

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
---------	----------	----------	-----------	------	---------

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 C D Woolworth Address K-30-24S-37E Lea  
Lease 329326 Well No. 330689 Unit Letter-Section-Township-Range 30-025-32862 County 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)	3,194 – 3,399'		3,415' – 3,634
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 / 1.193 BTU		35.0 API / 1.193 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 87 % Gas 69 %	Oil % Gas %	Oil 13 % Gas 31 %

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 6/20/2021  
TYPE OR PRINT NAME Marshall Bates TELEPHONE NO. (832) 706 - 0041  
E-MAIL ADDRESS Marshall@FAEnergyus.com



# faeIIoperating

June 7, 2021

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

**Re: C D Woolworth #008: API 30-025-32862**  
**Jalmat Pool: 33820**  
**Langlie Mattix Pool: 37240**

Dear Mr. McClure:

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

If you have any questions, please feel free to contact the undersigned 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



Steven Lehn bass  
Land

# faeIIoperating

June 20, 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 C D Woolworth #8 well located in Sec. 30, T-24S, R-37E, Lea County, New Mexico**

Dear Mr. McClure:

FAE II Operating LLC, OGRID: 329326, requests administrative approval for downhole commingling of oil and gas production from the Jalmat and Langlie Mattix Pools for its C D Woolworth #8 well located in Unit Letter K, Section 30, T-24S, R-37E, 1,930 feet FSL and 1,980 feet FWL, as shown in the attached C-102's for each zone.

C D Woolworth #8 is currently open to the Yates-Seven Rivers interval, which translates to the JALMAT; TAN-YATES-7 RVRS [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 C D Woolworth #8 is the Seven Rivers-Queen, which translates to the LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG [Pool ID: 37240]. To develop a forecast for this zone, seventy-nine (79) surrounding wells with production history from the Seven Rivers-Queen were used as an offset to prove up hole potential in the C D Woolworth #8 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 15.0 BOPD and 9.6 MCFPD is the expected total, and of that, 2.0 BOPD and 2.7 MCFPD will come from the Seven Rivers-Queen zone. The Yates-Seven Rivers is projected to yield 13.0 BOPD and 16.7 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,

