

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		
State A A/C 2	57	G-09-22S-36E	
Lease		Well No.	County
329326		30-025-20297	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)	3,137 – 3,572'		3,755 – 3,930
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 / 1.346 BTU		35.0 API / 1.346 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.)	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 % 61 %	Oil Gas % %	Oil Gas 100 % 39 %

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	Marshall Bates	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: State A A/C 2 #057: API 30-025-20297
Jalmat Pool: 79240
Langlie Mattix Pool: 37240

Dear Mr. McClure:

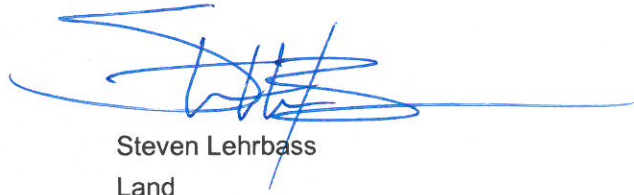
FAE II Operating LLC, as operator, will be filing applications with the New Mexico Oil Conservation Division for approval of the aforementioned commingling project. After a review of internal records, this letter serves as notice that the operator and interest owners are identical for the pools listed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

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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 State A A/C 2 #57 well located in Sec. 9, T-22S, 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 State A A/C 2 #57 well located in Unit Letter G, Section 9, T-22S, R-36E, 1,980 feet FNL and 1,980 feet FEL, as shown in the attached C-102's for each zone.

State A A/C 2 #57 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 State A A/C 2 #57 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-three (43) surrounding wells with production history from the Seven Rivers-Queen were used as an offset to prove up hole potential in the State A A/C 2 #57 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 3.8 BOPD and 30.8 MCFPD is the expected total, and of that, 3.8 BOPD and 11.9 MCFPD will come from the Seven Rivers-Queen zone. The Yates-Seven Rivers is projected to yield 0.0 BOPD and 18.9 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.

