

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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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



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.

Marshall Bates		Engineering Tech	6/25/2021
Print or Type Name	Signature	Title	Date
		Marshall@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 Address
Emery King SE 3 J-01-23S-36E Lea
Lease Well No. Unit Letter-Section-Township-Range County
329326 326929 30-025-09196 X
OGRID No. Property Code API No. Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat		Langlie Mattix
Pool Code	79240		37240
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3,109 – 3,247'		3,595 – 3,732
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)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	35.0API / 1.372 BTU		35.0 API / 1.372 BTU
Producing, Shut-In or New Zone	Producing		Shut-In
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.)	See Attached Date: Rates:	Date: Rates:	See Attached 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 Gas 0 % 71 %	Oil Gas % %	Oil Gas 100 % 29 %

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 TITLE Engineering Tech DATE 6/24/2021
TYPE OR PRINT NAME Marshall Bates TELEPHONE NO. (832) 706 - 0041
E-MAIL ADDRESS Marshall@FAEnergyus.com

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June 22, 2021

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

Re: Emery King SE #003: API 30-025-09196
Jalmat Pool: 79240
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 phone at (832) 220-9188 or by email at steven@faenergyus.com.

Thank you for your attention to this matter.

Sincerely,

FAE II Operating, LLC



Steven Lehrbass
Land

faeIIoperating

June 23, 2021

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 Emery King SE #3 well located in Sec. 1, T-23S, R-36E, 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 Emery King SE #3 well located in Unit Letter J, Section 1, T-23S, R-36E, 2,310 feet FSL and 1,650 feet FEL, as shown in the attached C-102's for each zone.

Emery King SE #3 is currently open to the Yates-Seven Rivers interval, which translates to the JALMAT; TAN-YATES-7 RVRS (GAS) [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 Emery King SE #3 is the Seven Rivers-Queen, which translates to the LANGLE MATTIX; 7 RVRS-Q-GRAYBURG [Pool ID: 37240]. To develop a forecast for this zone, forty-five (45) surrounding wells with production history from the Seven Rivers-Queen were used as an offset to prove up hole potential 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.

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 proved that an IP of 2.3 BOPD and 21.3 MCFPD is the expected total, and of that, 2.3 BOPD and 6.3 MCFPD will come from the Seven Rivers-Queen zone. The Yates-Seven Rivers is projected to yield 0.0 BOPD and 15.0 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.

