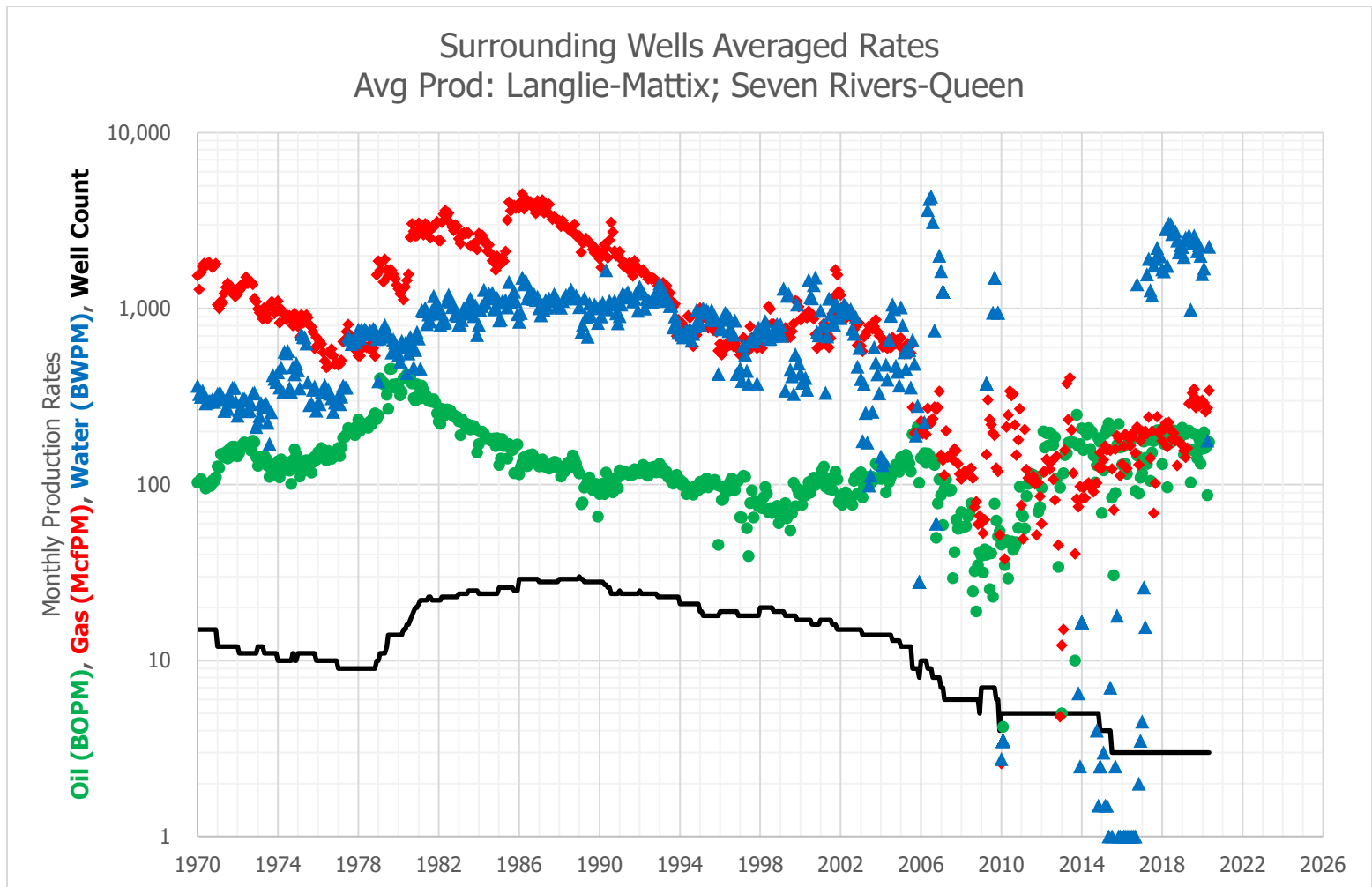


Exhibit B – Historical Average Production in the Proposed Zone



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Exhibit C – Historical Production and Decline Curve