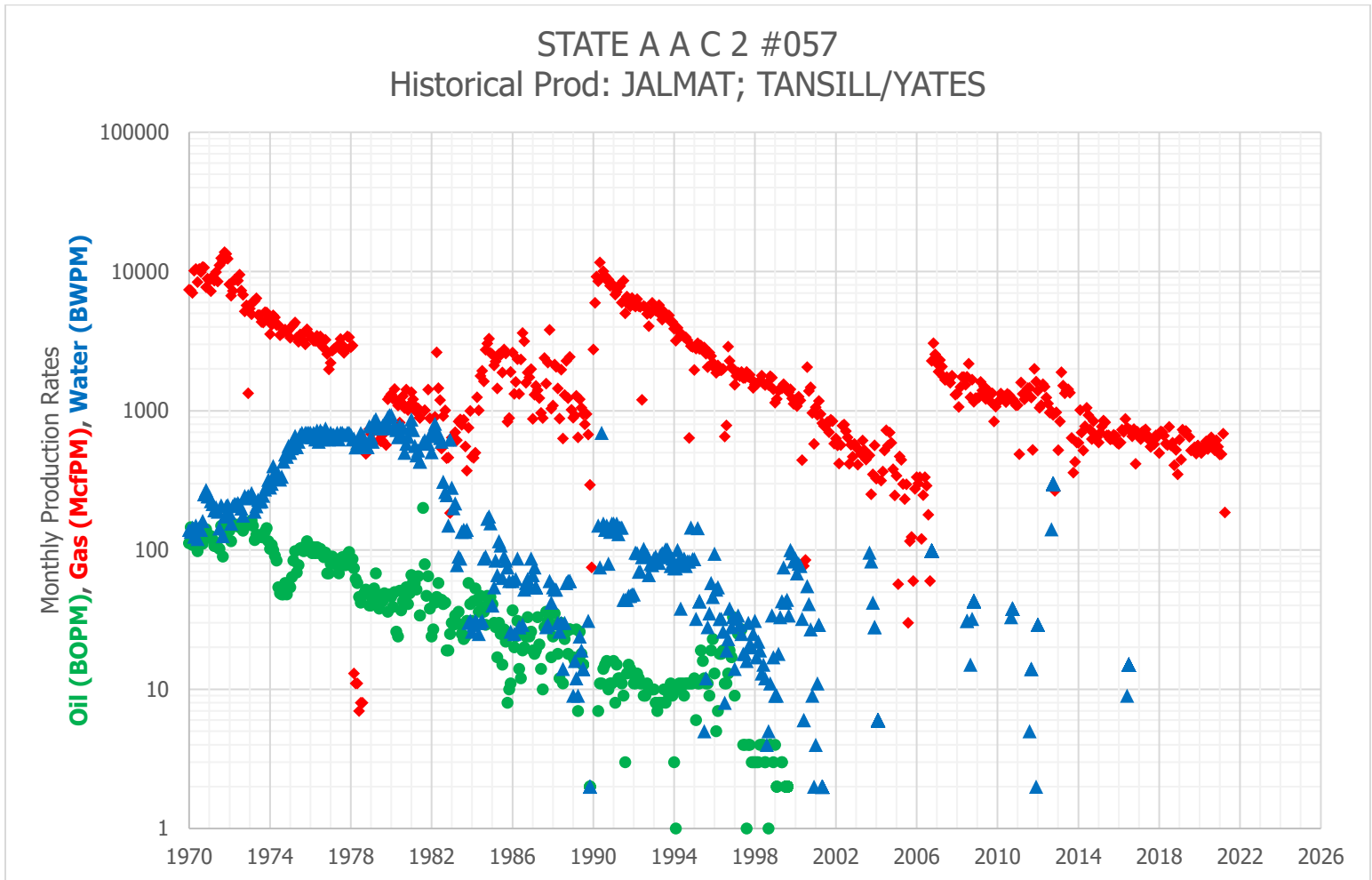
Very truly yours,



FAE II Operating, LLC

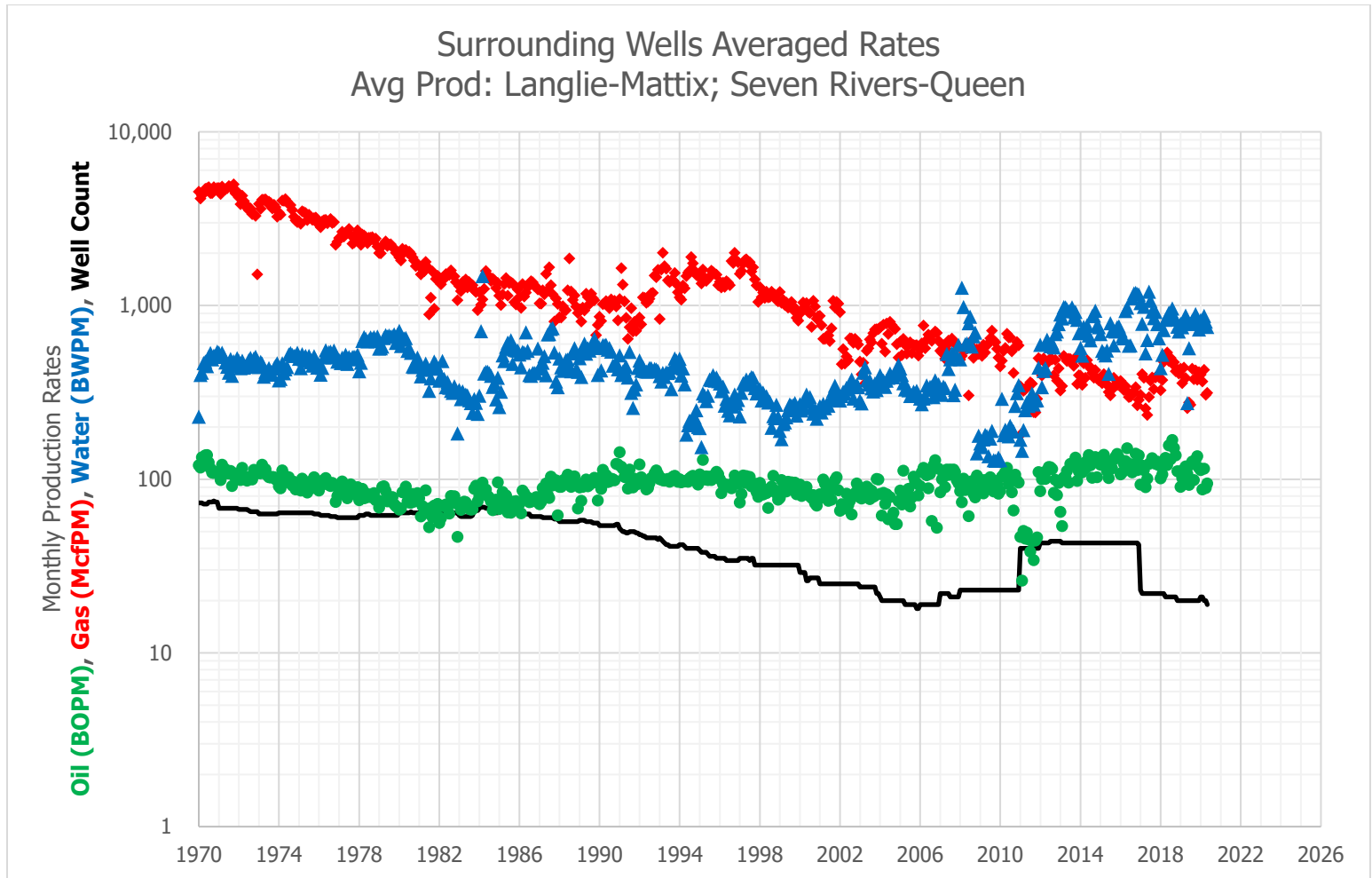
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Exhibit A – Historical and Forecast Production in the Current Zone