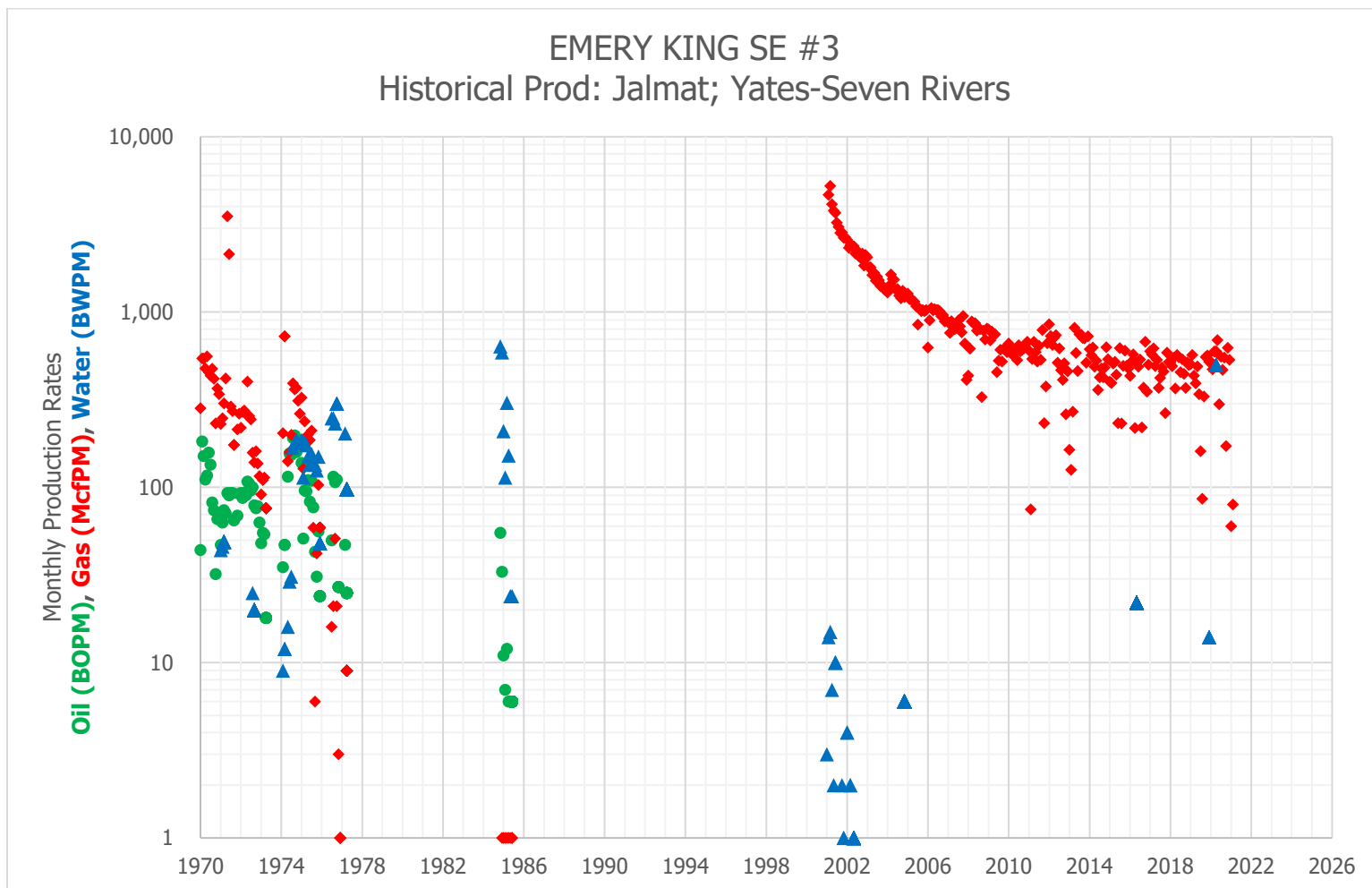
Very truly yours,



FAE II Operating, LLC

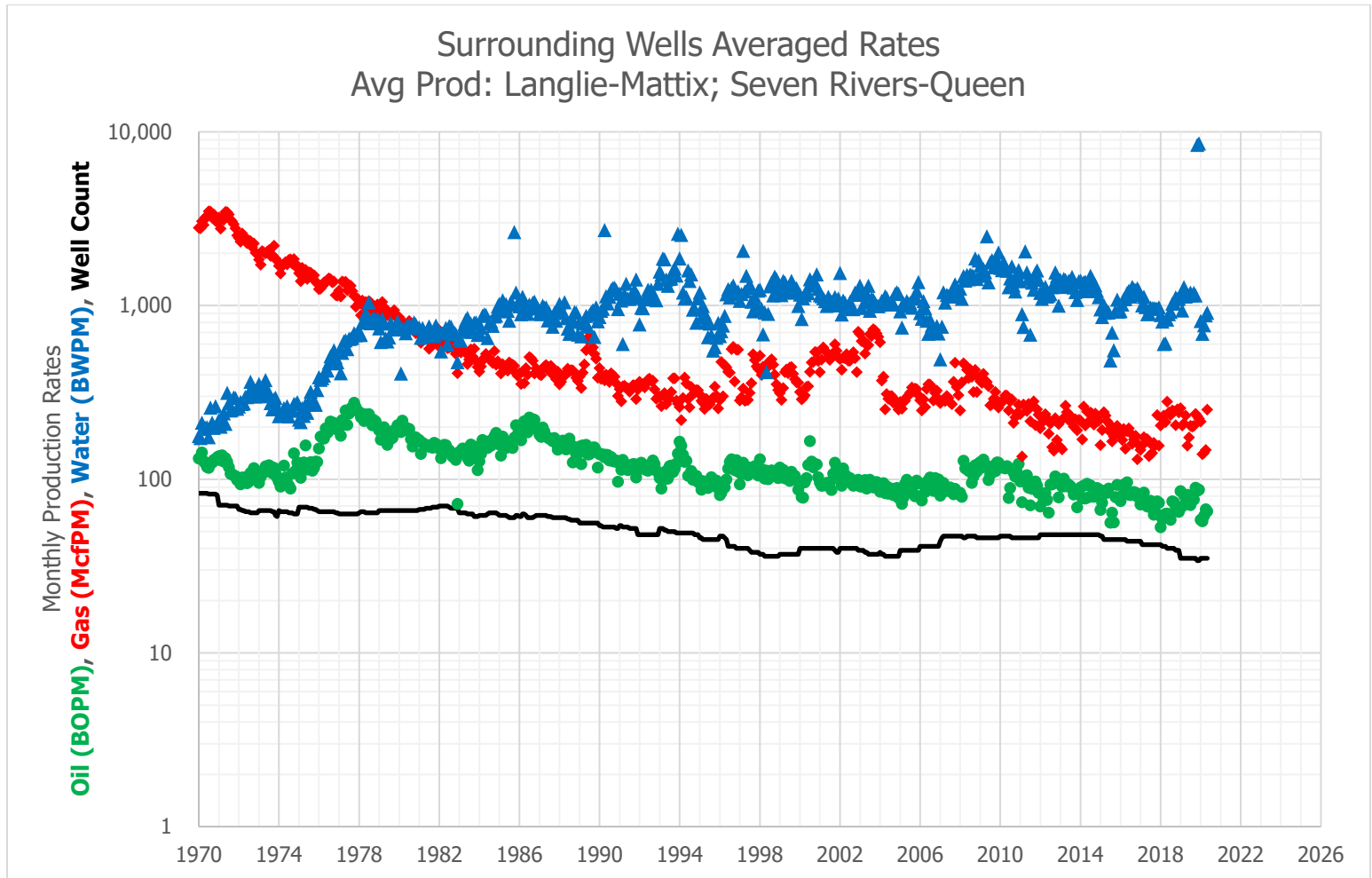
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Exhibit A – Historical and Forecast Production in the Current Zone