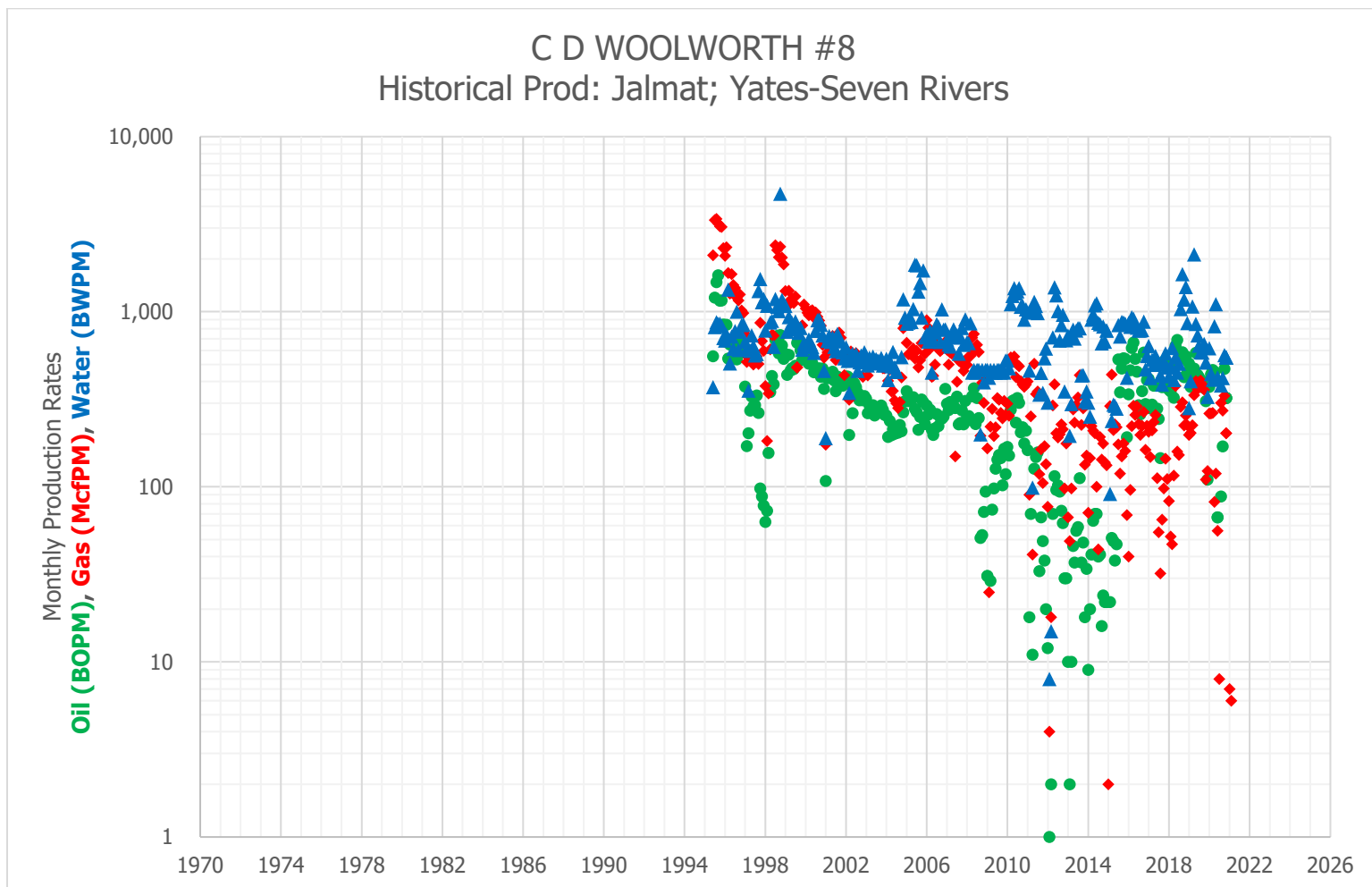


FAE II Operating, LLC



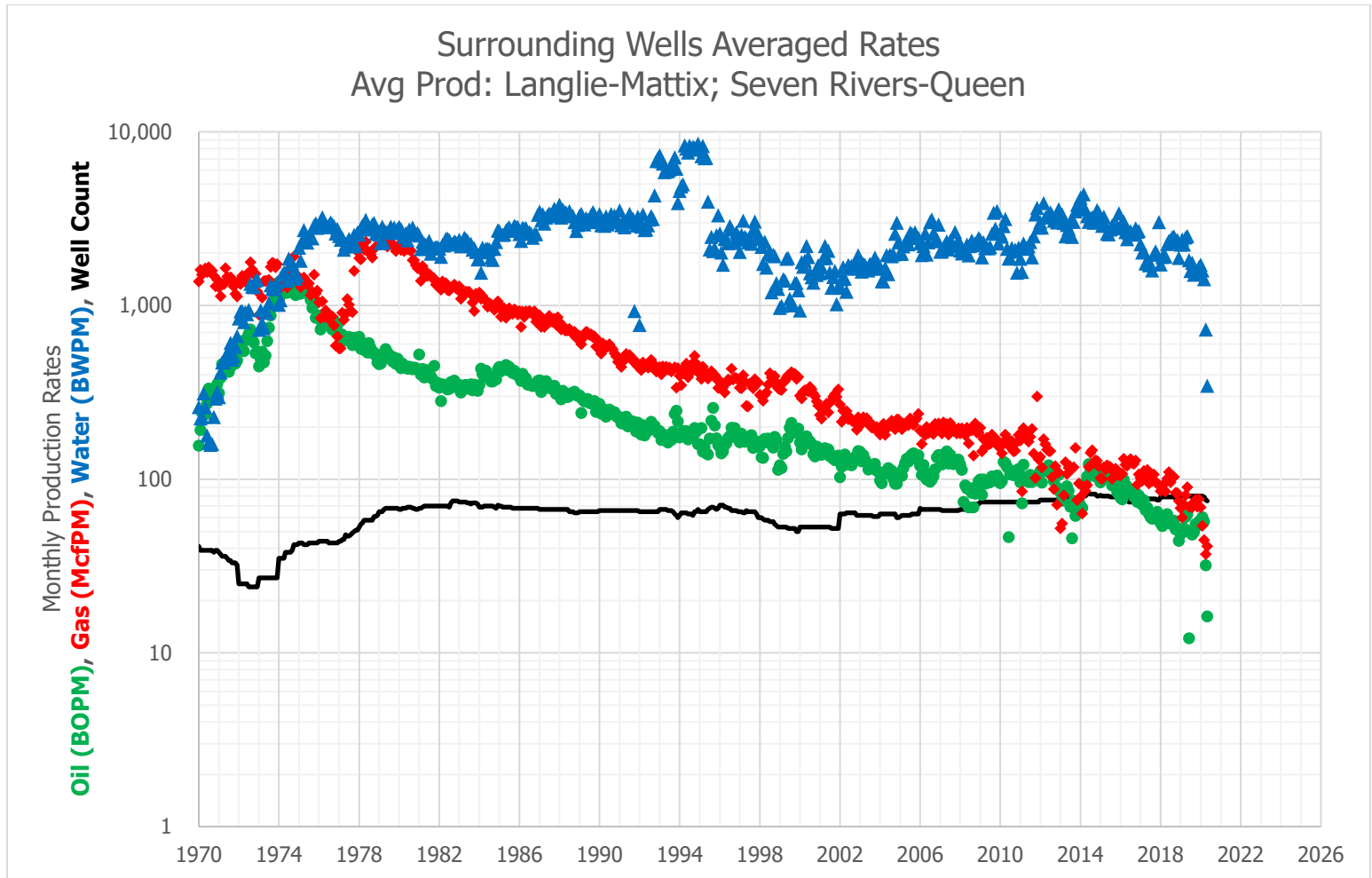
# faeIIoperating

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



# faeIIoperating

## Exhibit B – Historical Average Production in the Proposed Zone





# faeIoperating

## Exhibit C – Historical Production and Decline Curve

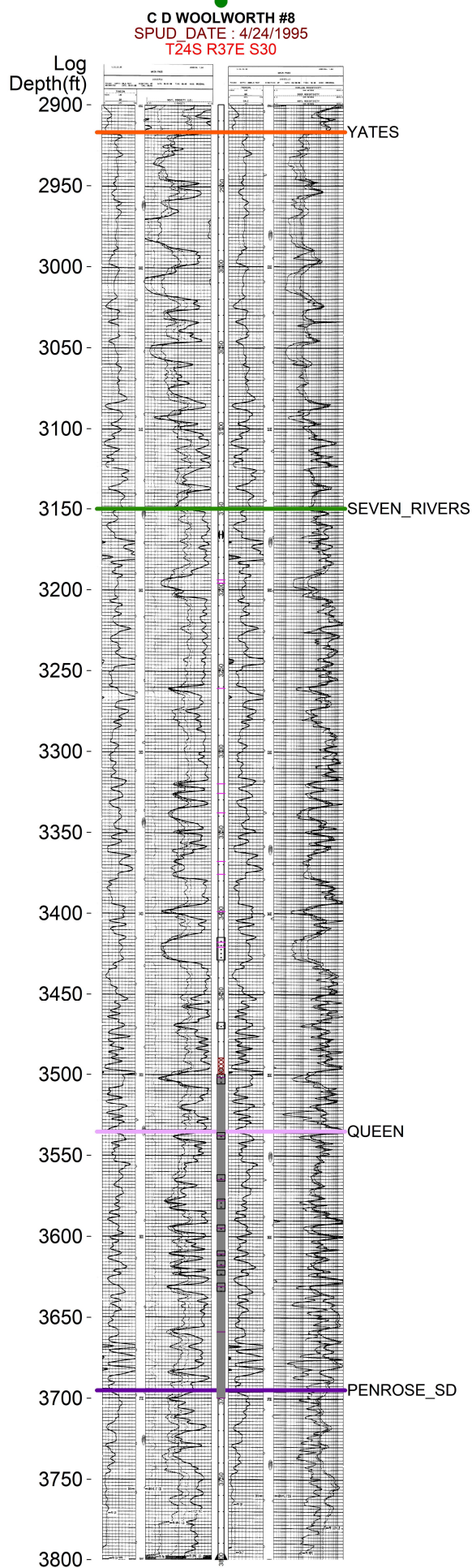
Surrounding Wells Averaged Rates Avg Prod: Langlie-Mattix; Seven Rivers-Queen					C D WOOLWORTH #8 Historical Prod: Jalmat; Yates-Seven Rivers				Synthetic Decline Curve			
Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Well Count	Date	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)	Month	Avg Oil (BOPM)	Avg Gas (McfPM)	Avg Water (BWPM)
7/1/2015	103	118	2,735	79	7/1/2015	535	175	840	1	457.4	292	2,672
8/1/2015	92	100	2,885	79	8/1/2015	346	119	723	2	455.2	291	2,663
9/1/2015	93	110	2,782	79	9/1/2015	473	149	874	3	453.0	291	2,655
10/1/2015	95	115	3,000	79	10/1/2015	543	177	869	4	450.9	290	2,646
11/1/2015	84	113	2,789	78	11/1/2015	538	160	856	5	448.7	289	2,637
12/1/2015	82	106	3,386	75	12/1/2015	192	69	420	6	446.6	289	2,629
1/1/2016	78	105	2,879	77	1/1/2016	337	40	862	7	444.4	288	2,620
2/1/2016	77	107	2,961	77	2/1/2016	463	96	821	8	442.3	287	2,611
