Γ					
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] TYPE OF APPLICATION - Check Those Which Apply for [A] [1] Location - Spacing Unit - Simultaneous Dedication ☐ NSL ☐ NSP ☐ SD Check One Only for [B] or [C] Commingling - Storage - Measurement ☑ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery [C] ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR [D] Other: Specify **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or □ Does Not Apply [2] Working, Royalty or Overriding Royalty Interest Owners [B] Offset Operators, Leaseholders or Surface Owner Application is One Which Requires Published Legal Notice [C] Notification and/or Concurrent Approval by BLM or SLO [D] U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office For all of the above, Proof of Notification or Publication is Attached, and/or, [E] [F] Waivers are Attached SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE [3] OF APPLICATION INDICATED ABOVE. 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. Print or Type Name e-mail Address

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1000		
I hereby certify that the well togation shown or this plat was pionedly from field notes; officual surveys hade by me or under my supervision, shouthat the same is true and correct to the bast of my belief.	Amott Ramsay NCT-B #12 St: 500' FSL & 1480' FWL (O) BHL: 511' FSL & 749' FEL (P) Sec. 32, T-25-S, R-37-E	energia, eduka sa ta Ang
TACIENTED BOAT WELLS		
73/29/2021 60 110 10 10 10 10 10 10 10 10 10 10 10 1		
Frightening Tech		
Signature Marchall Rate		
mBates		
Thereby certify that the information contained herein is true and complete to the best of my knowledge and belief		

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

District III 1000 Rio Brazos Rd., Aztec, NM 87410 District II 811 South First, Arlesia, NM 88210 District I PO Box 1980, Hobbs, NM 88241-1980

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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	329326	70GRID No.	326919	4Property Code	30-025-2755	API Number	
	FAE II						WELLL
Cirre	FAE II Operating, LLC	.dOr.	Amott	sPro	33820	zPool Code	OCATION AND A
Curface I postion	r.c	₄Operator Name	Amott Ramsay NCT-B	sProperty Name	Jalmat (T-Y-7R) Oil	₃Pool Name	WELL LOCATION AND ACREAGE DEDICATION PLAT
	2988' GR	»Elevation	12	«Well Number			

	329326	7OGRID No.	326919	Property Code	30-025-27551	AP! Number
.,Surfe	FAE II Operating, LLC	10*.	Amot	ld ⁸	51 33820	₂Pool Code
"Surface Location	110	Operator Name	Amott Ramsay NCT-B	sProperty Name	Jalmat (T-Y-7R) Oil	₃Pool Name
	2988' GR	•Elevation	12	«Well Number		

500' South Feet from the 1480

East/West Line

County

40	Dedicated Acres 13 Joint or Infill	70	L or lot no.		0
z	niober	32	Section	8	32
_		25S	Township		258
	₁₄Consolidation Code	37E	Range	"Botto	37E
	- 1		Lot Idn	m Hole I	
•	16Order No.	611'	Feet from the	Location If L	500'
		South	North/South line	"Bottom Hole Location If Different From Surface	South
		749'	Feet from the	Surface	1480'
		East	East/West Line		East
		Lea	County		Lea
_				J	_

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UL or lot no.

Township

5

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

Released to Imaging: 12/22/2021 5:45:55 PM

District II 811 South First, Artesia, NM 88210 District I PO Box 1980, Hobbs, NM 88241-1980

