

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

Form C-107A
Revised August 1, 2011

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

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		
Cagle C Federal Com	6	C-10-26S-37E	Lea
Lease	Well No.	Unit Letter-Section-Township-Range	County
329326	326352	30-02S-37342	X
OGRID No.	Property Code	API No.	Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Rhodes		Leonard
Pool Code	83810		38760
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2,895 – 3,005'		3,287 – 3,470
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 / 1.264 BTU		35.0 API / 1.264 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 % 81 %	Oil Gas % %	Oil Gas 100 % 19 %

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: Cagle C Federal Com #006: API 30-025-37342
Rhodes Pool: 83810
Leonard Pool: 38760

Dear Mr. McClure:

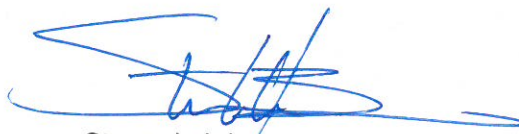
FAE II Operating LLC, as operator, will be filing applications with the New Mexico Oil Conservation Division for approval of the aforementioned commingling project. After a review of internal records, this letter serves as notice that the operator and interest owners are identical for the pools listed 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 Rhodes and Leonard Pools for the Cagle C Federal Com #6 well located in Sec. 10, T-26S, 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 Rhodes and Leonard Pools for its Cagle C Federal Com #6 well located in Unit Letter C, Section 10, T-26S, R-37E, 660 feet FNL and 1,977 feet FWL, as shown in the attached C-102's for each zone.

Cagle C Federal Com #6 is currently open to the Yates-Seven Rivers interval, which translates to the RHODES; YATES-SEVEN RIVERS (GAS) [Pool ID: 83810]. 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 Cagle C Federal Com #6 is the Queen, which translates to the LEONARD; QUEEN, SOUTH [Pool ID: 38760]. To develop a forecast for this zone, four (4) surrounding wells with production history from the 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 4.7 BOPD and 38.0 MCFPD is the expected total, and of that, 4.7 BOPD and 30.7 MCFPD will come from the Queen zone. The Yates-Seven Rivers is projected to yield 0.0 BOPD and 7.3 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.

