

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	County
Rhodes Federal Unit	P-04-26S-37E	Lea
Lease	Well No.	Unit Letter-Section-Township-Range
329326	326344	30-025-20011
OGRID No.	Property Code	API No.
Lease Type:		<input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> 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)	2,600 – 3,260'		TBD – TBD
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 / 1.501 BTU		35.0 API / 1.501 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 43 % 38 %	Oil Gas % %	Oil Gas 57 % 62 %

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



# faeIIoperating

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: Rhodes Federal Unit #047: API 30-025-20011**  
**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](mailto:steven@faenergyus.com).

Thank you for your attention to this matter.

Sincerely,

FAE II Operating, LLC

A handwritten signature in blue ink, appearing to read 'Steven Lehrbass', with a long horizontal flourish extending to the left.

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 Rhodes and Leonard Pools for the Rhodes Federal Unit #47 well located in Sec. 4, 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 Rhodes Federal Unit #47 well located in Unit Letter P, Section 4, T-26S, R-37E, 990 feet FSL and 660 feet FEL, as shown in the attached C-102's for each zone.

Rhodes Federal Unit #47 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 Rhodes Federal Unit #47 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 8.2 BOPD and 49.5 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 3.5 BOPD and 18.8 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](mailto:marshall@faenergyus.com) or by telephone at (832) 241-8080.