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Exhibit B – Historical Average Production in the Proposed Zone



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Exhibit C – Historical Production and Decline Curve

Surrounding Wells Averaged Rates					EMERY KING SE #3				Synthetic Decline Curve			
Avg Prod: Langlie-Mattix; Seven Rivers-Queen					Historical Prod: Jalmat; Yates-Seven Rivers							
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)
7/1/2015	56	205	481	45	9/1/2011		790		1	70.4	647	1,249
8/1/2015	64	165	698	45	10/1/2011		233		2	70.1	645	1,245
9/1/2015	56	176	552	45	11/1/2011		377		3	69.7	644	1,241
10/1/2015	79	192	930	45	12/1/2011		664		4	69.4	642	1,237
11/1/2015	92	203	1,081	45	1/1/2012		851		5	69.1	640	1,232
12/1/2015	77	188	921	45	2/1/2012		731		6	68.7	639	1,228
1/1/2016	75	179	927	45	3/1/2012		650		7	68.4	637	1,224
2/1/2016	81	168	1,012	45	4/1/2012		717		8	68.1	636	1,220
3/1/2016	93	195	1,089	45	5/1/2012		737		9	67.8	634	1,216
4/1/2016	88	149	1,091	45	6/1/2012		515		10	67.4	632	1,212
5/1/2016	96	189	1,179	44	7/1/2012		620		11	67.1	631	1,208
6/1/2016	81	196	1,212	44	8/1/2012		467		12	66.8	629	1,204
7/1/2016	81	184	1,124	44	9/1/2012		410		13	66.5	628	1,200
8/1/2016	82	160	1,281	44	10/1/2012		511		14	66.1	626	1,196
9/1/2016	84	169	1,239	44	11/1/2012		261		15	65.8	625	1,193
10/1/2016	83	178	1,222	44	12/1/2012		460		16	65.5	623	1,189
11/1/2016	79	130	1,256	44	1/1/2013		164		17	65.2	621	1,185
12/1/2016	79	157	1,214	44	2/1/2013		126		18	64.9	620	1,181
1/1/2017	71	147	1,149	44	3/1/2013		270		19	64.6	618	1,177
2/1/2017	78	156	1,002	42	4/1/2013		815		20	64.3	617	1,173
3/1/2017	84	175	1,121	42	5/1/2013		585		21	64.0	615	1,169
4/1/2017	73	170	978	42	6/1/2013		462		22	63.7	614	1,165
5/1/2017	70	170	891	42	7/1/2013		746		23	63.4	612	1,162
6/1/2017	69	136	902	42	8/1/2013		743		24	63.1	611	1,158
7/1/2017	75	160	972	42	9/1/2013		711		25	62.8	609	1,154
8/1/2017	71	141	965	42	10/1/2013		708		26	62.5	608	1,150
9/1/2017	62	162	963	42	11/1/2013		515		27	62.2	606	1,146
10/1/2017	64	157	961	42	12/1/2013		726		28	61.9	605	1,143
11/1/2017	75	234	956	42	1/1/2014		615		29	61.6	603	1,139
12/1/2017	73	156	974	42	2/1/2014		567		30	61.3	602	1,135
1/1/2018	53	203	882	42	3/1/2014		628		31	61.0	600	1,131
2/1/2018	59	223	806	41	4/1/2014		488		32	60.7	599	1,128
3/1/2018	61	232	599	41	5/1/2014		528		33	60.4	597	1,124
4/1/2018	63	213	605	41	6/1/2014		360		34	60.1	596	1,120
5/1/2018	63	279	829	40	7/1/2014		425		35	59.8	594	1,117
6/1/2018	61	242	890	40	8/1/2014		477		36	59.5	593	1,113
7/1/2018	58	234	918	40	9/1/2014		425		37	59.2	591	1,109
8/1/2018	75	249	1,023	40	10/1/2014		482		38	59.0	590	1,106
9/1/2018	74	246	1,034	40	11/1/2014		630		39	58.7	588	1,102
10/1/2018	69	204	1,114	39	12/1/2014		538		40	58.4	587	1,098
11/1/2018	67	252	1,086	39	1/1/2015		401		41	58.1	585	1,095
12/1/2018	65	242	1,095	39	2/1/2015		394		42	57.8	584	1,091
1/1/2019	85	256	1,144	35	3/1/2015		508		43	57.6	582	1,088
2/1/2019	70	204	935	35	4/1/2015		521		44	57.3	581	1,084
3/1/2019	81	209	1,272	35	5/1/2015		440		45	57.0	579	1,080
4/1/2019	78	233	1,124	35	6/1/2015		233		46	56.7	578	1,077
5/1/2019	81	156	1,157	35	7/1/2015		624		47	56.5	576	1,073
6/1/2019	74	174	1,136	35	8/1/2015		232		48	56.2	575	1,070
7/1/2019	71	202	1,186	35	9/1/2015		494		49	55.9	574	1,066
8/1/2019	76	201	1,148	35	10/1/2015		603		50	55.7	572	1,063
9/1/2019	76	203	1,180	35	11/1/2015		494		51	55.4	571	1,059
10/1/2019	89	237	1,144	35	12/1/2015		478		52	55.1	569	1,056
11/1/2019	86	230	8,390	34	1/1/2016		432	-	53	54.9	568	1,052
12/1/2019	87	223	8,563	34	2/1/2016		525	-	54	54.6	566	1,049
1/1/2020	58	215	814	35	3/1/2016		574	-	55	54.4	565	1,045
2/1/2020	57	139	687	35	4/1/2016		218	-	56	54.1	564	1,042
3/1/2020	61	142	768	35	5/1/2016		514	22	57	53.8	562	1,039
4/1/2020	67	147	876	35	6/1/2016		489	-	58	53.6	561	1,035
5/1/2020	65	251	909	35	7/1/2016		536	-	59	53.3	559	1,032
6/1/2020	66	211	828	35	8/1/2016		220	-	60	53.1	558	1,028
7/1/2020	54	226	788	35	9/1/2016		371	-				
8/1/2020	52	215	869	35	10/1/2016		677	-				
9/1/2020	64	212	870	34	11/1/2016		352	-				
10/1/2020	70	191	934	34	12/1/2016		501	-				
11/1/2020	75	242	1,051	32	1/1/2017		597					
12/1/2020	77	158	1,073	32	2/1/2017		574					

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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	0.0	15.0	0.0
Langlie Mattix	Seven Rivers-Queen	2.3	6.3	41.1
	Total	2.3	21.3	41.1
Jalmat	Yates-Seven Rivers	0%	71%	0%
Langlie Mattix	Seven Rivers-Queen	100%	29%	100%
	Total (%)	100%	100%	100%