3/1/2016	100	131	3,036	77	3/1/2016	620	222	930	9	440.2	286	2,603
4/1/2016	93	121	2,650	77	4/1/2016	667	290	912	10	438.1	286	2,594
5/1/2016	91	119	2,406	77	5/1/2016	539	257	848	11	436.0	285	2,586
6/1/2016	87	124	2,618	74	6/1/2016	455	288	810	12	433.9	284	2,577
7/1/2016	85	131	2,677	74	7/1/2016	293	228	780	13	431.8	283	2,569
8/1/2016	83	124	2,555	74	8/1/2016	259	198	780	14	429.8	283	2,560
9/1/2016	79	122	2,608	74	9/1/2016	352	223	786	15	427.7	282	2,552
10/1/2016	84	128	2,773	74	10/1/2016	585	267	879	16	425.7	281	2,543
11/1/2016	74	93	2,657	74	11/1/2016	297	163	468	17	423.6	281	2,535
12/1/2016	81	106	2,682	74	12/1/2016	407	223	559	18	421.6	280	2,527
1/1/2017	78	101	2,252	77	1/1/2017	414	206	638	19	419.6	279	2,518
2/1/2017	71	98	2,019	77	2/1/2017	281	148	419	20	417.6	279	2,510
3/1/2017	76	111	2,041	77	3/1/2017	295	210	533	21	415.6	278	2,502
4/1/2017	66	102	1,746	77	4/1/2017	378	234	497	22	413.6	277	2,494
5/1/2017	69	113	1,748	77	5/1/2017	490	257	558	23	411.6	276	2,485
6/1/2017	63	95	1,702	77	6/1/2017	280	112	504	24	409.7	276	2,477
7/1/2017	61	107	1,722	77	7/1/2017	244	55	504	25	407.7	275	2,469
8/1/2017	59	97	1,592	77	8/1/2017	146	32	432	26	405.7	274	2,461
9/1/2017	63	106	1,964	77	9/1/2017	371	65	384	27	403.8	274	2,453