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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 Avg Prod: Langlie-Mattix; Seven Rivers-Queen					STATE A C 2 #057 Historical Prod: JALMAT; TANSILL/YATES				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)	Month	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)
7/1/2015	125	303	791	43	9/1/2011		1,246	14	1	115.3	935	807
8/1/2015	115	329	712	43	10/1/2011		525	-	2	114.8	933	804
9/1/2015	129	383	589	43	11/1/2011		2,001	-	3	114.2	930	802
10/1/2015	134	351	708	43	12/1/2011		1,622	2	4	113.7	928	799
11/1/2015	139	348	750	43	1/1/2012		1,396	29	5	113.1	926	796
12/1/2015	133	356	758	43	2/1/2012		1,051	-	6	112.6	923	794
1/1/2016	106	368	717	43	3/1/2012		1,095	-	7	112.1	921	791
2/1/2016	109	350	661	43	4/1/2012		1,556	-	8	111.5	919	789
3/1/2016	123	326	647	43	5/1/2012		1,485	-	9	111.0	917	786
4/1/2016	127	343	927	43	6/1/2012		1,246	-	10	110.5	914	783
5/1/2016	150	320	973	43	7/1/2012		1,128	-	11	109.9	912	781
6/1/2016	123	297	586	43	8/1/2012		972	-	12	109.4	910	778
7/1/2016	113	298	588	43	9/1/2012		995	141	13	108.9	907	776
8/1/2016	109	312	1,098	43	10/1/2012		933	299	14	108.4	905	773
9/1/2016	121	319	1,174	43	11/1/2012		266		15	107.9	903	771
10/1/2016	140	338	1,182	43	12/1/2012		977		16	107.3	901	768
11/1/2016	113	266	1,164	43	1/1/2013		522		17	106.8	898	766
12/1/2016	137	286	1,155	42	2/1/2013		839		18	106.3	896	763
1/1/2017	93	306	1,032	23	3/1/2013		1,893		19	105.8	894	761
2/1/2017	120	402	784	22	4/1/2013		1,518		20	105.3	892	758
3/1/2017	113	383	981	22	5/1/2013		1,338		21	104.8	889	756
4/1/2017	90	255	529	22	6/1/2013		1,396		22	104.3	887	753
5/1/2017	101	234	632	22	7/1/2013		1,426		23	103.8	885	751
6/1/2017	123	297	1,201	22	8/1/2013		1,347		24	103.3	883	748
7/1/2017	124	369	1,061	22	9/1/2013		639		25	102.8	881	746
8/1/2017	132	385	920	22	10/1/2013		359		26	102.3	878	743
9/1/2017	125	329	844	22	11/1/2013		430		27	101.8	876	741
10/1/2017	122	384	917	22	12/1/2013		592		28	101.3	874	738
11/1/2017	126	394	782	22	1/1/2014		590		29	100.9	872	736
12/1/2017	120	386	646	22	2/1/2014		1,013		30	100.4	870	733
1/1/2018	101	324	436	22	3/1/2014		697		31	99.9	868	731
2/1/2018	107	372	521	22	4/1/2014		518		32	99.4	865	729
3/1/2018	123	473	721	22	5/1/2014		773		33	98.9	863	726
4/1/2018	133	511	826	21	6/1/2014		1,049		34	98.5	861	724
5/1/2018	121	536	860	21	7/1/2014		932		35	98.0	859	722
6/1/2018	156	479	907	21	8/1/2014		731		36	97.5	857	719
7/1/2018	130	500	897	21	9/1/2014		625		37	97.1	855	717
8/1/2018	168	463	960	21	10/1/2014		843		38	96.6	852	714
9/1/2018	151	471	865	21	11/1/2014		668		39	96.1	850	712
10/1/2018	137	418	829	21	12/1/2014		645		40	95.7	848	710
11/1/2018	111	428	755	20	1/1/2015		591		41	95.2	846	707
12/1/2018	110	406	708	20	2/1/2015		697		42	94.8	844	705
1/1/2019	90	433	782	20	3/1/2015		771		43	94.3	842	703
2/1/2019	101	357	750	20	4/1/2015		849		44	93.9	840	700
3/1/2019	114	438	823	20	5/1/2015		827		45	93.4	838	698
4/1/2019	119	381	875	20	6/1/2015		665		46	93.0	836	696
5/1/2019	107	256	274	20	7/1/2015		666		47	92.5	834	694
6/1/2019	93	277	567	20	8/1/2015		624		48	92.1	831	691
7/1/2019	121	268	784	20	9/1/2015		630		49	91.6	829	689
8/1/2019	126	433	817	20	10/1/2015		673		50	91.2	827	687
9/1/2019	99	376	784	20	11/1/2015		661		51	90.8	825	685
10/1/2019	130	423	890	20	12/1/2015		589		52	90.3	823	682
11/1/2019	136	373	797	20	1/1/2016		577	-	53	89.9	821	680
12/1/2019	116	414	727	20	2/1/2016		593	-	54	89.5	819	678
1/1/2020	113	399	822	21	3/1/2016		730	-	55	89.0	817	676
2/1/2020	87	365	811	21	4/1/2016		706	-	56	88.6	815	673
3/1/2020	115	426	871	20	5/1/2016		873	-	57	88.2	813	671
4/1/2020	89	305	808	20	6/1/2016		757	9	58	87.8	811	669
5/1/2020	94	314	753	19	7/1/2016		736	15	59	87.4	809	667
6/1/2020	94	305	780	19	8/1/2016		724		60	86.9	807	665
7/1/2020	100	372	904	19	9/1/2016		657					
8/1/2020	102	365	855	19	10/1/2016		739					
9/1/2020	95	295	712	19	11/1/2016		417					
10/1/2020	88	269	554	19	12/1/2016		707					
11/1/2020	103	290	626	19	1/1/2017		670					
12/1/2020	92	330	624	19	2/1/2017		627					