Surrounding Wells Averaged Rates Avg Prod: Langlie-Mattix; Seven Rivers-Queen					Surrounding Wells Averaged Rates Avg Prod: Jalmat; Yates-Seven Rivers					Synthetic Decline Curve			
Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Well Count	Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Well Count	Month	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)
1/1/2015	69	124	-	4	1/1/2015	91	445	289	18	1	299	710	1,490
2/1/2015	121	138	3	4	2/1/2015	78	412	174	18	2	298	708	1,485
3/1/2015	195	166	2	4	3/1/2015	58	462	162	17	3	296	707	1,480
4/1/2015	208	157	2	4	4/1/2015	109	475	179	17	4	295	705	1,475
5/1/2015	223	160	1	4	5/1/2015	92	499	257	17	5	294	703	1,470
6/1/2015	202	156	7	4	6/1/2015	133	450	219	17	6	292	701	1,465
7/1/2015	84	122	1	3	7/1/2015	125	522	207	17	7	291	700	1,460
8/1/2015	31	72	1	3	8/1/2015	132	374	275	17	8	289	698	1,456
9/1/2015	90	159	3	3	9/1/2015	97	548	305	17	9	288	696	1,451
10/1/2015	168	189	18	3	10/1/2015	158	547	282	17	10	287	694	1,446
11/1/2015	221	182	1	3	11/1/2015	124	442	147	17	11	285	693	1,441
12/1/2015	163	112	1	3	12/1/2015	150	482	321	17	12	284	691	1,437
1/1/2016	130	130	1	3	1/1/2016	156	472	272	19	13	282	689	1,432
2/1/2016	165	165	1	3	2/1/2016	116	532	242	19	14	281	687	1,427
3/1/2016	131	193	1	3	3/1/2016	135	542	265	19	15	280	686	1,423
4/1/2016	115	124	1	3	4/1/2016	138	334	264	19	16	278	684	1,418
5/1/2016	184	183	1	3	5/1/2016	152	544	349	19	17	277	682	1,413
6/1/2016	174	166	1	3	6/1/2016	75	556	185	19	18	276	681	1,409
7/1/2016	187	185	1	3	7/1/2016	192	561	1	17	19	274	679	1,404
8/1/2016	189	199	1	3	8/1/2016	162	538	117	17	20	273	677	1,399
9/1/2016	92	151	1	3	9/1/2016	147	391	228	17	21	272	676	1,395
10/1/2016	147	213	1,375	3	10/1/2016	198	562	297	17	22	271	674	1,390
11/1/2016	89	129	2	3	11/1/2016	138	324	187	17	23	269	672	1,386
12/1/2016	110	177	4	3	12/1/2016	186	478	274	17	24	268	670	1,381
1/1/2017	116	200	5	3	1/1/2017	135	482	220	17	25	267	669	1,376
2/1/2017	176	191	26	3	2/1/2017	142	466	177	17	26	265	667	1,372
3/1/2017	142	201	16	3	3/1/2017	157	525	261	16	27	264	665	1,367
4/1/2017	131	194	1,566	3	4/1/2017	159	491	262	16	28	263	664	1,363
5/1/2017	180	242	1,919	3	5/1/2017	166	559	285	16	29	262	662	1,358
6/1/2017	105	141	1,271	3	6/1/2017	156	445	249	16	30	260	660	1,354
7/1/2017	152	201	1,185	3	7/1/2017	157	481	259	16	31	259	659	1,350
8/1/2017	177	69	1,758	3	8/1/2017	159	493	260	16	32	258	657	1,345
9/1/2017	198	102	1,911	3	9/1/2017	153	536	226	16	33	257	656	1,341
10/1/2017	203	242	2,216	3	10/1/2017	143	558	251	16	34	255	654	1,336
11/1/2017	203	196	2,040	3	11/1/2017	151	545	246	16	35	254	652	1,332
12/1/2017	184	205	1,986	3	12/1/2017	151	539	221	16	36	253	651	1,328
1/1/2018	131	177	1,675	3	1/1/2018	142	498	245	16	37	252	649	1,323
2/1/2018	171	206	1,633	3	2/1/2018	141	496	257	15	38	251	647	1,319
3/1/2018	196	223	2,831	3	3/1/2018	117	518	219	15	39	249	646	1,314
4/1/2018	97	163	1,752	3	4/1/2018	115	440	272	15	40	248	644	1,310
5/1/2018	203	226	3,039	3	5/1/2018	119	570	128	15	41	247	643	1,306
6/1/2018	173	206	3,026	3	6/1/2018	128	532	0	15	42	246	641	1,302
7/1/2018	187	181	2,651	3	7/1/2018	132	567	147	14	43	245	639	1,297
8/1/2018	203	196	2,795	3	8/1/2018	154	594	0	14	44	243	638	1,293
9/1/2018	192	178	2,745	3	9/1/2018	129	567	1	14	45	242	636	1,289
10/1/2018	183	128	2,438	3	10/1/2018	110	415	1	14	46	241	635	1,285
11/1/2018	202	177	2,092	3	11/1/2018	160	593	1	14	47	240	633	1,280
12/1/2018	187	171	2,294	3	12/1/2018	145	546	1	14	48	239	631	1,276
1/1/2019	210	168	2,240	3	1/1/2019	158	543	0	14	49	238	630	1,272
2/1/2019	148	156	1,971	3	2/1/2019	147	497	1	14	50	237	628	1,268
3/1/2019	194	142	2,528	3	3/1/2019	156	513	1	14	51	235	627	1,264
4/1/2019	198	161	2,436	3	4/1/2019	158	534	0	14	52	234	625	1,259
5/1/2019	203	288	2,609	3	5/1/2019	140	570	5	14	53	233	624	1,255
6/1/2019	103	295	986	3	6/1/2019	147	526	5	14	54	232	622	1,251
7/1/2019	157	330	2,371	3	7/1/2019	160	547	1	14	55	231	620	1,247
8/1/2019	195	348	2,602	3	8/1/2019	158	592	1	14	56	230	619	1,243
9/1/2019	160	274	2,403	3	9/1/2019	142	561	0	14	57	229	617	1,239
10/1/2019	141	302	2,120	3	10/1/2019	147	576	200	14	58	228	616	1,235
11/1/2019	181	281	2,293	3	11/1/2019	128	561	12	14	59	227	614	1,231
12/1/2019	132	294	2,000	3	12/1/2019	122	517	9	14	60	226	613	1,227
1/1/2020	159	301	1,572	3	1/1/2020	85	491	1	14				
2/1/2020	198	290	1,693	3	2/1/2020	49	486	7	14				
3/1/2020	162	259	1	3	3/1/2020	151	491	7	14				
4/1/2020	87	272	178	3	4/1/2020	133	480	619	14				
5/1/2020	174	342	2,248	3	5/1/2020	111	497	170	14				
6/1/2020	122	295	2,175	3	6/1/2020	156	447	195	14				