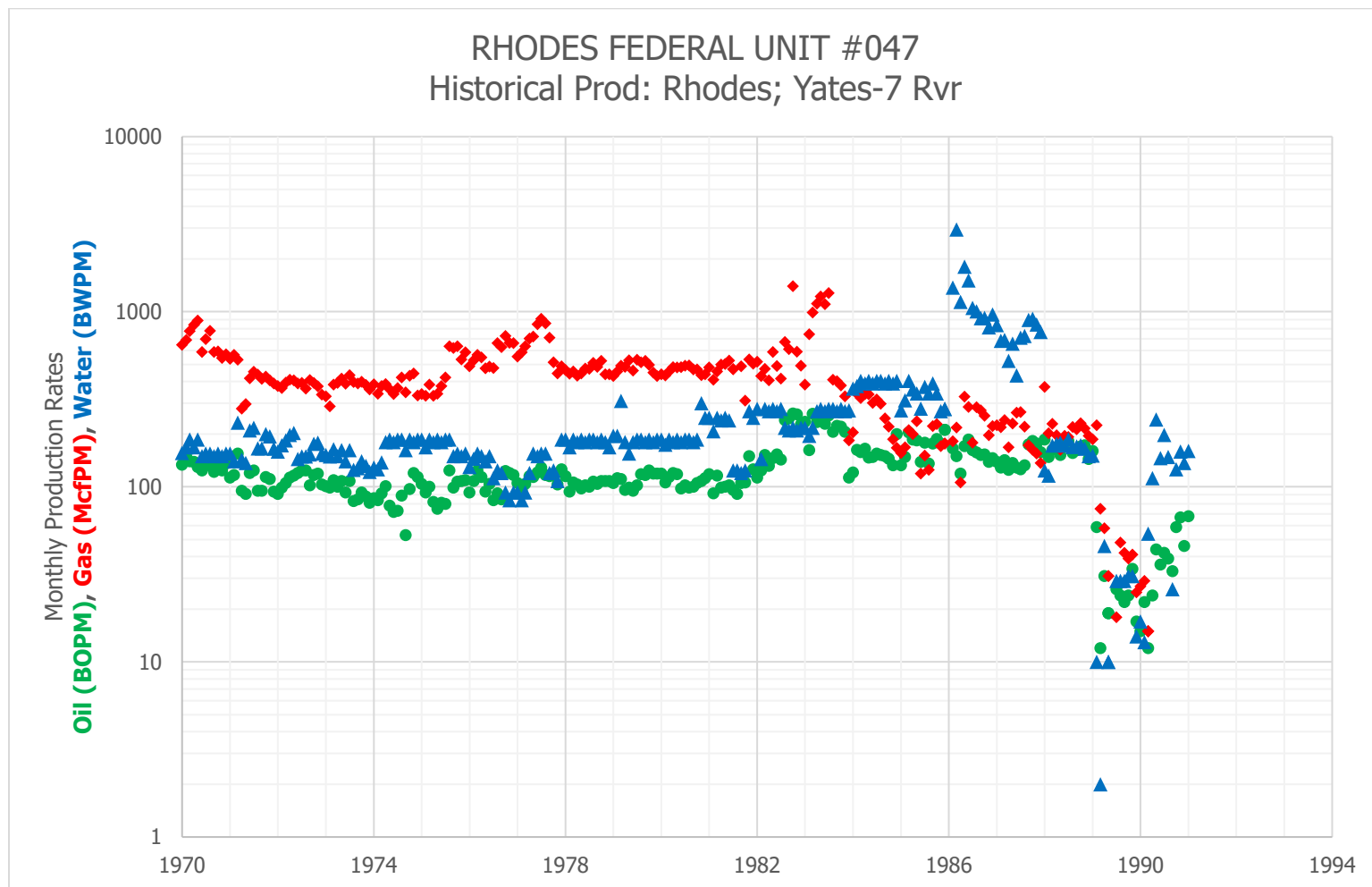
Very truly yours,



FAE II Operating, LLC

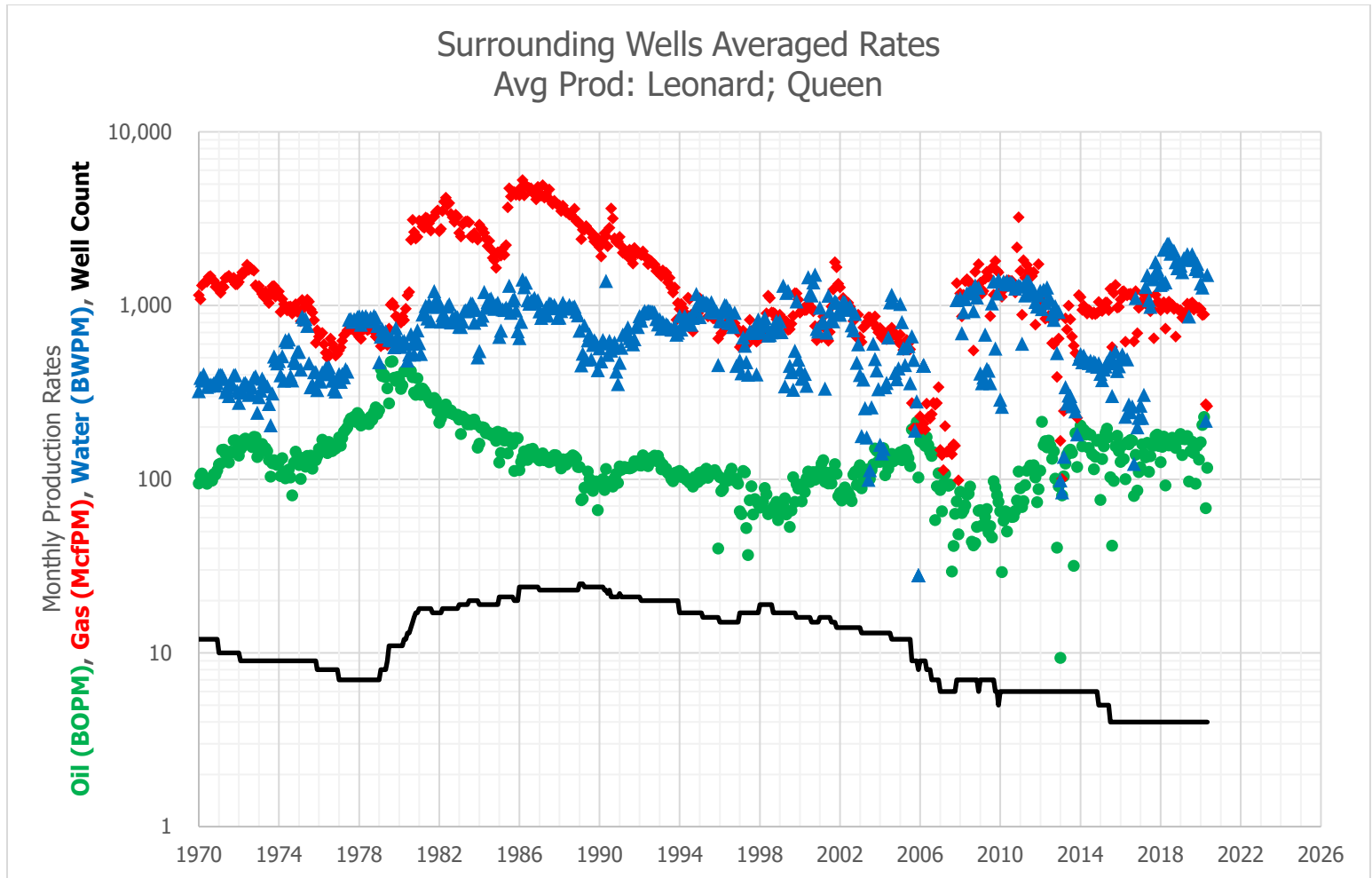
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## Exhibit A – Historical and Forecast Production in the Current Zone