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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	18.9	0.0
Langlie Mattix	Seven Rivers-Queen	3.8	11.9	26.5
	Total	3.8	30.8	26.5
Jalmat	Yates-Seven Rivers	0%	61%	0%
Langlie Mattix	Seven Rivers-Queen	100%	39%	100%
	Total (%)	100%	100%	100%

30025202970000

BLACKBEARD

STATE A A/C-2 57

SPUD_DATE : 1/21/1964

T22S R36E S9

Log
Depth(ft)

3100-

3150-

3200-

3250-

3300-

3350-

3400-

3450-

3500-

3550-

3600-

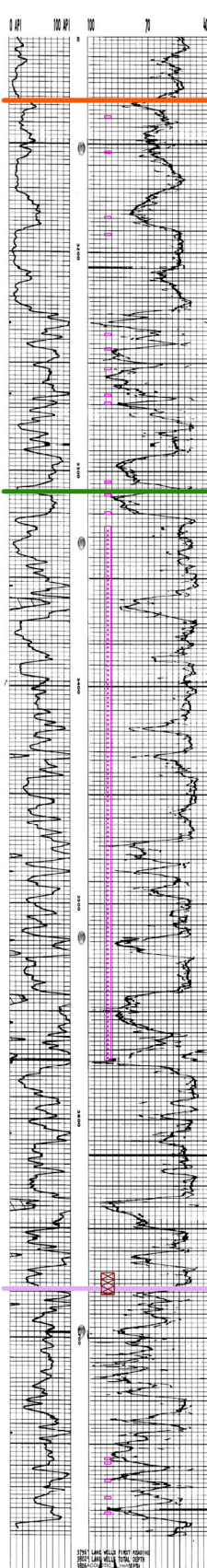
3650-

3700-

3750-

3800-

3850-



Yates

Seven Rivers

Queen

STATE A A/C-2 57

TD : 3,806

ELEV_KB : 3,576

API	Source	Type	Top Perf	Btm Perf
30025202970000	CJH	ACTIVE	3137	3319
30025202970000	CJH	ACTIVE	3326	3572
30025202970000	CJH	INACTIVE	3755	3756
30025202970000	CJH	INACTIVE	3757	3758
30025202970000	CJH	INACTIVE	3765	3766
30025202970000	CJH	INACTIVE	3773	3774
30025202970000	CJH	INACTIVE	3780	3781
30025202970000	CJH	PROPOSED - OH	3806	3930

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 30-025-20297	² Pool Code 79240	³ Pool Name JALMAT; TAN-YATES-7 RVRS (GAS)
⁴ Property Code	⁵ Property Name STATE A A/C 2	⁶ Well Number #057
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
G	9	22S	36E		1980	N	1980	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
G	9	22S	36E		1980	N	1980	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. Signature: <u>M. Bates</u> Date: 6/23/2021 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: _____	

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 30-025-20297	² Pool Code 37240	³ Pool Name LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG
⁴ Property Code	⁵ Property Name STATE A A/C 2	⁶ Well Number #057
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
G	9	22S	36E		1980	N	1980	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
G	9	22S	36E		1980	N	1980	E	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

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>MBates</u> Date: <u>6/23/2021</u> Printed Name: <u>Marshall Bates</u> E-mail Address: <u>Marshall@FAEnergyus.com</u>	
	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: **STATE A A/C 2 #057** Lease No: _____ Lease Type: _____ State: _____
 Township: 22-S Range: 36-E Sec: 09-G Location: 1980' FNL & 1980' FEL
 County: Lea State: NM API: 30-025-20297 Formation: [79240] JALMAT; TAN-YATES-7 RVRs (GAS
[24130] EUNICE; 7 RIVERS-QUEEN, SOUTH