District III 1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

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				Ġ	NO ALLOWABLE	12Dedicated Acres	ס	III or lorno	0	UL or lot no.	329326	326919	4Property Code	· -	
					VABLE WILL		ω 8		32	Section	No.	: 4	30-025-27551 Code	API Number	
					유류	nfill	258	Tour State of the	258	Township	FAE				ΝE
					SIGNED ON-STA	⊷Consolidation Code	37E	Bottom	37E	Ranna	Ħ		37		┟╒
3	Arnott Rams SL: 500° FSL; BHL: 611° FS BHC: 32, 13				TO THIS		501.001	Hole		Lot ldn	operation		+240	₂Pool Code	LOCATION
	Amott Ramsay NCT-B #12 SL: 500' FSL & 1480' FWL (O) BHL: 611' FSL & 749' FEL (P) Sec. 32, T-25-S, R-37-E		2		COMPLETI JNIT HAS B	sOrder No.	611'	Location If	500'	"Surface I	Operator Name	Amott Ramsay NCT-B	sProperty Name		AND ACH
12					ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BE A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION		South	Different From	South	Location	Name	say NCT-B	Langlie		ACREAGE DEDICATION PLAT
Certificate Number	I hereby Certify I was piolegoprom or under my sup correct to the decorrect to the decorrec	Signature Mary Printed Name Engin Title 3/29/2021 Date 3/29/2021	m	"OPERATOR I hereby certify that the ir	TERESTS H		749'	Surface	1480'	Fact from the			e Mathx		ATION PLA
mber	LSU TVEY OF CEBRITIES hereby Certify martine well togetion shown on vas ploteoprom field noise the same is runder my supervision, abdular the same is correct to the best of my belief. Date of Survey Sinnature and Seal of Professional Surveyor.	Marshall Baks Marshall Baks Talporion Tal	m Bates	§ § Ω	E		East		East	To company to the com				m e	4
	I hereby Levily marrine was control Surveys and Seal of Professional Surveys Date of Survey Singalure and Seal of Professional Surveys	Baks		ERTIFICATION ation contained herein is of my knowledge and belief	CONSOLIDATED		Lea		Lea		∍Elevation 2988' GR	12	Well Nimber		

Page 4 of 22 District I 1625 N. French Drive, Hobbs, NM 88240

District II 811 S. First St., Artesia, NM 88210

District IV

is Dr

State of New Mexico Energy, Minerals and Natural Resources Department

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

> Revised August 1, 2011 Form C-107A

District III
1000 Rio Brazos Road, Aztec, NM 87410

Fc, NM 87505

APPLICATION FOR DOWNHOLE COMMINGLING

APPLICATION TYPE

X_Single Well

Establish Pre-Approved Pools

EXISTING WELLBORE

OGRID No	329326	Lease	Arnott Ramsay NCT-B	FAE II Operating, LLC
Property Code	326		NCT-B	ng, LLC
ode	326919	Well No.	12	11757 K
API No.	30-025-27551	Unit Letter-Section-Township-Range	0-32-25S-37E	11757 Katy Fwy. Ste. 1000, Houston, TX 77079
Lease Type:Federal		lange		TX 77079
Federal	.			
State	×	County	Lea	
Fee				

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Jalmat		Langlie Mattix
Pool Code	33820		37240
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2,725 – 3,330		3,350'-3,385'
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)	33.1 API / 1.346 BTU		33.1 API / 1.346 BTU
Producing, Shut-In or New Zone	Producing		Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production	See Attached Date:	Date:	See Attached Date:
estimates and supporting data.)	Rates:	Rates:	Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other	Oil Gas	Oil Gas	Oil Gas
than current or past production, supporting data or explanation will be required.)	52 % 79 %	% %	48 % 21 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes

No No

Yes

No

No

Are all produced fluids from all commingled zones compatible with each other?

Will commingling decrease the value of production?

or the United States Bureau of Land Management been notified in writing of this application? If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands

Yes

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 approved Pools were provided notice of the approved notice of the approv

were provided notice of this application

S

E-MAIL ADDRESS

Marshall @

FREnergyus

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

YPE OR PRINT NAME	IGNATURE MBAL
IE Marshall Bates	ita
Bates	TITLE
TELEP	Engineering
HONE NO. (Tech
832)	DATE
TELEPHONE NO. (\$32) 241 - 8080	3/30/21

March 31, 2021

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

Re:

Arnott Ramsay NCT-B #012: API 30-025-27551

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.

Thank you for your attention to this matter.