30025091960000

FAE



EMERY KING SE 3

SPUD DATE : 8/25/1959

T23S R36E S1

Log
Depth(ft)

3100 -

3150 -

3200 -

3250 -

3300 -

3350 -

3400 -

3450 -

3500 -

3550 -

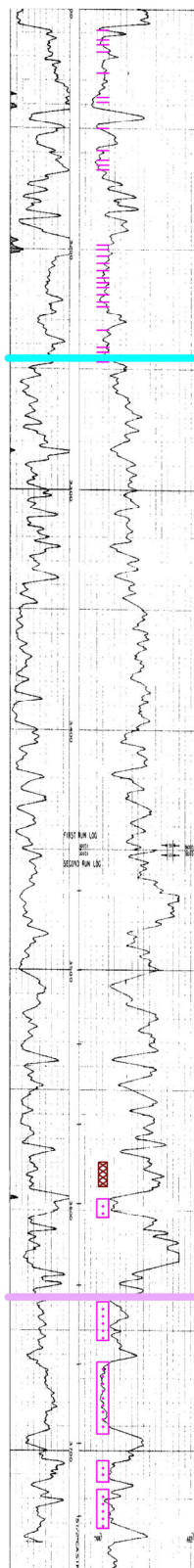
3600 -

3650 -

3700 -

3750 -

3800 -



7-RVRS_D

QUEEN

API	Source	Type	Top Perf	Btm Perf
30025091960000	WBD	ACTIVE	3109	3247
30025091960000	WBD	INACTIVE	3595	3603
30025091960000	WBD	INACTIVE	3638	3654
30025091960000	WBD	INACTIVE	3663	3693
30025091960000	WBD	INACTIVE	3704	3713
30025091960000	WBD	INACTIVE	3716	3732

EMERY KING SE 3

ELEV_KB : 3,416

TD : 3,758

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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 August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-09196	² Pool Code 79240	³ Pool Name JALMAT; TAN-YATES-7 RVRS (GAS)
⁴ Property Code 326929	⁵ Property Name EMERY KING SE	⁶ Well Number #003
⁷ OGRID No. 329326	⁸ Operator Name FAE II OPERATING, LLC	⁹ Elevation

¹⁰ Surface Location

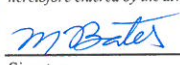
UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	1	23S	36E		2310	S	1650	E	LEA

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
J	1	23S	36E		2310	S	1650	E	LEA

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 	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.  6/22/2021 Signature Date Marshall Bates Printed Name Marshall@FAEnergyus.com E-mail Address	
	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
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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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 August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-09196		² Pool Code 37240		³ Pool Name LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG					
⁴ Property Code 326929		⁵ Property Name EMERY KING SE						⁶ Well Number #003	
⁷ OGRID No. 329326		⁸ Operator Name FAE II OPERATING, LLC						⁹ Elevation	
¹⁰ Surface Location									
UL - Lot J	Section 1	Township 23S	Range 36E	Lot Idn	Feet from 2310	N/S Line S	Feet From 1650	E/W Line E	County LEA
¹¹ Bottom Hole Location If Different From Surface									
UL - Lot J	Section 1	Township 23S	Range 36E	Lot Idn	Feet from 2310	N/S Line S	Feet From 1650	E/W Line E	County LEA
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 				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.	
				Signature <u>M. Bates</u> Date 6/22/2021	
				Printed Name Marshall Bates	
				E-mail Address Marshall@FAEnergyus.com	
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	

Well Name: **EMERY KING SE #003** Lease No: _____ Lease Type: _____ State: _____
 Township: **23-S** Range: **36-E** Sec: **01-J** Location: **2310' FSL & 1650' FEL**
 County: **Lea** State: **NM** API: **30-025-09196** Formation: **Jalmat-Langlie Mattix; Y-7R-Q**

Surface Csg

Size: **8-5/8"**
 Wt.&Thrd: **24#**
 Grade: **H-40**
 Set @: **317'**
 Sxs cmt: **200 sxs**
 Circ: **Circ**
 TOC: **Surface**
 Hole Size: **11-1/4"**

Sqz csg leak 592'