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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					RHODES FEDERAL UNIT #047				Synthetic Decline Curve				
Avg Prod: Leonard; Queen					Historical Prod: Rhodes; Yates-7 Rvr								
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	-	-	-	1	10/1/2020	249.2	1,504	1,551
8/1/2015	41	576	301	4	10/1/2011	-	-	-	2	11/1/2020	248.0	1,500	1,546
9/1/2015	98	1,178	474	4	11/1/2011	-	-	-	3	12/1/2020	246.8	1,497	1,541
10/1/2015	155	1,312	543	4	12/1/2011	-	-	-	4	1/1/2021	245.6	1,493	1,536
11/1/2015	178	970	419	4	1/1/2012	-	-	-	5	2/1/2021	244.4	1,489	1,531
12/1/2015	145	977	447	4	2/1/2012	-	-	-	6	3/1/2021	243.3	1,486	1,526
1/1/2016	126	1,083	498	4	3/1/2012	-	-	-	7	4/1/2021	242.1	1,482	1,521
2/1/2016	156	1,201	521	4	4/1/2012	-	-	-	8	5/1/2021	241.0	1,478	1,516
3/1/2016	131	1,208	498	4	5/1/2012	-	-	-	9	6/1/2021	239.8	1,474	1,511
4/1/2016	100	618	229	4	6/1/2012	-	-	-	10	7/1/2021	238.7	1,471	1,506
5/1/2016	163	1,143	490	4	7/1/2012	-	-	-	11	8/1/2021	237.5	1,467	1,501
6/1/2016	159	1,162	269	4	8/1/2012	-	-	-	12	9/1/2021	236.4	1,463	1,496
7/1/2016	168	1,170	243	4	9/1/2012	-	-	-	13	10/1/2021	235.3	1,460	1,491
8/1/2016	166	1,124	262	4	10/1/2012	-	-	-	14	11/1/2021	234.1	1,456	1,486
9/1/2016	80	620	122	4	11/1/2012	-	-	-	15	12/1/2021	233.0	1,452	1,481
10/1/2016	138	1,210	1,106	4	12/1/2012	-	-	-	16	1/1/2022	231.9	1,449	1,476
11/1/2016	86	693	199	4	1/1/2013	-	-	-	17	2/1/2022	230.8	1,445	1,472
12/1/2016	110	968	226	4	2/1/2013	-	-	-	18	3/1/2022	229.7	1,442	1,467
1/1/2017	117	1,042	265	4	3/1/2013	-	-	-	19	4/1/2022	228.6	1,438	1,462
2/1/2017	159	1,011	226	4	4/1/2013	-	-	-	20	5/1/2022	227.5	1,434	1,457
3/1/2017	140	1,163	306	4	5/1/2013	-	-	-	21	6/1/2022	226.4	1,431	1,452
4/1/2017	133	1,048	1,279	4	6/1/2013	-	-	-	22	7/1/2022	225.3	1,427	1,448
5/1/2017	162	1,128	1,494	4	7/1/2013	-	-	-	23	8/1/2022	224.2	1,424	1,443
6/1/2017	110	980	1,073	4	8/1/2013	-	-	-	24	9/1/2022	223.2	1,420	1,438
7/1/2017	136	923	981	4	9/1/2013	-	-	-	25	10/1/2022	222.1	1,417	1,433
8/1/2017	156	953	1,416	4	10/1/2013	-	-	-	26	11/1/2022	221.0	1,413	1,429
9/1/2017	156	646	1,432	4	11/1/2013	-	-	-	27	12/1/2022	220.0	1,410	1,424
10/1/2017	177	1,151	1,773	4	12/1/2013	-	-	-	28	1/1/2023	218.9	1,406	1,419
11/1/2017	180	1,044	1,615	4	1/1/2014	-	-	-	29	2/1/2023	217.9	1,403	1,415
12/1/2017	155	1,040	1,516	4	2/1/2014	-	-	-	30	3/1/2023	216.9	1,399	1,410