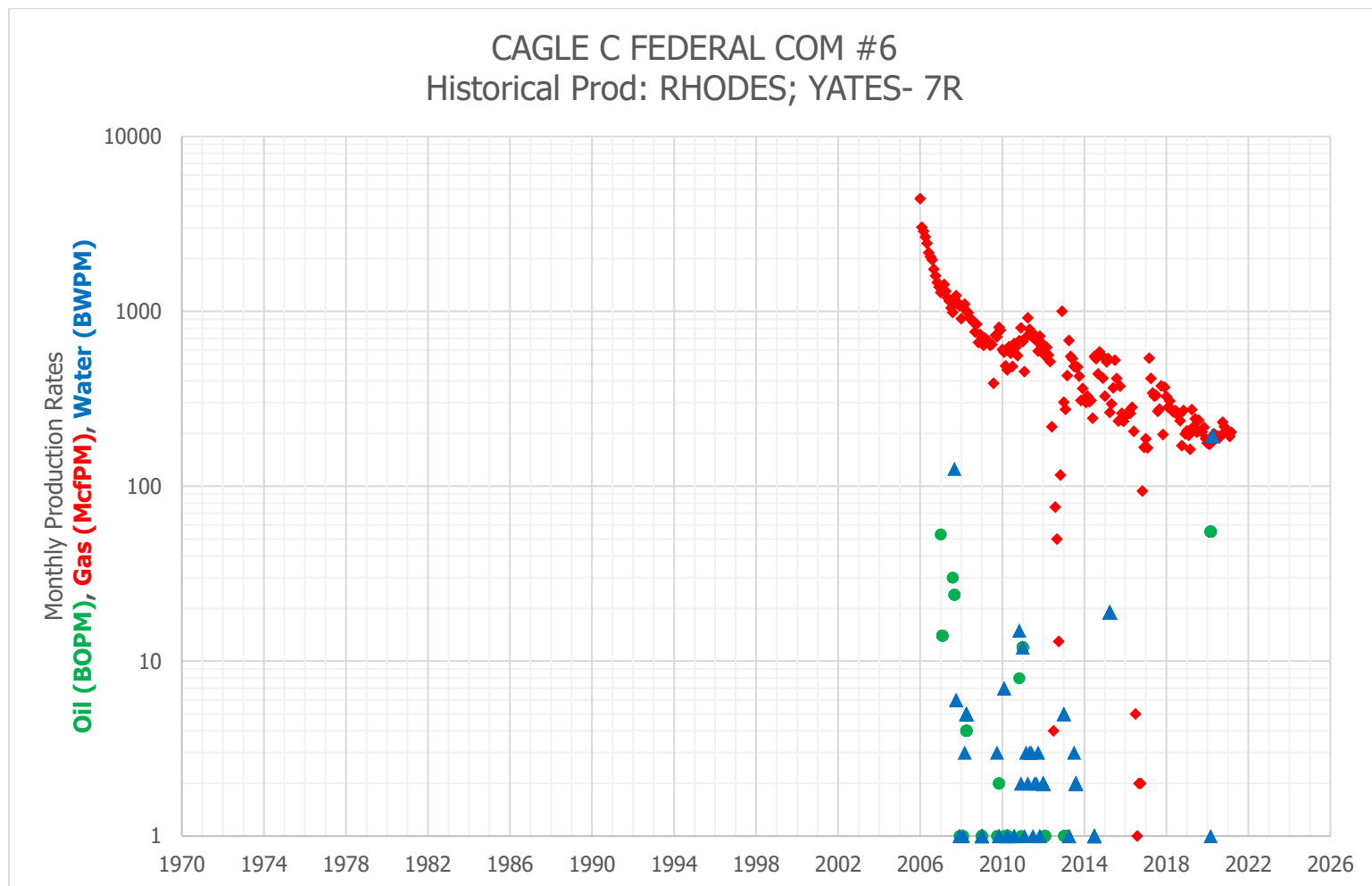
Very truly yours,



FAE II Operating, LLC

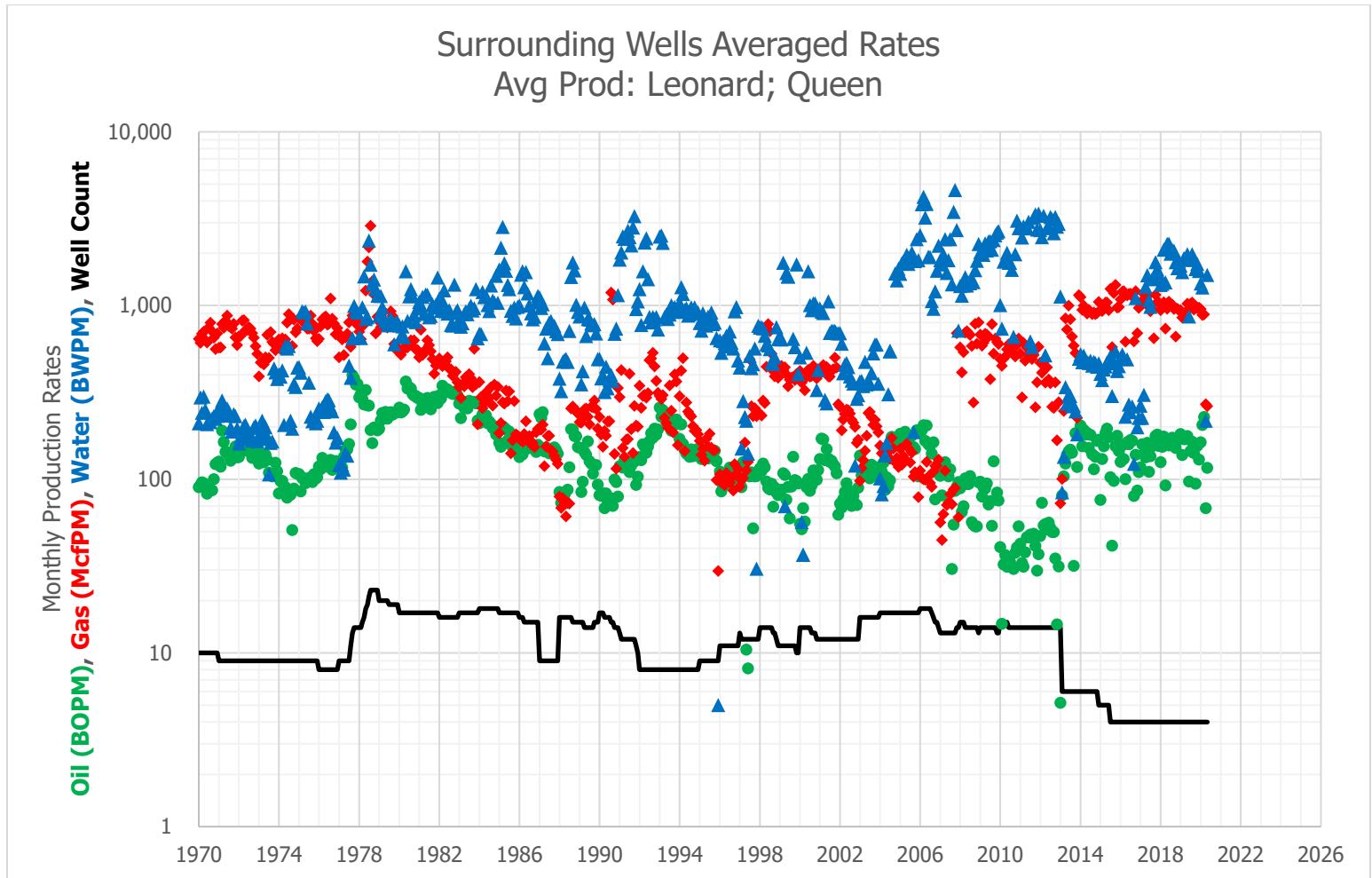
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Exhibit A – Historical and Forecast Production in the Current Zone