10/1/2017	60	96	2,048	77	10/1/2017	521	98	511	28	401.9	273	2,445
11/1/2017	65	95	1,962	76	11/1/2017	488	145	578	29	400.0	272	2,437
12/1/2017	63	92	3,015	76	12/1/2017	375	111	480	30	398.0	272	2,429
1/1/2018	56	85	1,724	79	1/1/2018	358	83	428	31	396.1	271	2,421
2/1/2018	54	89	1,901	79	2/1/2018	351	52	490	32	394.2	270	2,413
3/1/2018	58	93	1,936	79	3/1/2018	492	47	622	33	392.4	270	2,405
4/1/2018	58	85	1,916	79	4/1/2018	323	116	408	34	390.5	269	2,397
5/1/2018	63	100	2,262	79	5/1/2018	640	377	549	35	388.6	268	2,389
6/1/2018	59	110	2,357	79	6/1/2018	690	159	450	36	386.8	268	2,381
7/1/2018	55	96	2,372	79	7/1/2018	582	152	504	37	384.9	267	2,374
8/1/2018	55	103	2,469	79	8/1/2018	536	286	1,036	38	383.1	266	2,366
9/1/2018	58	103	2,486	79	9/1/2018	586	304	1,637	39	381.2	266	2,358
10/1/2018	51	83	2,297	78	10/1/2018	423	224	1,172	40	379.4	265	2,350
11/1/2018	52	83	2,384	78	11/1/2018	557	256	1,386	41	377.6	264	2,342
12/1/2018	44	75	1,880	78	12/1/2018	450	225	863	42	375.8	264	2,335
1/1/2019	48	68	2,240	80	1/1/2019	507	198	282	43	374.0	263	2,327
2/1/2019	49	60	2,395	80	2/1/2019	372	203	401	44	372.2	262	2,319
3/1/2019	52	71	2,241	80	3/1/2019	426	225	1,072	45	370.4	262	2,312