PROPOSED

KB: _____
 DF: **3416'**
 GL: **3406'**
 Spud Date: **8/24/1959**
 Compl. Date: **9/5/1959**

History - Highlights

1977-05: TA well
2000-06: Sqz csg leak; Bond log showed cmt behind csg 568-614'. Add Perfs & Acidize 7 RVRs, Acidize QUEEN
2001-01: RC to Jalmat Pool, Acidize & Foam Frac
Proposed: DO BP; CO to PBTD; Acidize existing perfs; DHC Jalmat-Langlie Mattix Pools

YATES (Top @ 2948')

3109', 3113', 3115', 3118', 3127', 3137', 3139', 3150', 3159', 3163', 3165', 3167' (1 SPF) - Jan 2001
 Acidized w/ 2550 gals 15% MCA acid, 19 ball sealers & flush w/ 14 bbls 2% KCL water; Foam Frac w/ 7 RVRs w/ 238,000 gals gel wtr (54.6% CO₂), 50,000# 20/40 sand, 75,000# 10/20 sand, & 375,000# 8/16 sand

7-RIVERS (Top @ 3170')

3198', 3200', 3203', 3206', 3209', 3212', 3214', 3216', 3219', 3222', 3224', 3234', 3241', 3243', 3247' (1 SPF) - Jan 2001

Acidized w/ 7150 gals 15% MCA acid, 63 ball sealers & flush w/ 28 bbls 2% KCL water; Foam Frac w/ YATES

Acidize 3109-3247' perfs w/ 3000 gals 15% NEFE HCL acid, 1000# rock salt, & flush w/ 350 bbls - Proposed

3595'-3603' (5 holes) - Jun 2000

Acidized w/ 900 gals 15% NEFE acid

QUEEN (Top @ 3626')

3638'-3654', 3663'-3693', 3709'-3713', 3716'-3732' - Sep 1959

Frac w/ 24,000 gal oil, 24,000# sand, & 74 ball sealers

Acidized w/ 4400 gal 15% NEFE acid w/ 192 ball sealers - Jun 2000

Acidize 3595-3732' perfs w/ 5000 gals 15% NEFE HCL acid, 1500# rock salt, & flush w/ 500 bbls - Proposed

SN 3651'
 EOT 3687'

Production Csg

Size: **5-1/2"**
 Wt.&Thrd: **15.5#**
 Grade: **J-55**
 Set @: **3757'**
 Sxs Cmt: **600 sxs**
 Circ: _____
 TOC: **1240'**
 Hole Size: **7-7/8"**

PBTD 3747'
TD 3758'

Tubulars - Capacities and Performance

2-3/8" 4.7# J-55 EUE Tubing (113 lts 2-3/8" tbg, SN, 4' perf sub, MA w/ bull plug)
 C-114D-143-64 pumping unit

Well Name: **EMERY KING SE #003** Lease No: _____ Lease Type: _____ State: _____
 Township: **23-S** Range: **36-E** Sec: **01-J** Location: **2310' FSL & 1650' FEL**
 County: **Lea** State: **NM** API: **30-025-09196** Formation: **Jalmat; TANSILL-YATES-7 RVRs**

Surface Csg

Size: **8-5/8"**
 Wt.&Thrd: **24#**
 Grade: **H-40**
 Set @: **317'**
 Sxs cmt: **200 sxs**
 Circ: **Circ**
 TOC: **Surface**
 Hole Size: **11-1/4"**

Sqz csg leak 592'

KB: _____

DF: **3416'**

GL: **3406'**

Spud Date: **8/24/1959**

Compl. Date: **9/5/1959**

History - Highlights

1977-05: TA well

2000-06: Sqz csg leak; Bond log showed cmt behind csg 568-614'. Add Perfs & Acidize 7 RVRs, Acidize QUEEN

2001-01: RC to Jalmat Pool, Acidize & Foam Frac

All info from OCD well files ONLY

YATES (Top @ 2948')

3109', 3113', 3115', 3118', 3127', 3137', 3139', 3150', 3159', 3163', 3165', 3167' (1 SPF) - Jan 2001
 Acidized w/ 2550 gals 15% MCA acid, 19 ball sealers & flush w/ 14 bbls 2% KCL water; Foam Frac w/ 7 RVRs w/ 238,000 gals gel wtr (54.6% CO₂), 50,000# 20/40 sand, 75,000# 10/20 sand, & 375,000# 8/16 sand