1/1/2018	125	939	1,313	4	3/1/2014	-	-	-	31	4/1/2023	215.8	1,396	1,405
2/1/2018	153	989	1,332	4	4/1/2014	-	-	-	32	5/1/2023	214.8	1,392	1,401
3/1/2018	176	1,042	2,096	4	5/1/2014	-	-	-	33	6/1/2023	213.8	1,389	1,396
4/1/2018	92	736	1,358	4	6/1/2014	-	-	-	34	7/1/2023	212.7	1,385	1,392
5/1/2018	159	958	2,262	4	7/1/2014	-	-	-	35	8/1/2023	211.7	1,382	1,387
6/1/2018	156	1,050	2,262	4	8/1/2014	-	-	-	36	9/1/2023	210.7	1,378	1,382
7/1/2018	166	1,010	1,990	4	9/1/2014	-	-	-	37	10/1/2023	209.7	1,375	1,378
8/1/2018	173	1,009	2,077	4	10/1/2014	-	-	-	38	11/1/2023	208.7	1,371	1,373
9/1/2018	170	952	2,067	4	11/1/2014	-	-	-	39	12/1/2023	207.7	1,368	1,369
10/1/2018	151	661	1,773	4	12/1/2014	-	-	-	40	1/1/2024	206.7	1,364	1,364
11/1/2018	171	957	1,638	4	1/1/2015	-	-	-	41	2/1/2024	205.7	1,361	1,360
12/1/2018	168	940	1,793	4	2/1/2015	-	-	-	42	3/1/2024	204.7	1,358	1,355
1/1/2019	182	938	1,696	4	3/1/2015	-	-	-	43	4/1/2024	203.8	1,354	1,351
2/1/2019	137	851	1,555	4	4/1/2015	-	-	-	44	5/1/2024	202.8	1,351	1,346
3/1/2019	170	857	1,867	4	5/1/2015	-	-	-	45	6/1/2024	201.8	1,348	1,342
4/1/2019	170	871	1,840	4	6/1/2015	-	-	-	46	7/1/2024	200.8	1,344	1,338
5/1/2019	177	1,024	1,968	4	7/1/2015	-	-	-	47	8/1/2024	199.9	1,341	1,333
6/1/2019	97	961	864	4	8/1/2015	-	-	-	48	9/1/2024	198.9	1,337	1,329
7/1/2019	145	1,021	1,826	4	9/1/2015	-	-	-	49	10/1/2024	198.0	1,334	1,324
8/1/2019	164	1,041	1,975	4	10/1/2015	-	-	-	50	11/1/2024	197.0	1,331	1,320
9/1/2019	141	947	1,837	4	11/1/2015	-	-	-	51	12/1/2024	196.1	1,327	1,316
10/1/2019	94	982	1,618	4	12/1/2015	-	-	-	52	1/1/2025	195.2	1,324	1,311
11/1/2019	155	966	1,732	4	1/1/2016	-	-	-	53	2/1/2025	194.2	1,321	1,307
12/1/2019	129	972	1,580	4	2/1/2016	-	-	-	54	3/1/2025	193.3	1,318	1,303
1/1/2020	163	955	1,337	4	3/1/2016	-	-	-	55	4/1/2025	192.4	1,314	1,299
2/1/2020	205	882	1,270	4	4/1/2016	-	-	-	56	5/1/2025	191.5	1,311	1,294
3/1/2020	228	889	1	4	5/1/2016	-	-	-	57	6/1/2025	190.5	1,308	1,290
4/1/2020	68	270	217	4	6/1/2016	-	-	-	58	7/1/2025	189.6	1,304	1,286
5/1/2020	116	263	1,498	4	7/1/2016	-	-	-	59	8/1/2025	188.7	1,301	1,282
6/1/2020	81	224	1,450	4	8/1/2016	-	-	-	60	9/1/2025	187.8	1,298	1,277
7/1/2020	77	525	37	4	9/1/2016	-	-	-					
8/1/2020	149	1,011	1	4	10/1/2016	-	-	-					
9/1/2020	155	1,145	7	4	11/1/2016	-	-	-					
10/1/2020	32	939	0	4	12/1/2016	-	-	-					
11/1/2020	158	977	2	4	1/1/2017	-	-	-					
12/1/2020	165	923	24	4	2/1/2017	-	-	-					