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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					CAGLE C FEDERAL COM #6				Synthetic Decline Curve				
Avg Prod: Leonard; Queen					Historical Prod: RHODES; YATES- 7R								
Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Well Count	Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Month	Est Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)
7/1/2015	103	1,243	507	4	9/1/2011		685	2	1	10/1/2020	143.8	1,156	1,104
8/1/2015	41	576	301	4	10/1/2011		594	3	2	11/1/2020	143.2	1,153	1,101
9/1/2015	98	1,178	474	4	11/1/2011		722	1	3	12/1/2020	142.5	1,150	1,097
10/1/2015	155	1,312	543	4	12/1/2011		632	-	4	1/1/2021	141.8	1,147	1,094
11/1/2015	178	970	419	4	1/1/2012	-	648	2	5	2/1/2021	141.1	1,144	1,090
12/1/2015	145	977	447	4	2/1/2012	1	559		6	3/1/2021	140.4	1,142	1,086
1/1/2016	126	1,083	498	4	3/1/2012		624		7	4/1/2021	139.8	1,139	1,083
2/1/2016	156	1,201	521	4	4/1/2012		564		8	5/1/2021	139.1	1,136	1,079
3/1/2016	131	1,208	498	4	5/1/2012		516		9	6/1/2021	138.4	1,133	1,076
4/1/2016	100	618	229	4	6/1/2012		219		10	7/1/2021	137.8	1,130	1,072
5/1/2016	163	1,143	490	4	7/1/2012		4		11	8/1/2021	137.1	1,127	1,069
6/1/2016	159	1,162	269	4	8/1/2012		76		12	9/1/2021	136.5	1,125	1,065
7/1/2016	168	1,170	243	4	9/1/2012		50		13	10/1/2021	135.8	1,122	1,062
8/1/2016	166	1,124	262	4	10/1/2012		13		14	11/1/2021	135.2	1,119	1,058
9/1/2016	80	620	122	4	11/1/2012		116		15	12/1/2021	134.5	1,116	1,055
10/1/2016	138	1,210	1,106	4	12/1/2012		1,000		16	1/1/2022	133.9	1,113	1,051
11/1/2016	86	693	199	4	1/1/2013	1	303	5	17	2/1/2022	133.2	1,111	1,048
12/1/2016	110	968	226	4	2/1/2013	1	276	-	18	3/1/2022	132.6	1,108	1,044
1/1/2017	117	1,042	265	4	3/1/2013	-	430	-	19	4/1/2022	132.0	1,105	1,041
2/1/2017	159	1,011	226	4	4/1/2013		681	1	20	5/1/2022	131.3	1,102	1,037
3/1/2017	140	1,163	306	4	5/1/2013		552	-	21	6/1/2022	130.7	1,100	1,034
4/1/2017	133	1,048	1,279	4	6/1/2013		536	-	22	7/1/2022	130.1	1,097	1,031
5/1/2017	162	1,128	1,494	4	7/1/2013		484	3	23	8/1/2022	129.5	1,094	1,027
6/1/2017	110	980	1,073	4	8/1/2013		480	2	24	9/1/2022	128.8	1,091	1,024
7/1/2017	136	923	981	4	9/1/2013		481		25	10/1/2022	128.2	1,089	1,021
8/1/2017	156	953	1,416	4	10/1/2013		427		26	11/1/2022	127.6	1,086	1,017
9/1/2017	156	646	1,432	4	11/1/2013		310		27	12/1/2022	127.0	1,083	1,014
10/1/2017	177	1,151	1,773	4	12/1/2013		363		28	1/1/2023	126.4	1,081	1,010
11/1/2017	180	1,044	1,615	4	1/1/2014		315	-	29	2/1/2023	125.8	1,078	1,007
12/1/2017	155	1,040	1,516	4	2/1/2014		301	-	30	3/1/2023	125.2	1,075	1,004
1/1/2018	125	939	1,313	4	3/1/2014		327	-	31	4/1/2023	124.6	1,072	1,001
2/1/2018	153	989	1,332	4	4/1/2014		305	-	32	5/1/2023	124.0	1,070	997
3/1/2018	176	1,042	2,096	4	5/1/2014		310	-	33	6/1/2023	123.4	1,067	994
4/1/2018	92	736	1,358	4	6/1/2014		245	-	34	7/1/2023	122.8	1,064	991
5/1/2018	159	958	2,262	4	7/1/2014		552	1	35	8/1/2023	122.2	1,062	987
6/1/2018	156	1,050	2,262	4	8/1/2014		536	-	36	9/1/2023	121.6	1,059	984
7/1/2018	166	1,010	1,990	4	9/1/2014		440		37	10/1/2023	121.1	1,056	981
8/1/2018	173	1,009	2,077	4	10/1/2014		588		38	11/1/2023	120.5	1,054	978
9/1/2018	170	952	2,067	4	11/1/2014		561		39	12/1/2023	119.9	1,051	975
10/1/2018	151	661	1,773	4	12/1/2014		415		40	1/1/2024	119.3	1,049	971
11/1/2018	171	957	1,638	4	1/1/2015		328	-	41	2/1/2024	118.8	1,046	968
12/1/2018	168	940	1,793	4	2/1/2015		514	-	42	3/1/2024	118.2	1,043	965
1/1/2019	182	938	1,696	4	3/1/2015		539	-	43	4/1/2024	117.6	1,041	962
2/1/2019	137	851	1,555	4	4/1/2015		264	19	44	5/1/2024	117.1	1,038	959
3/1/2019	170	857	1,867	4	5/1/2015		296		45	6/1/2024	116.5	1,036	955
4/1/2019	170	871	1,840	4	6/1/2015		366		46	7/1/2024	115.9	1,033	952
5/1/2019	177	1,024	1,968	4	7/1/2015		527		47	8/1/2024	115.4	1,030	949
6/1/2019	97	961	864	4	8/1/2015		413		48	9/1/2024	114.8	1,028	946
7/1/2019	145	1,021	1,826	4	9/1/2015		236		49	10/1/2024	114.3	1,025	943
8/1/2019	164	1,041	1,975	4	10/1/2015		374		50	11/1/2024	113.7	1,023	940
9/1/2019	141	947	1,837	4	11/1/2015		261		51	12/1/2024	113.2	1,020	937
10/1/2019	94	982	1,618	4	12/1/2015		235		52	1/1/2025	112.7	1,018	934
11/1/2019	155	966	1,732	4	1/1/2016		251		53	2/1/2025	112.1	1,015	931
12/1/2019	129	972	1,580	4	2/1/2016		262		54	3/1/2025	111.6	1,013	928
1/1/2020	163	955	1,337	4	3/1/2016		265		55	4/1/2025	111.1	1,010	925
2/1/2020	205	882	1,270	4	4/1/2016		261		56	5/1/2025	110.5	1,007	922
3/1/2020	228	889	1	4	5/1/2016		283		57	6/1/2025	110.0	1,005	918
4/1/2020	68	270	217	4	6/1/2016		206		58	7/1/2025	109.5	1,002	915
5/1/2020	116	263	1,498	4	7/1/2016		5		59	8/1/2025	108.9	1,000	912
6/1/2020	81	224	1,450	4	8/1/2016		1		60	9/1/2025	108.4	997	909
7/1/2020	77	525	37	4	9/1/2016		2						
8/1/2020	149	1,011	1	4	10/1/2016		2						
9/1/2020	155	1,145	7	4	11/1/2016		94						
10/1/2020	32	939	0	4	12/1/2016		167						
11/1/2020	158	977	2	4	1/1/2017		187						
12/1/2020	165	923	24	4	2/1/2017		166						