7-RIVERS (Top @ 3170')

3198', 3200', 3203', 3206', 3209', 3212', 3214', 3216', 3219', 3222', 3224', 3234', 3241', 3243', 3247' (1 SPF) - Jan 2001

Acidized w/ 7150 gals 15% MCA acid, 63 ball sealers & flush w/ 28 bbls 2% KCL water; Foam Frac w/ YATES

3595'-3603' (5 holes) - Jun 2000 [ISOLATED]

Acidized w/ 900 gals 15% NEFE acid

QUEEN (Top @ 3626')

3638'-3654', 3663'-3693', 3709'-3713', 3716'-3732' - Sep 1959 [ISOLATED]

Frac w/ 24,000 gal oil, 24,000# sand, & 74 ball sealers

Acidized w/ 4400 gal 15% NEFE acid w/ 192 ball sealers - Jun 2000

EOT 3454'

CIBP 3579'

Production Csg

Size: **5-1/2"**
 Wt.&Thrd: **15.5#**
 Grade: **J-55**
 Set @: **3757'**
 Sxs Cmt: **600 sxs**
 Circ: _____
 TOC: **1240'**
 Hole Size: **7-7/8"**

PBTD 3579'

TD 3758'

Tubulars - Capacities and Performance

2-3/8" 4.7# J-55 EUE Tubing (108 jts 2-3/8" tbg, SN, MA)
 C-114D-143-64 pumping unit

From: [Engineer, OCD, EMNRD](#)
To: [Vanessa Neal](#); [Marshall Bates](#)
Cc: [McClure, Dean, EMNRD](#); [Kautz, Paul, EMNRD](#); [Hawkins, James, EMNRD](#); [Powell, Brandon, EMNRD](#); lisa@rwbyram.com
Subject: Approved Administrative Order DHC-5136
Date: Wednesday, December 22, 2021 5:30:43 PM
Attachments: [DHC5136 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5136 which authorizes FAE II Operating, LLC (329326) to downhole commingle production from 2 pools in their Emery King SE #3 well (30-025-09196).

The administrative order is attached to this email and can also be found online at OCD Imaging.

Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.

Dean McClure
Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

From: [Vanessa Neal](#)
To: [McClure, Dean, EMNRD](#); [Marshall Bates](#)
Subject: [EXTERNAL] RE: downhole commingling application DHC-5136
Date: Tuesday, December 21, 2021 12:16:28 PM
Attachments: [image001.png](#)
[WBD Emery King SE #003 CURRENT-PROPOSED 2021-12.pdf](#)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Mr. McClure,

Please find the attached current and proposed wellbore diagrams for the downhole commingling application DHC-5136 which involves the Emery King SE #3 (30-025-09196) operated by FAE II Operating, LLC (329326).

Thank you,

Vanessa Neal | Sr Reservoir Engineer

forty acres energy

O [832.219.0990 \(ext 165\)](tel:832.219.0990)

C [979.255.3476](tel:979.255.3476)

From: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>
Sent: Wednesday, November 24, 2021 4:51 PM
To: Marshall Bates <marshall@faenergyus.com>; Vanessa Neal <vanessa@faenergyus.com>
Subject: downhole commingling application DHC-5136

Mr. Bates, Ms. Neal,

I am reviewing downhole commingling application DHC-5136 which involves the Emery King SE #3 (30-025-09196) operated by FAE II Operating, LLC (329326).

Please provide current and proposed well bore diagrams for this well.

Dean McClure
Petroleum Engineer, Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
(505) 469-8211

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION FOR DOWNHOLE COMMINGLING
SUBMITTED BY FAE II OPERATING, LLC**

ORDER NO. DHC-5136

ORDER

The Director of the New Mexico Oil Conservation Division (“OCD”), having considered the application and the recommendation of the Engineering Bureau, issues the following Order.