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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	3.5	18.8	14.8
Leonard	Queen	4.7	30.7	36.2
	<b>Total</b>	<b>8.2</b>	<b>49.5</b>	<b>51.0</b>
Rhodes	Yates-Seven Rivers	43%	38%	29%
Leonard	Queen	57%	62%	71%
	<b>Total (%)</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>



FAE



RHODES FEDERAL UNIT 47

SPUD DATE : 1/5/1963

T26S R37E S4

Log  
Depth(ft)

2600 -

2650 -

2700 -

2750 -

2800 -

2850 -

2900 -

2950 -

3000 -

3050 -

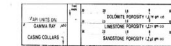
3100 -

3150 -

3200 -

3250 -

3300 -



YATES

SEVEN\_RIVERS

QUEEN

API	SOURCE	TYPE	TOP PERF	BASE PERF
30025200110000	OCD	INACTIVE	3238	3260
30025200110000	CJH	PROPOSED - OH	3290	3450

RHODES FEDERAL UNIT 47  
ELEV\_KB : 2,997  
TD : 3,290

Open hole completion,

--Deepen well to 3450'

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

<sup>1</sup> API Number 30-025-20011	<sup>2</sup> Pool Code 83810	<sup>3</sup> Pool Name RHODES; YATES-SEVEN RIVERS (GAS)
<sup>4</sup> Property Code 326344	<sup>5</sup> Property Name RHODES FEDERAL UNIT	<sup>6</sup> Well Number #047
<sup>7</sup> OGRID No. 329326	<sup>8</sup> Operator Name FAE II OPERATING, LLC	<sup>9</sup> Elevation

<sup>10</sup> Surface Location


UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	4	26S	37E		990	S	660	E	LEA

<sup>11</sup> 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
P	4	26S	37E		990	S	660	E	LEA

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

<div style="text-align: center;"> </div>	<b><sup>17</sup> OPERATOR CERTIFICATION</b> 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. <div style="text-align: right;">  </div> <div style="text-align: right;">6/22/2021</div> <hr/> Signature <span style="float: right;">Date</span> <hr/> Marshall Bates Printed Name <hr/> Marshall@FAEnergyus.com E-mail Address
	<b><sup>18</sup> SURVEYOR CERTIFICATION</b> 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. <hr/> Date of Survey <hr/> Signature and Seal of Professional Surveyor:
	<hr/> 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

<sup>1</sup> API Number 30-025-20011		<sup>2</sup> Pool Code 38760	<sup>3</sup> Pool Name LEONARD; QUEEN, SOUTH
<sup>4</sup> Property Code 326344	<sup>5</sup> Property Name RHODES FEDERAL UNIT		<sup>6</sup> Well Number #047
<sup>7</sup> OGRID No. 329326	<sup>8</sup> Operator Name FAE II OPERATING, LLC		<sup>9</sup> Elevation

## 10 Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	4	26S	37E		990	S	660	E	LEA

<sup>11</sup> 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
P	4	26S	37E		990	S	660	E	LEA

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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				<p><b>17 OPERATOR CERTIFICATION</b></p> <p>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.</p> <hr/> <div style="display: flex; justify-content: space-between;"> <span><i>M. Bates</i></span> <span>6/22/2021</span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Signature</span> <span>Date</span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Marshall Bates</span> <span></span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Printed Name</span> <span></span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Marshall@FAEnergyus.com</span> <span></span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>E-mail Address</span> <span></span> </div>
			SE/4 SE/4 Sec 4 (40 acres)	
			<div style="position: relative; height: 100px;"> <div style="position: absolute; left: -40px; top: 50%; transform: translateY(-50%); white-space: nowrap;">990'</div> <div style="position: absolute; right: -40px; top: 0; white-space: nowrap;">660'</div> </div>	<p><b>18 SURVEYOR CERTIFICATION</b></p> <p>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.</p> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Date of Survey</span> <span></span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Signature and Seal of Professional Surveyor:</span> <span></span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>Certificate Number</span> <span></span> </div>