Sincerely,

FAE II Operating, LLC

Steven Lehrbass

Land

VIA ONLINE FILING

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

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 Arnott Ramsay NCT-B #12 well located in Sec. 32, T-25S, R-37E, Lea County, New Mexico

Dear Mr. McClure:

as shown in the attached C-102's for each zone 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 Arnott Ramsay NCT-B #12 well located in Unit Letter O, Section 32, T-25S, R-37E, 500 feet FSL and 1,480 feet FEL,

The Arnott Ramsay NCT-B #12 is currently open to the Yates-Seven Rivers interval, which translates to the JALMAT; TAN-YATES-7 RVRS pool [Pool ID: 33820]. 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 Arnott Ramsay NCT-B #12 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, four (4) surrounding wells with production history from the Seven Rivers-Queen were used as an offset to prove up hole potential in the Arnott Ramsay NCT-B #12 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 for the Arnott Ramsay NCT-B #12 proved that an IP of 11.5 BOPD and 32.2 MCFPD is the expected total, and of that, 5.2 BOPD and 6.4 MCFPD will come from the Seven Rivers-Queen zone. The Yates-Seven Rivers is projected to yield 6.3 BOPD and 25.8 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.

intent to commingle production will not be necessary. After a review of internal records, the interest owners are identical for the aforementioned wells. As such, notification to the relevant parties of our

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 I Toperating

March 29, 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 Arnott Ramsay NCT-B #12 well located in Sec. 32, T-25S, R-37E, Lea County, New Mexico

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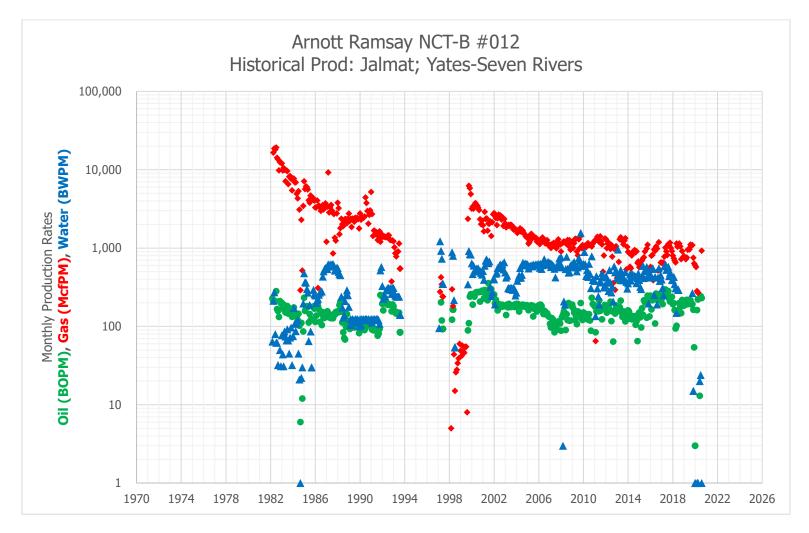
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Very truly yours,