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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)
Rhodes	Yates-Seven Rivers	0.0	7.3	0.0
Leonard	Queen	4.7	30.7	36.3
	Total	4.7	38.0	36.3
Rhodes	Yates-Seven Rivers	0%	19%	0%
Leonard	Queen	100%	81%	100%
	Total (%)	100%	100%	100%

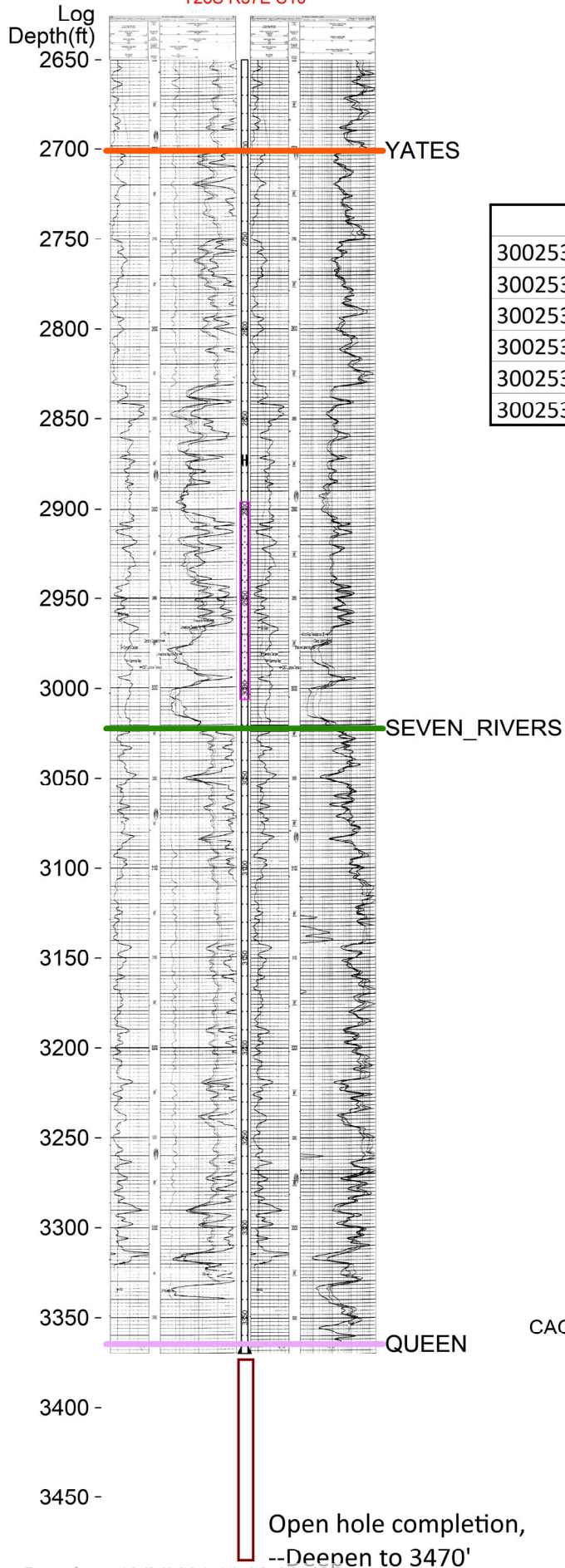
30025373420000

FAE

CAGLE C FEDERAL COM 6

SPUD DATE : 11/12/2005

T26S R37E S10



API	Source	Type	Top Perf	Btm Perf
30025373420000	CJH	PROPOSED	3287	3291
30025373420000	CJH	PROPOSED	3296	3299
30025373420000	CJH	PROPOSED	3313	3318
30025373420000	CJH	PROPOSED	3331	3339
30025373420000	CJH	PROPOSED	3354	3357
30025373420000	CJH	PROPOSED - OH	3370	3470