Well Name: **RFU #047** Lease No: **LC 054668** Lease Type: **Federal**  
 Township: **26 S** Range: **37 E** Sec: **04-P** Location: **990 FSL & 660 FEL**  
 County: **Lea** State: **NM** API: **30-025-20011** Formation: **Rhodes-Leonard; Y-7R-Q**

**Surface Csg**

Size: **8-5/8"**  
 Wt.&Thrd: **28# & 32#**  
 Grade: **H-40 ST&C**  
 Set @: **355'**  
 Sxs cmt: **350 sxs**  
 Circ:   
 TOC: **Surface**  
 Hole Size: **12-1/4"**

KB: **2996'**  
 DF: **2994'**  
 GL: **2985'**  
 Spud Date: **1/5/1963**  
 Compl. Date: **1/17/1963**

**History - Highlights**

**1990-03:** Set CIBP to Isolate QUEEN. Perf Jalmat Pool. Acidize w/ 4000 gals 7.5% NEFE HCL acid; Foam frac w/ 40,000 gals 65Q CO2 & 55,000# 12/20 Brady sand. Set CIBP @ 2500'. Sqz perf @ 2300'. Sqz 50 sxs cmt. Replace top 10' of 8-5/8" csg. DO cmt & CIBP. RTP

**1993-12:** Repair Pump, Clean out to PBTD, RTP

**Proposed:** MIRU. POOH w/ tbg. RIH w/ 4-3/4" bit & deepen to base of QUEEN (est 3450'). Circulate clean. POOH w/ bit. RIH w/ pkr. Set pkr above open hole. Acidize open hole w/ 5000 gals 15% NEFE HCL acid, 1500# rock salt diverter, & flush w/ 1000 bbls 2% KCL water. POOH w/ pkr. TIH w/ tbg, pump & rods. RTP

50 sxs sqz 2300'

**Production Csg**

Size: **5-1/2"**  
 Wt.&Thrd: **14#**  
 Grade: **J-55 ST&C**  
 Set @: **3290'**  
 Sxs Cmt: **250 sxs**  
 Circ:   
 TOC: **2470' (log)**  
 Hole Size: **7-7/8"**

SN 3266'  
 EOT 3303'

**Open Hole**

Size: **4-3/4"**  
 Down to: **3450'**

2580'-2582', 2590'-2594', 2600'-2604' (2 SPF) - Mar 1990  
 Acidized & Frac'd w/ YATES & SEVEN RIVERS

**YATES (Top @ 2620')**

2628'-2634', 2672'-2694', 2726'-2746', 2792'-2800', 2838'-2842' (2 SPF) - Mar 1990  
 Acidized & Frac'd w/ TANSILL & SEVEN RIVERS

**SEVEN RIVERS (Top @ 2879')**

2881'-2900', 2953'-2960' (2 SPF) - Mar 1990  
 Acidized & Frac'd w/ TANSILL & YATES

**QUEEN (Top @ 3236')**

3238', 3240', 3242', 3257', 3260' - Jan 1963  
 Acidized w/ 1000 gals MEC acid; Sand-oil frac w/ 10,000 gals refined oil & 10,000# sand

**3290-3450' Open Hole - Proposed**

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

PBTD 3450'  
 TD 3450'

**Tubulars - Capacities and Performance**

2-3/8" 4.7# J-55 8rd EUE Tubing (~104 jts 2-3/8" tbg, SN, 4' perf sub, MA w/ bull plug)



Well Name: **RFU #047** Lease No: **LC 054668** Lease Type: **Federal**  
 Township: **26 S** Range: **37 E** Sec: **04-P** Location: **990 FSL & 660 FEL**  
 County: **Lea** State: **NM** API: **30-025-20011** Formation: **Rhodes; Yates-7 Rivers**