FAE II Operating, LLC

Exhibit A - Historical and Forecast Production in the Current Zone



fae I operating

Exhibit B – Historical Average Production in the Proposed Zone

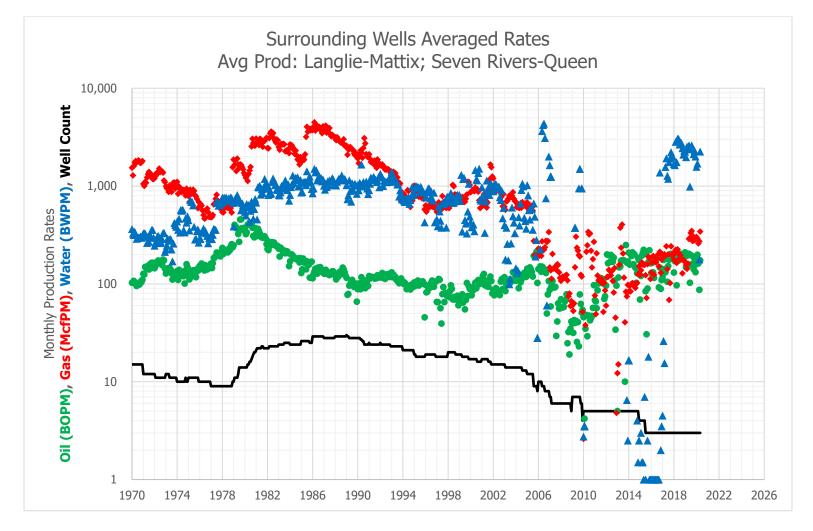
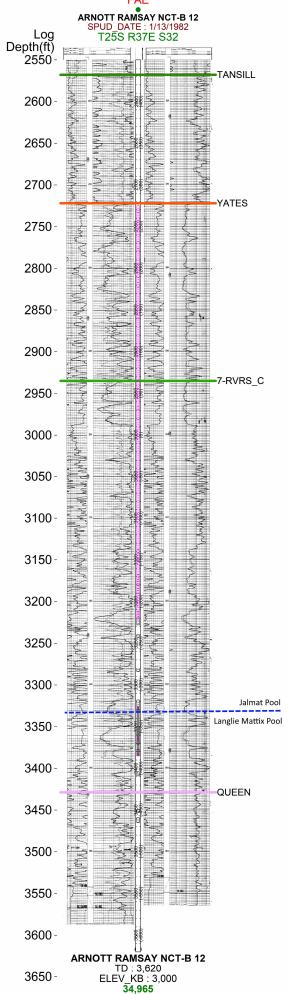