CAGLE C FEDERAL COM 6

ELEV_KB : 3,001

TD : 3,370

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 30-025-37342	² Pool Code 83810	³ Pool Name RHODES; YATES-SEVEN RIVERS (GAS)
⁴ Property Code 326352	⁵ Property Name CAGLE C FEDERAL COM	⁶ Well Number #006
⁷ OGRID No. 329326	⁸ Operator Name FAE II OPERATING, LLC	⁹ Elevation 2987'

¹⁰ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
C	10	26S	37E		660	N	1977	W	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
C	10	26S	37E		660	N	1977	W	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 Date 6/22/2021 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 30-025-37342	² Pool Code 38760	³ Pool Name LEONARD; QUEEN, SOUTH
⁴ Property Code 326352	⁵ Property Name CAGLE C FEDERAL COM	⁶ Well Number #006
⁷ OGRID No. 329326	⁸ Operator Name FAE II OPERATING, LLC	⁹ Elevation 2987'

¹⁰ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
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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
C	10	26S	37E		660	N	1977	W	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 _____ Date 6/22/2021 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 _____	

Well Name: **Cagle C Federal COM #006** Lease No: _____ Lease Type: **Federal**
 Township: **26-S** Range: **37-E** Sec: **10C** Location: **660' FNL & 1977' FWL**
 County: **Lea** State: **NM** API: **30-025-37342** Formation: **Rhodes-Leonard; Y-7 RVRs-Q**

PROPOSEDSurface Csg

Size: **8-5/8"**
 Wt.&Thrd: **24#**
 Grade: **J-55 STC**
 Set @: **970'**
 Sxs cmt: **505 sxs**
 Circ: _____
 TOC: _____
 Hole Size: **12-1/4"**

KB: **3001'**
 DF: **3000'**
 GL: **2987'**
 Spud Date: **11/13/2005**
 Compl. Date: **12/31/2005**

History - HighlightsTANSILL (Top @ 2534')YATES (Top @ 2701')

SN **3370'**
 EOT **3407'**

Production Csg

Size: **5-1/2"**
 Wt.&Thrd: **15.5#**
 Grade: **J-55 STC**
 Set @: **3370'**
 Sxs Cmt: **840 sxs**
 Circ: **70 sxs**
 TOC: **90' (log)**
 Hole Size: **7-7/8"**

Open Hole

Hole Size: **4-3/4"**
 Down to: **3470'**

2896-3006' (3 SPF, 30 holes) - Dec 2005

Foam Frac w/ 51,245 gals 70-50Q CO2 foam GR-33 & 100,000# Brady sand
 (10,000# 20/40, 20,000# 12/20, 70,000# 8/16)

SEVEN RIVERS (Top @ 3023')

3287-3291', 3296-3299' (2 SPF) - Proposed

Acidize w/ QUEEN perms w/ 2500 gals 15% NEFE HCL acid, 750# rock salt
 diverter & flush w/ 500 bbls 2% KCL water

QUEEN (Top @ 3313')

3313-3318', 3331-3339', 3354-3357' (2 SPF) - Proposed

Acidize w/ Lwr 7 RVRs perms w/ 2500 gals 15% NEFE HCL acid, 750# rock salt
 diverter & flush w/ 500 bbls 2% KCL water

3370-3470' Open Hole - Proposed

Acidize w/ 5000 gals 15% NEFE HCL acid, 1500# rock salt diverter & flush w/
 1000 bbls 2% KCL water

PBTD 3470'
 TD 3470'

Tubulars - Capacities and Performance

2-3/8" 4.7# EUE 8rd Tubing (104 jts 2-3/8" tbg, SN, 4' perf sub, MA w/ bull plug) @ 3407'