**CURRENT**Surface Csg

Size: **8-5/8"**  
 Wt.&Thrd: **28# & 32#**  
 Grade: **H-40 ST&C**  
 Set @: **355'**  
 Sxs cmt: **350 sxs**  
 Circ:   
 TOC: **Surface**  
 Hole Size: **12-1/4"**

KB: **2996'**DF: **2994'**GL: **2985'**Spud Date: **1/5/1963**Compl. Date: **1/17/1963**History - Highlights

**1990-03:** Set CIBP to Isolate QUEEN. Perf Jalmat Pool. Acidize w/ 4000 gals 7.5% NEFE HCL acid; Foam frac w/ 40,000 gals 65Q CO2 & 55,000# 12/20 Brady sand. Set CIBP @ 2500'. Sqz perf @ 2300'. Sqz 50 sxs cmt. Replace top 10' of 8-5/8" csg. DO cmt & CIBP. RTP

**1993-12:** Repair Pump, Clean out to PBTD, RTP

All info from OCD well files ONLY

50 sxs sqz 2300'

2580'-2582', 2590'-2594', 2600'-2604' (2 SPF) - Mar 1990  
 Acidized & Frac'd w/ YATES & SEVEN RIVERS

YATES (Top @ 2620')

2628'-2634', 2672'-2694', 2726'-2746', 2792'-2800', 2838'-2842' (2 SPF) - Mar 1990  
 Acidized & Frac'd w/ TANSILL & SEVEN RIVERS

EOT 2846'

SEVEN RIVERS (Top @ 2879')

2881'-2900', 2953'-2960' (2 SPF) - Mar 1990  
 Acidized & Frac'd w/ TANSILL & YATES

Cmt on top 2974'  
 CIBP 3004'

Production Csg

Size: **5-1/2"**  
 Wt.&Thrd: **14#**  
 Grade: **J-55 ST&C**  
 Set @: **3290'**  
 Sxs Cmt: **250 sxs**  
 Circ:   
 TOC: **2470' (log)**  
 Hole Size: **7-7/8"**

QUEEN (Top @ 3236') [ISOLATED]

3238', 3240', 3242', 3257', 3260' - Jan 1963  
 Acidized w/ 1000 gals MEC acid; Sand-oil frac w/ 10,000 gals refined oil & 10,000# sand

PBTD 2974'  
 TD 3290'

Tubulars - Capacities and Performance

2-3/8" 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

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**From:** Vanessa Neal <[vanessa@faenergyus.com](mailto:vanessa@faenergyus.com)>

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

**To:** McClure, Dean, EMNRD <[Dean.McClure@state.nm.us](mailto: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](mailto: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-5141  
**Date:** Wednesday, December 8, 2021 11:19:13 AM  
**Attachments:** [DHC5141 Order.pdf](#)

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NMOCD has issued Administrative Order DHC-5141 which authorizes FAE II Operating, LLC (329326) to downhole commingle production from 2 pools in their Rhodes Federal Unit 47 well (30-025-20011).

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

**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-5141**

**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:** 12/07/2021



State of New Mexico  
Energy, Minerals and Natural Resources Department

## Exhibit A

Order: **DHC-5141**

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

Well Name: **Rhodes Federal Unit #47**

Well API: **30-025-20011**

Upper Zone	Pool Name: <b>RHODES;YATES-SEVEN RIVERS (GAS)</b>		
	Pool ID: <b>83810</b>	Current: <b>X</b>	New:
	Allocation: <b>Fixed Percent</b>	Oil: <b>43%</b>	Gas: <b>38%</b>
	Interval: <b>Perforations</b>	Top: <b>2,600</b>	Bottom: <b>3,178</b>
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: <b>LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG</b>		
	Pool ID: <b>37240</b>	Current:	New: <b>X</b>
	Allocation: <b>Fixed Percent</b>	Oil: <b>57%</b>	Gas: <b>62%</b>
	Interval: <b>Open-Hole</b>	Top: <b>3,178</b>	Bottom: <b>3,450</b>
Bottom of Interval within 150% of Upper Zone's Top of Interval: <b>YES</b>			
Top of Queen Formation: <b>3,278</b>			

**District I**

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

**District II**

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**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 33751

**CONDITIONS**

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 1000 Houston, TX 77079	OGRID: 329326
	Action Number: 33751
	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