Exhibit C - Historical Production and Decline Curve

			raged Rates ven Rivers-Qu	een			ay NCT-B#0 at; Yates-Se		Synthetic Decline Curve			е
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
1/1/2015	69	124	-	4	1/1/2015	151	570	392	1	349.9	980	1,441
2/1/2015	121	138	3	4	2/1/2015	130	625	320	2	348.2	977	1,436
3/1/2015	195	166	2	4	3/1/2015	97	615	300	3	346.5	975	1,432
4/1/2015	208	157	2	4	4/1/2015	170	690	438	4	344.9	972	1,427
5/1/2015	223	160	1	4	5/1/2015	141	740	591	5	343.2	970	1,422
6/1/2015	202	156	7	4	6/1/2015	215	762	415	6	341.6	968	1,417
7/1/2015	84	122	1	3	7/1/2015	203	906	523	7	339.9	965	1,413
8/1/2015	31	72	1	3	8/1/2015	204	403	506	8	338.3	963	1,408
9/1/2015	90	159	3	3	9/1/2015	129	987	575	9	336.7	960	1,404
10/1/2015	168	189	18	3	10/1/2015	247	1,103	427	10	335.1	958	1,399
11/1/2015	221	182	1	3	11/1/2015	219	425	196	11	333.5	955	1,394
12/1/2015	163	112	1	3	12/1/2015	134	503	491	12	331.9	953	1,390
1/1/2016	130	130	1	3	1/1/2016	247	576	459	13	330.3	951	1,385
2/1/2016	165	165	1	3	2/1/2016	165	800	421	14	328.7	948	1,381
3/1/2016	131	193	1	3	3/1/2016	215	814	554	15	327.2	946	1,376
4/1/2016	115	124	1	3	4/1/2016	240	387	542	16	325.6	944	1,372
5/1/2016	184	183	1	3	5/1/2016	226	960	251	17	324.0	941	1,367
6/1/2016	174	166	1	3	6/1/2016	109	923	425	18	322.5	939	1,363
7/1/2016	187	185	1	3	7/1/2016	263	1,052	-	19	320.9	937	1,358
8/1/2016	189	199	1	3	8/1/2016	219	984	191	20	319.4	934	1,354
9/1/2016	92	151	1	3	9/1/2016	219	517	421	21	317.9	932	1,349
10/1/2016	147	213	1,375	3	10/1/2016	257	1,186	553	22	316.4	930	1,345
11/1/2016	89	129	2	3	11/1/2016	215	527	381	23	314.9	927	1,340
12/1/2016	110	177	4	3	12/1/2016	252	654	450	24	313.3	925	1,336
1/1/2017	116	200	5	3	1/1/2017	225	651	397	25	311.8	923	1,332
2/1/2017	176	191	26	3	2/1/2017	192	642	311	26	310.4	920	1,327
3/1/2017	142	201	16	3	3/1/2017	249	655	250	27	308.9	918	1,323
4/1/2017	131	194	1,566	3	4/1/2017	287	777	586	28 29	307.4	916	1,318
5/1/2017	180 105	242	1,919	3	5/1/2017	297	1,010	618		305.9	913	1,314
6/1/2017		141	1,271		6/1/2017	269	910	527	30	304.5	911	1,310
7/1/2017	152 177	201 69	1,185 1,758	3	7/1/2017	260 283	815 1,125	538 579	31 32	303.0 301.6	909	1,306 1,301
8/1/2017 9/1/2017	198	102	1,758	3	8/1/2017 9/1/2017	283	1,125	438	33	301.6	907	1,301
10/1/2017	203	242	2,216	3	10/1/2017	207	1,171	483	34	298.7	902	1,297
11/1/2017	203	196	2,216	3	11/1/2017	234	996	466	35	290.7	900	1,293
12/1/2017	184	205	1,986	3	12/1/2017	239	914	392	36	295.8	898	1,284
1/1/2018	131	177	1,675	3	1/1/2018	192	799	390	37	294.4	895	1,280
2/1/2018	171	206	1,633	3	2/1/2018	198	739	428	38	293.0	893	1,276
3/1/2018	196	223	2,831	3	3/1/2018	162	690	346	39	291.6	891	1,272
4/1/2018	97	163	1,752	3	4/1/2018	94	657	307	40	290.2	889	1,267
5/1/2018	203	226	3,039	3	5/1/2018	102	1,143	149	41	288.8	886	1,263
6/1/2018	173	206	3,026	3	6/1/2018	159	1,039	-	42	287.5	884	1,259
7/1/2018	187	181	2,651	3	7/1/2018	158	1,070	292	43	286.1	882	1,255
8/1/2018	203	196	2,795	3	8/1/2018	199	1,144	-	44	284.7	880	1,251
9/1/2018	192	178	2,745	3	9/1/2018	177	1,053	-	45	283.3	878	1,247
10/1/2018	183	128	2,438	3	10/1/2018	148	720	-	46	282.0	875	1,243
11/1/2018	202	177	2,092	3	11/1/2018	217	913	-	47	280.6	873	1,239
12/1/2018	187	171	2,294	3	12/1/2018	183	768	-	48	279.3	871	1,234
1/1/2019	210	168	2,240	3	1/1/2019	211	788	-	49	278.0	869	1,230
2/1/2019	148	156	1,971	3	2/1/2019	187	746	-	50	276.6	867	1,226
3/1/2019	194	142	2,528	3	3/1/2019	201	722	-	51	275.3	865	1,222
4/1/2019	198	161	2,436	3	4/1/2019	218	756	-	52	274.0	862	1,218
5/1/2019	203	288	2,609	3	5/1/2019	192	952	-	53	272.7	860	1,214
6/1/2019	103	295	986	3	6/1/2019	213	977	-	54	271.4	858	1,210
7/1/2019	157	330	2,371	3	7/1/2019	204	960	-	55	270.1	856	1,206
8/1/2019	195	348	2,602	3	8/1/2019	215	1,108	-	56	268.8	854	1,202
9/1/2019	160	274	2,403	3	9/1/2019	191	1,079	-	57	267.5	852	1,198
10/1/2019	141	302	2,120	3	10/1/2019	192	1,089	266	58	266.2	850	1,194
11/1/2019	181	281	2,293	3	11/1/2019	163	751	15	59	265.0	847	1,191
12/1/2019	132	294	2,000	3	12/1/2019	54	634		60	263.7	845	1,187
1/1/2020	159	301	1,572	3	1/1/2020	3	602	1				
2/1/2020	198	290	1,693	3	2/1/2020	-	574	-				
3/1/2020	162	259	1	3	3/1/2020	162	283	1				
4/1/2020	87	272	178	3	4/1/2020	222	270	1				
5/1/2020	174	342	2,248	3	5/1/2020	-	-	-				
_					6/1/2020	13	-	20				