PROPOSEDSurface Csg

Size: 8-5/8"
 Wt.&Thrd: 24/28/32#
 Grade: J-55
 Set @: 335'
 Sxs cmt: 300 sxs
 Circ: Circ
 TOC: Surface
 Hole Size: 12-1/4"

KB: 3576'
 DF: 3575'
 GL: 3565'
 Spud Date: 1/21/1964
 Compl. Date: 1/28/1964

History - Highlights

1990-01: RC to Jalmat (Yates & Mid 7 RVRs)

Proposed: DO CIBP & Deepen ~125' to 3930'. Acidize QUEEN open hole w/ 5000 gals 15% NEFE HCL acid, 1500# rock salt & flush w/ 1000 bbls 2% KCL water. DHC Jalmat & Langlie Mattix pools.

SN 3780'
 EOT 3817'

Production Csg

Size: 5-1/2"
 Wt.&Thrd: 14/15.5/17#
 Grade: J-55 ST&C/LT&C
 Set @: 3806'
 Sxs Cmt: 300 sxs
 Circ: _____
 TOC: 2865' (log)
 Hole Size: 7-7/8"

Open Hole

Size: 4-3/4"
 Down to: 3806-3930'

YATES (Top @ 3130')

3137', 3153', 3183', 3191', 3237', 3244', 3253', 3265', 3269', 3305', 3311', 3319' (1 SI
 Acidized w/ 2700 gals acid; Frac w/ 49,000 gals 30# gel & 103,000# 12/20 s

7-RIVERS (Top @ 3321')

3551-3559' - Jan 1990
 Acidized w/ YATES (Isolated during Frac)

QUEEN (Top @ 3696')

3755', 3757', 3765', 3773', 3780' - Jan 1964
 Acidized w/ 1000 gals acid; Frac w/ 20,000 gals refined oil & 40,000# sand

3806-3930' Open Hole - Proposed
 Acidize w/ 5000 gals 15% NEFE HCL acid, 1500# rock salt & flush w/ 1000 bbls 2% KCL water

PBTD 3930'
 TD 3930'

Tubulars - Capacities and Performance

2-3/8" 4.7# J-55 EUE Tubing (117 jts 2-3/8" tbg, SN, 4' perf sub, MA w/ bull plug)

Well Name: **STATE A A/C 2 #057** Lease No: _____ Lease Type: _____ State: _____
 Township: 22-S Range: 36-E Sec: 09-G Location: 1980' FNL & 1980' FEL
 County: Lea State: NM API: 30-025-20297 Formation: [79240] JALMAT; TAN-YATES-7 RVRs (GAS)

Surface Csg

Size: 8-5/8"
 Wt.&Thrd: 24/28/32#
 Grade: J-55
 Set @: 335'
 Sxs cmt: 300 sxs
 Circ: Circ
 TOC: Surface
 Hole Size: 12-1/4"

KB: 3576'DF: 3575'GL: 3565'Spud Date: 1/21/1964Compl. Date: 1/28/1964**CURRENT****History - Highlights****1990-01:** RC to Jalmat (Yates & Mid 7 RVRs)

All info from OCD well files ONLY

EOT 3137'

CIBP 3670'

Production Csg

Size: 5-1/2"
 Wt.&Thrd: 14/15.5/17#
 Grade: J-55 ST&C/LT&C
 Set @: 3806'
 Sxs Cmt: 300 sxs
 Circ: _____
 TOC: 2865' (log)
 Hole Size: 7-7/8"

YATES (Top @ 3130')

3137', 3153', 3183', 3191', 3237', 3244', 3253', 3265', 3269', 3305', 3311', 3319' (1 SPF) - Ja
 Acidized w/ 2700 gals acid; Frac w/ 49,000 gals 30# gel & 103,000# 12/20 sand