FINDINGS OF FACT

1. FAE II Operating, LLC (“Applicant”) submitted a complete application (“Application”) to downhole commingle the pools described in Exhibit A (“the Pools”) within the well bore of the well identified in Exhibit A (“the Well”).
2. Applicant proposed a method to allocate the oil and gas production from the Well to each of the Pools that is satisfactory to the OCD and protective of correlative rights.
3. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
4. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
5. To the extent that ownership is identical, Applicant submitted a certification by a licensed attorney or qualified petroleum landman that ownership in the Pools is identical as defined by 19.15.12.7(B) NMAC.
6. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools, provided evidence a copy of the Application was given to each person, and those persons either submitted a written waiver or did not file an objection to the Application.
7. Applicant provided notice of the Application to the Bureau of Land Management (“BLM”) or New Mexico State Land Office (“NMSLO”), as applicable.

CONCLUSIONS OF LAW

8. OCD has jurisdiction to issue this Order pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-6, 70-2-11, 70-2-12, 70-2-16, 70-2-17, and 19.15.12 NMAC.
9. The downhole commingling of the Pools is common, or Applicant has provided evidence that the fluids are compatible and will not damage the Pools in accordance with 19.15.12.11(A)(1) NMAC.
10. The bottom perforation of the lower zone is within one hundred fifty percent (150%) of the depth of the top perforation in the upper zone or Applicant has provided evidence that the

proposed commingling of the Pools shall not result in shut-in or flowing well bore pressure in excess of the commingled pool's fracture parting pressure in accordance with 19.15.12.11(A)(3) NMAC.

11. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
12. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools and provided evidence the application was given to those persons in accordance with 19.15.12.11(C)(1)(b) NMAC.
13. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

ORDER

1. Applicant is authorized to downhole commingle the Pools described in Exhibit A within the well bore of the well identified in Exhibit A.
2. Applicant shall allocate a fixed percentage of the oil and gas production from the Well to each of the Pools as described in Exhibit A.
3. If any of the pools being commingled is prorated, or the Well's production has been restricted by an OCD order in any manner, the allocated production from each producing pool in the commingled well bore shall not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to the well.
4. Prior to commingling production from the Pools within the Well's well bore, Applicant shall confirm the depth of the top of the Queen Formation with OCD's Engineering Bureau. If the depth confirmed by OCD's Engineering Bureau is different than the depth submitted within the Application as identified in Exhibit A, then no later than sixty (60) days after commingling production, Applicant shall submit Form C-103 to the OCD Engineering Bureau correcting the depth of the top of the Queen Formation.
5. If the Well is deepened, then Applicant shall conduct and, no later than forty-five (45) days after the Well is deepened, provide logs to OCD that are sufficient for OCD to determine which pool(s) each new completed interval of the Well will produce from.
6. If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred Applicant shall submit a new downhole commingling application to OCD to amend this Order to remove the pool that caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
7. If a completed interval of the Well is altered from what is submitted within the Application as identified in Exhibit A, then no later than sixty (60) days after the alteration, Applicant

shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.

8. If OCD determines that Applicant has failed to comply with any provision of this Order, OCD may take any action authorized by the Oil and Gas Act or the New Mexico Administrative Code (NMAC).
9. OCD retains jurisdiction of this matter and reserves the right to modify or revoke this Order as it deems necessary.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



**ADRIENNE SANDOVAL
DIRECTOR**

DATE: 12/22/2021

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

Order: **DHC-5136**

Operator: **FAE II Operating, LLC (329326)**

Well Name: **Emery King SE #3**

Well API: **30-025-09196**

Upper Zone	Pool Name: JALMAT; TAN-YATES-7 RVRS (GAS)		
	Pool ID: 79240	Current: X	New:
	Allocation: Fixed Percent	Oil: 0%	Gas: 71%
	Interval: Perforations	Top: 3,109	Bottom: 3,247
Intermediate Zone	Pool Name:		
	Pool ID:	Current:	New:
	Allocation:	Oil:	Gas:
	Interval:	Top:	Bottom:
Bottom of Interval within 150% of Upper Zone's Top of Interval:			
Lower Zone	Pool Name: LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG		
	Pool ID: 37240	Current:	New: X
	Allocation: Fixed Percent	Oil: 100%	Gas: 29%
	Interval: Perforations	Top: 3,595	Bottom: 3,732
Bottom of Interval within 150% of Upper Zone's Top of Interval: YES			
Top of Queen Formation: 3,626			

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

CONDITIONS

Action 33739

CONDITIONS

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 1000 Houston, TX 77079	OGRID: 329326
	Action Number: 33739
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.	12/22/2021