4/1/2019	60	81	2,461	80	4/1/2019	473	334	2,124	46	368.7	261	2,304
5/1/2019	63	90	2,508	80	5/1/2019	582	402	853	47	366.9	260	2,297
6/1/2019	12	69	1,821	80	6/1/2019	436	361	733	48	365.2	260	2,289
7/1/2019	50	70	1,580	80	7/1/2019	423	397	640	49	363.4	259	2,282
8/1/2019	48	69	1,761	80	8/1/2019	407	404	586	50	361.7	258	2,274
9/1/2019	49	71	1,504	80	9/1/2019	400	384	584	51	359.9	258	2,267
10/1/2019	55	76	1,591	80	10/1/2019	367	359	654	52	358.2	257	2,259
11/1/2019	54	69	1,547	80	11/1/2019	308	110	512	53	356.5	257	2,252
12/1/2019	57	77	1,667	80	12/1/2019	110	123	326	54	354.8	256	2,244
1/1/2020	58	69	1,716	80	1/1/2020	372	262	619	55	353.1	255	2,237
2/1/2020	60	54	1,590	80	2/1/2020	440	262	441	56	351.4	255	2,230
3/1/2020	57	45	1,414	79	3/1/2020	464	264	409	57	349.7	254	2,222
4/1/2020	32	37	726	76	4/1/2020	455	82	826	58	348.1	253	2,215
5/1/2020	16	41	345	75	5/1/2020	406	119	1,106	59	346.4	253	2,208
6/1/2020	39	53	1,046	75	6/1/2020	67	56	420	60	344.7	252	2,200
7/1/2020	49	64	1,463	75	7/1/2020	-	8	-				
8/1/2020	46	67	1,192	75	8/1/2020	88	302	380				
9/1/2020	47	67	1,216	75	9/1/2020	170	272	418				
10/1/2020	55	82	1,373	61	10/1/2020	472	331	565				
11/1/2020	64	86	1,387	59	11/1/2020	321	202	549				
12/1/2020	58	92	1,401	59	12/1/2020	-	-	-				