7-RIVERS (Top @ 3321')

3551-3559' - Jan 1990
 Acidized w/ YATES (Isolated during Frac)

QUEEN (Top @ 3696')

3755', 3757', 3765', 3773', 3780' - Jan 1964
 Acidized w/ 1000 gals acid; Frac w/ 20,000 gals refined oil & 40,000# sand

PBTD 3670'

TD 3806'

Tubulars - Capacities and Performance

2-3/8" 4.7# Tubing

From: [Vanessa Neal](#)
To: [McClure, Dean, EMNRD](#)
Subject: RE: [EXTERNAL] DHC Applications Format & Missing Items?
Date: Wednesday, November 3, 2021 12:16:21 PM
Attachments: [image001.png](#)
[BLM DHC C E Lamunyon #090 Sundry Submittal 2021-11-03.pdf](#)

Awesome, thank you Dean!

Here are the tracking numbers we have for the submitted DHCs. I'm not sure which ones you were waiting on, so I included all the tracking numbers we had documented.

I've also attached a PDF of the DHC submitted to the BLM for C E Lamunyon #90; a DHC application was submitted earlier this week to the OCD. Is the PDF attached an acceptable substitute for the BLM tracking numbers for future submissions?

Project	API	SLO/BLM Submittal Tracking Info
State A A/C 2 #062	30-025-25542	7020 0640 0000 9346 5293
State C TR 11 #003	30-025-23103	7020 0640 0000 9346 5293
State C TR 11 #005	30-025-25517	7020 0640 0000 9346 5293
State I Com #002	30-025-06133	7020 0640 0000 9346 5293
C D Woolworth #008	30-025-32862	7020 0640 0000 9346 5293
Cagle C #005	30-025-34450	7021 0350 0001 5380 9936
Cagle C Federal Com #006	30-025-37342	7021 0350 0001 5380 9936
Myers B #006	30-025-31382	7021 0350 0001 5380 9936
Rhodes Federal Unit #047	30-025-20011	7021 0350 0001 5380 9936
Rhodes Federal Unit #096	30-025-24536	7021 0350 0001 5380 9936
Rhodes Federal Unit #098	30-025-37514	7021 0350 0001 5380 9936
Rhodes Federal Unit #102	30-025-24537	7021 0350 0001 5380 9936
Shell A State COM #006	30-025-32030	7020 0640 0000 9346 3985
State A A/C 1 #096	30-025-09250	7020 0640 0000 9346 5293
State A A/C 1 #129	30-025-34877	7020 0640 0000 9346 5293
State A A/C 2 #057	30-025-20297	7020 0640 0000 9346 5293
Stevens A-35 Com #002	30-025-09467	7021 0350 0001 5380 9936

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: Tuesday, November 2, 2021 6:41 PM
To: Vanessa Neal <vanessa@faenergyus.com>

Subject: RE: [EXTERNAL] DHC Applications Format & Missing Items?

Hello Vanessa,

Quite busy, but I suppose I can't complain; hopefully everything in your world is going great.

Based off my conversations with Marshall, I think he had mentioned that there may be some applications in the current batch that require notice to either the BLM or SLO which the evidence of which has not been provided, but I have not had a chance to sit down and go through them all quite yet. Regarding format and future submittals, I have an outdated guidance document regarding DHCs, but I will see if I can update it and help make it more specific to what would be more relevant to FAE. Please note that there are different requirements based upon whether the pools being commingled have been commonly commingled in the area or not. For FAE, this becomes relevant because some of your proposed pools to be commingled are common and some are not. An example of an application that is not is DHC-5150 for the E C Hill A 7.

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

From: Vanessa Neal <vanessa@faenergyus.com>

Sent: Tuesday, November 2, 2021 5:25 PM

To: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>

Subject: [EXTERNAL] DHC Applications Format & Missing Items?

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

Hi Dean,

I hope everything is going great in your world.