Well Name: **Cagle C Federal COM #006** Lease No: _____ Lease Type: **Federal**
 Township: **26-S** Range: **37-E** Sec: **10C** Location: **660' FNL & 1977' FWL**
 County: **Lea** State: **NM** API: **30-025-37342** Formation: **Rhodes; YATES-7 RVRs (GAS)**

CURRENTSurface Csg

Size: **8-5/8"**
 Wt.&Thrd: **24#**
 Grade: **J-55 STC**
 Set @: **970'**
 Sxs cmt: **505 sxs**
 Circ: _____
 TOC: _____
 Hole Size: **12-1/4"**

KB: **3001'**
 DF: **3000'**
 GL: **2987'**
 Spud Date: **11/13/2005**
 Compl. Date: **12/31/2005**

History - Highlights

All info from OCD well files ONLY

TANSILL (Top @ 2534')YATES (Top @ 2701')

2896-3006' (3 SPF, 30 holes) - Dec 2005
 Foam Frac w/ 51,245 gals 70-50Q CO2 foam GR-33 & 100,000# Brady sand
 (10,000# 20/40, 20,000# 12/20, 70,000# 8/16)

SEVEN RIVERS (Top @ 3023')QUEEN (Top @ 3313')

EOT 2873'

Production Csg

Size: **5-1/2"**
 Wt.&Thrd: **15.5#**
 Grade: **J-55 STC**
 Set @: **3370'**
 Sxs Cmt: **840 sxs**
 Circ: **70 sxs**
 TOC: **90' (log)**
 Hole Size: **7-7/8"**

PBTD 3278'
 TD 3370'

Tubulars - Capacities and Performance

2-3/8" 4.7# EUE 8rd Tubing @ 2873'

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: [Marshall Bates](#); [Vanessa Neal](#)
Cc: [McClure, Dean, EMNRD](#); [Kautz, Paul, EMNRD](#); [Hawkins, James, EMNRD](#); [Powell, Brandon, EMNRD](#); [lisa@rwbyram.com](#); [Glover, James](#); [Paradis, Kyle O](#); [Walls, Christopher](#)
Subject: Approved Administrative Order DHC-5138
Date: Wednesday, December 8, 2021 11:12:24 AM
Attachments: [DHC5138 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5138 which authorizes FAE II Operating, LLC (329326) to downhole commingle production from 2 pools in their Cagle C Federal Com 6 well (30-025-37342).

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-5138
Date: Monday, November 29, 2021 7:42:58 AM
Attachments: [image001.png](#)
[WBD_Cagle C Federal COM #006_CURRENT-PROPOSED_2021-10-15.pdf](#)

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

Mr. McClure,

Attached are the current and proposed wellbore diagrams for the Cagle C Federal Com #6 (30-025-37342).

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 5:20 PM
To: Marshall Bates <marshall@faenergyus.com>; Vanessa Neal <vanessa@faenergyus.com>
Subject: downhole commingling application DHC-5138

Mr. Bates, Ms. Neal,

I am reviewing downhole commingling application DHC-5138 which involves the Cagle C Federal Com #6 (30-025-37342) 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-5138

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. 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.
5. 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.
6. 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.
7. 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).
8. 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**

A handwritten signature in black ink, appearing to read 'A. Sandoval', is written over a horizontal line.

**ADRIENNE SANDOVAL
DIRECTOR**

DATE: 12/07/2021

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

Order: **DHC-5138**

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

Well Name: **Cagle C Federal Com #6**

Well API: **30-025-37342**

Upper Zone	Pool Name: RHODES; YATES-SEVEN RIVERS (GAS)		
	Pool ID: 83810	Current: X	New:
	Allocation: Fixed Percent	Oil: 0%	Gas: 81%
	Interval: Perforations	Top: 2,895	Bottom: 3,365
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: LEONARD;QUEEN, SOUTH		
	Pool ID: 38760	Current:	New: X
	Allocation: Fixed Percent	Oil: 100%	Gas: 19%
	Interval: Open-Hole	Top: 3,365	Bottom: 3,470
Bottom of Interval within 150% of Upper Zone's Top of Interval: YES			
Top of Queen Formation: 3,365			

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 33744

CONDITIONS

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 1000 Houston, TX 77079	OGRID: 329326
	Action Number: 33744
	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.	12/8/2021