# faeIIoperating

## 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	13.0	6.7	21.9
Langlie Mattix	Seven Rivers-Queen	2.0	2.9	66.0
	<b>Total</b>	<b>15.0</b>	<b>9.6</b>	<b>87.9</b>
Jalmat	Yates-Seven Rivers	87%	69%	25%
Langlie Mattix	Seven Rivers-Queen	13%	31%	75%
	<b>Total (%)</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>





API	SOURCE	PERF TYPE	TOP PERF	BTM PERF
30025328620000	CJH	PROPOSED	3415	3429
30025328620000	CJH	PROPOSED	3468	3472
30025328620000	CJH	PROPOSED	3500	3506
30025328620000	CJH	PROPOSED	3536	3540
30025328620000	CJH	PROPOSED	3562	3566
30025328620000	CJH	PROPOSED	3577	3583
30025328620000	CJH	PROPOSED	3593	3597
30025328620000	CJH	PROPOSED	3609	3612
30025328620000	CJH	PROPOSED	3615	3619
30025328620000	CJH	PROPOSED	3621	3624
30025328620000	CJH	PROPOSED	3629	3634

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 30-025-32862	<sup>2</sup> Pool Code 37240	<sup>3</sup> Pool Name LANGLIE MATTIX; 7 RVRS-Q-GRAYBURG
<sup>4</sup> Property Code 330689	<sup>5</sup> Property Name C D WOOLWORTH	<sup>6</sup> Well Number #008
<sup>7</sup> OGRID No. 329326	<sup>8</sup> Operator Name FAE II OPERATING, LLC	<sup>9</sup> Elevation 3261'

<sup>10</sup> Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
K	30	24S	37E		1930	S	1980	W	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
K	30	24S	37E		1930	S	1980	W	LEA

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill Y	<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.

<sup>16</sup> 	<sup>17</sup> OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <u>Marshall Bates</u> 6/15/2021 Signature Date <u>Marshall Bates</u> Printed Name <u>Marshall@faenergyus.com</u> E-mail Address	
	<sup>18</sup> SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  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

<sup>1</sup> API Number 30-025-32862	<sup>2</sup> Pool Code 33820	<sup>3</sup> Pool Name JALMAT; TAN-YATES-7 RVRS (OIL)
<sup>4</sup> Property Code 330689	<sup>5</sup> Property Name C D WOOLWORTH	<sup>6</sup> Well Number #008
<sup>7</sup> OGRID No. 329326	<sup>8</sup> Operator Name FAE II OPERATING, LLC	<sup>9</sup> Elevation 3261'

<sup>10</sup> Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
K	30	24S	37E		1930	S	1980	W	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
K	30	24S	37E		1930	S	1980	W	LEA

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill Y	<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.