I am going to be helping Marshall Bates submit downhole commingle applications in the future and I was wondering if you had a preferred format for submissions? I would also like to make sure you get everything you need for approval upon initial submission, if possible; is there anything that we have repeatedly missed in the past that you have had to ask for?

I know that we are planning a lot of work in 2022 that will require DHC permits, so I am hoping to get those to you as soon as possible. For the DHC applications currently in your queue, are you waiting on any missing items from us? If you let me know what you need I will get it to you ASAP.

Looking forward to working with you!

Vanessa Neal | Sr Reservoir Engineer

forty acres **energy**

11757 Katy Freeway, Suite 725 | Houston, TX 77079

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

C [979.255.3476](tel:979.255.3476)

E vanessa@faenergyus.com

From: [Engineer, OCD, EMNRD](#)
To: [Vanessa Neal](#)
Cc: [McClure, Dean, EMNRD](#); [Kautz, Paul, EMNRD](#); [Wrinkle, Justin, EMNRD](#); [Powell, Brandon, EMNRD](#); [lisa@rwbyram.com](#); [Dawson, Scott](#)
Subject: Approved Administrative Order DHC-5145
Date: Friday, April 15, 2022 12:10:05 PM
Attachments: [DHC5145 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5145 which authorizes FAE II Operating, LLC (329326) to downhole commingle production within the following well:

Well Name: [State A AC 2 #57](#)

Well API: [30-025-20297](#)

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](#)
Subject: [EXTERNAL] FW: downhole commingling application DHC-5140 (Correction DHC-5145)
Date: Tuesday, December 28, 2021 2:47:03 PM
Attachments: [image001.png](#)
[WBD State A AC 2 #57 CURRENT-PROPOSED 2021-12.pdf](#)

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

Correction, **DHC-5145**

Vanessa Neal | Sr Reservoir Engineer

forty acres energy

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

C [979.255.3476](tel:979.255.3476)

From: Vanessa Neal
Sent: Tuesday, December 28, 2021 3:45 PM
To: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>
Subject: downhole commingling application DHC-5140

Mr. McClure,

Attached are the current and proposed wellbore diagrams for the State A A/C 2 #057 (30-025-20297).

The DHC package was previously submitted (mailed) to the SLO via USPS, we were provided a tracking number [7020 0640 0000 9346 5293] that shows delivery on 9/20/2021.

Thank you,

Vanessa Neal | Sr Reservoir Engineer

forty acres energy

11757 Katy Freeway, Suite 725 | Houston, TX 77079

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

C [979.255.3476](tel:979.255.3476)

E vanessa@faenergyus.com

**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-5145

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 E. SANDOVAL
DIRECTOR**

DATE: 4/15/2022

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

Order: **DHC-5145**

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

Well Name: **State A AC 2 #57**

Well API: **30-025-20297**

Pool Name: **JALMAT;TAN-YATES-7 RVRS (GAS)**

Upper Zone

Pool ID: **79240**

Current: **X**

New:

Allocation: **Fixed Percent**

Oil: **0%**

Gas: **61%**

Interval: **Perforations**

Top: **3,137**

Bottom: **3,572**

Pool Name:

Intermediate Zone

Pool ID:

Current:

New:

Allocation:

Oil:

Gas:

Interval:

Top:

Bottom:

Bottom of Interval within 150% of Upper Zone's Top of Interval:

Pool Name: **LANGLIE MATTIX;7 RVRS-Q-GRAYBURG**

Lower Zone

Pool ID: **37240**

Current:

New: **X**

Allocation: **Fixed Percent**

Oil: **100%**

Gas: **39%**

Interval: **Open-Hole**

Top: **3,755**

Bottom: **3,930**

Bottom of Interval within 150% of Upper Zone's Top of Interval: **YES**

Top of Queen Formation: **3,680**

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 33758

CONDITIONS

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 33758
	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.	4/15/2022