Exhibit D – Decline Curve IP Rates and Zone Allocation Percentage

Zone (1)	Zone (2)	Oil IP (BOPD)	Gas IP (MCFD)	Water IP (BWPD)
Jalmat	Yates-Seven Rivers	4.6	16.6	4.9
Langlie Mattix	Seven Rivers-Queen	5.2	6.8	44.1
	Total	9.8	23.4	49.0
Jalmat	Yates-Seven Rivers	47%	71%	10%
Langlie Mattix	Seven Rivers-Queen	53%	29%	90%
	Total (%)	100%	100%	100%

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
August 1, 2011

Permit 288539

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-47990	2. Pool Code 37240	3. Pool Name LANGLIE MATTIX
4. Property Code 326919	5. Property Name ARNOTT RAMSAY NCT-B	6. Well No. 020
7. OGRID No. 329326	8. Operator Name FAE II Operating LLC	9. Elevation 2977

10. Surface Location

UL - Lot L	Section 32	Township 25S	Range 37E	Lot Idn L	Feet From 2240	N/S Line S	Feet From 350	E/W Line W	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 40.00	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

<table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr><td style="width: 25%; height: 30px;"></td><td style="width: 25%; height: 30px;"></td><td style="width: 25%; height: 30px;"></td><td style="width: 25%; height: 30px;"></td></tr> <tr><td style="height: 30px;"></td><td style="height: 30px;"></td><td style="height: 30px;"></td><td style="height: 30px;"></td></tr> <tr><td style="height: 30px;"></td><td style="height: 30px;"></td><td style="height: 30px;"></td><td style="height: 30px;"></td></tr> <tr><td style="height: 30px;"></td><td style="height: 30px;"></td><td style="height: 30px;"></td><td style="height: 30px;"></td></tr> </table>																	<p style="text-align: center;">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(s) 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>E-Signed By: Huxley Song Title: CEO Date: 11/6/2020</p> <hr/> <p style="text-align: center;">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>Surveyed By: Gary Jones Date of Survey: 9/2/2020 Certificate Number: 7977</p>

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102

August 1, 2011

Permit 288539

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-47990	2. Pool Code 33820	3. Pool Name JALMAT;TAN-YATES-7 RVRS (OIL)
4. Property Code 326919	5. Property Name ARNOTT RAMSAY NCT-B	6. Well No. 020
7. OGRID No. 329326	8. Operator Name FAE II Operating LLC	9. Elevation 2977

10. Surface Location

UL - Lot L	Section 32	Township 25S	Range 37E	Lot Idn L	Feet From 2240	N/S Line S	Feet From 350	E/W Line W	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 40.00	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

	<p align="center">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(s) 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>E-Signed By: Huxley Song Title: CEO Date: 11/6/2020</p>		
	<p align="center">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>Surveyed By: Gary Jones Date of Survey: 9/2/2020 Certificate Number: 7977</p>		