<sup>16</sup> 				<sup>17</sup> 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. Marshall Bates 6/15/2021 Signature Date Marshall Bates Printed Name Marshall@faenergyus.com E-mail Address	
				<sup>18</sup> 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: **CD WOOLWORTH #008** Lease No: **14899** Lease Type: **State**  
 Township: **24-S** Range: **37-E** Sec: **30-K** Location: **1930' FSL & 1980' FWL**  
 County: **Lea** State: **NM** API: **30-025-32862** Formations: **[33820] JALMAT; TAN-YATES-7 RVRs (OIL)**  
**[37240] LANGLEIE MATTIX; 7 RVRs-Q-GB**

**Surface Csg**

Size: **8-5/8"**  
 Wt.&Thrd: **24#**  
 Grade: **K-55**  
 Set @: **460'**  
 Sxs cmt: **250 sxs**  
 Circ: **21 sxs**  
 TOC: **Surface**  
 Hole Size: **12-1/4"**

KB: **3271'**DF: **3270'**GL: **3261'**Spud Date: **4/24/1995**Compl. Date: **6/15/1995****PROPOSED****Directional Survey**

MD (ft)	Inc (deg)	
460	1.00	
1236	1.00	
2109	2.00	
2389	3.00	KOP
2513	4.00	
2638	4.00	
2763	4.25	
2888	3.00	
3011	2.25	
3800	2.00	

**History - Highlights**

**1995-06:** Test Queen, all water, isolate bottom two sets of perfs, Test Queen, high wtr cut; Sqz & RC to Jalmat Oil

**Proposed:** DO Cmt & CIBP, CO to PBTD, Add Perfs & Acidize 7 RVRs & QUEEN; DHC Jalmat & Langlie Mattix Pools

**YATES (Top @ 2917')**

SN **3554'**  
 EOT **3590'**

Cmt Plug **3641'-3800'****Production Csg**

Size: **5-1/2"**  
 Wt.&Thrd: **15.5/17#**  
 Grade: **J-55/K-55**  
 Set @: **3800'**  
 Sxs Cmt: **650 sxs**  
 Circ: **73 sxs**  
 TOC: **Surface**  
 Hole Size: **7-7/8"**

**7-RIVERS (Top @ 3150')**

3194', 3196', 3261', 3320', 3326', 3338', 3368', 3376', 3399' (4 SPF) - Jun 1995

3418', 3421' (2 SPF) - Jun 1995

Acidized w/ 2300 gals 15% NEFE acid; Frac w/ 61,000 gals 35# XL gel &amp; 188,000# 12/20

**3415-3429', 3468-3472', 3500-3506', 3536-3540', 3562-3566' (2 SPF) - Proposed**

Acidize w/ QUEEN w/ 5000 gals 15% NEFE HCL acid, 1500# rock salt diverter &amp; flush w/ 30 bbls 2 % KCL water.

**QUEEN (Top @ 3575') [SQUEEZED]**

3502', 3538', 3565', 3578', 3595', 3611', 3618', 3631', 3659', 3700' (4 SPF) - Jun 1995

Acidized w/ 1500 gals 15% NEFE acid; Frac w/ 61,000 gals 35# XL gel &amp; 206,000# 12/20

**3577-3583', 3593-3597', 3609-3612', 3615-3619', 3621-3624', 3629-3634' (2 SPF) - Proposed**

Acidize w/ Lwr 7 RVRs

**PBTD 3641'****TD 3800'****Tubulars - Capacities and Performance****2-3/8" 4.7# J-55 EUE Tubing (110 jts 2-3/8" tbg, SN, 4' perf sub, MA w/ bull plug)**



Well Name: **CD WOOLWORTH #008** Lease No: **14899** Lease Type: **State**  
 Township: **24-S** Range: **37-E** Sec: **30-K** Location: **1930' FSL & 1980' FWL**  
 County: **Lea** State: **NM** API: **30-025-32862** Formation: **[33820] JALMAT; TAN-YATES-7 RVRS (OIL)**

**Surface Csg**

Size: **8-5/8"**  
 Wt.&Thrd: **24#**  
 Grade: **K-55**  
 Set @: **460'**  
 Sxs cmt: **250 sxs**  
 Circ: **21 sxs**  
 TOC: **Surface**  
 Hole Size: **12-1/4"**

KB: **3271'**DF: **3270'**GL: **3261'**Spud Date: **4/24/1995**Compl. Date: **6/15/1995****CURRENT****Directional Survey**

MD (ft)	Inc (deg)	
460	1.00	
1236	1.00	
2109	2.00	
2389	3.00	KOP
2513	4.00	
2638	4.00	
2763	4.25	
2888	3.00	
3011	2.25	
3800	2.00	

**History - Highlights**

**1995-06:** Test Queen, all water, isolate bottom two sets of perms, Test Queen, high wtr cut; Sqz & RC to Jalmat Oil

**All info from OCD well files ONLY**

**YATES (Top @ 2917')**

EOT 3166'

Cmt on top 3480'

CIBP 3490'

Cmt Plug 3641'-3800'

**7-RIVERS (Top @ 3150')**

3194', 3196', 3261', 3320', 3326', 3338', 3368', 3376', 3399' (4 SPF) - Jun 1995

3418', 3421' (2 SPF) - Jun 1995

Acidized w/ 2300 gals 15% NEFE acid; Frac w/ 61,000 gals 35# XL gel &amp; 188,000# 12/20

**Production Csg**

Size: **5-1/2"**  
 Wt.&Thrd: **15.5/17#**  
 Grade: **J-55/K-55**  
 Set @: **3800'**  
 Sxs Cmt: **650 sxs**  
 Circ: **73 sxs**  
 TOC: **Surface**  
 Hole Size: **7-7/8"**

**QUEEN (Top @ 3575') [SQUEEZED]**

3502', 3538', 3565', 3578', 3595', 3611', 3618', 3631', 3659', 3700' (4 SPF) - Jun 1995

Acidized w/ 1500 gals 15% NEFE acid; Frac w/ 61,000 gals 35# XL gel &amp; 206,000# 12/20

PBTD 3480'

TD 3800'

**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

---

**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:** [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-5146  
**Date:** Friday, April 15, 2022 12:07:57 PM  
**Attachments:** [DHC5146 Order.pdf](#)

---

NMOCD has issued Administrative Order DHC-5146 which authorizes FAE II Operating, LLC (329326) to downhole commingle production within the following well:

**Well Name:** **C D Woolworth #8**

**Well API:** **30-025-32862**

---

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] downhole commingling application DHC-5146  
**Date:** Tuesday, December 28, 2021 11:01:03 AM  
**Attachments:** [image001.png](#)  
[WBD C D Woolworth #8 CURRENT-PROPOSED 2021-12.pdf](#)

---

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

Mr. McClure,

Attached are the current and proposed wellbore diagrams for the C D Woolworth #008 (30-025-32862).

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

C [979.255.3476](tel:979.255.3476)

E [vanessa@faenergyus.com](mailto: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-5146**

**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 an alteration is made to the Well or a condition within the Well changes which may cause the allocation of production to the Pools as approved within this Order to become inaccurate, then no later than sixty (60) days after that event, Applicant shall submit Form C-103 to the OCD Engineering Bureau describing the event and include a revised allocation plan. If OCD denies the revised allocation plan, this Order shall terminate on the date of such action.
4. 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.
5. 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.
6. If the Well is deepened, then no later than forty-five (45) days after the Well is deepened, Applicant shall conduct and provide logs to OCD that are sufficient for OCD to determine which pool(s) each new completed interval of the Well will produce from.
7. 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.

8. 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.
9. 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).
10. 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-5146**

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

Well Name: **C D Woolworth #8**

Well API: **30-025-32862**

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

**Upper Zone**

Pool ID: **33820**

Current: **X**

New:

Allocation: **Fixed Percent**

Oil: **87%**

Gas: **69%**

Interval: **Perforations**

Top: **3,194**

Bottom: **3,435**

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: **13%**

Gas: **31%**

Interval: **Perforations**

Top: **3,435**

Bottom: **3,834**

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

Top of Queen Formation: **3,535**

**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 33760

**CONDITIONS**

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 33760
	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