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	6.3	25.8	7.8
Langlie Mattix	Seven Rivers-Queen	5.2	6.4	39.6
	Total	11.5	32.2	47.4
Jalmat	Yates-Seven Rivers	52%	79%	15%
Langlie Mattix	Seven Rivers-Queen	48%	21%	85%
	Total (%)	100%	100%	100%



API	Source	Status	Top Perf	Btm Perf
30025275510000	CJH	PROPOSED	3138	3142
30025275510000	CJH	PROPOSED	3148	3152
30025275510000	CJH	PROPOSED	3168	3176
30025275510000	CJH	PROPOSED	3179	3181
30025275510000	CJH	PROPOSED	3184	3190
30025275510000	CJH	PROPOSED	3212	3228
30025275510000	CJH	PROPOSED	3240	3243
30025275510000	CJH	PROPOSED	3281	3284
30025275510000	CJH	PROPOSED	3318	3333
30025275510000	CJH	PROPOSED	3350	3371
30025275510000	CJH	PROPOSED	3377	3385
30025275510000	CJH	PROPOSED	3404	3409
30025275510000	CJH	PROPOSED	3449	3453
30025275510000	CJH	PROPOSED	3459	3465

ARNOTT RAMSAY NCT-B #012 State Well Name: Lease No: Lease Type: 25-S 37-E Sec: Surface Location: 500' FSL & 1480' FEL Range: 32-O Township: Bottm Hole Location: 611' FSL & 749' FEL 30-025-27551 Lea NM API: County: State: Formation: Jalmat-Langlie Mattix; Y-7R-Q **PROPOSED** Surface Csg KB: 3000' **Directional Survey** Size: 8-5/8' DF MD (feet) Incl. (Deg) 2989' Wt.&Thrd: 24# GL: 0.00 Grade: K-55 ST&C Spud Date: 1/13/1982 775 3.00 - KOP 350' Compl. Date: 3/11/1982 897 5.00 Set @: Sxs cmt: 225 sxs 1021 7.00 Circ: Circ 1114 9.50 TOC: Surface Severe dogleg 1100-1200' 1235 17.75 Hole Size: 12-1/4" 1397 17.75 1581 17.75 2015 17.25 2607 17.25 3107 15.50 3522 15.00 3615 15.00 History - Highlights 1999-08: CO2 foam frac YATES & 7 RVRs w/ 266,307 gals gel water (44.7% CO2), 60,000# 20/40 sand, 90,000# 10/20 sand, & 450,000# 8/16 sand Proposed: Add Perfs & Acidize 7 RVRs & QUEEN formations; DHC Jalmat & Langlie Mattix Pools DV tool 2660' YATES (Top @ 2722') 2725', 2733', 2743', 2752', 2768', 2776', 2779', 2795', 2811', 2817', 2823', 2860', 2944', 2953', 2956', 2966', 2969', 2981' (1 SPF) - Aug 1999 Acidized w/ 3280 gal 15% MCA acid, 29 ball sealers & flush w/ 30 bbls 2% KCL water SN 3425' 7-RIVERS (Top @ 2989') **EOT** 3461 3174', 3187', 3215', 3219', 3221' (1 SPF) - Aug 1999 Acidized w/ 920 gal 15% MCA acid, 8 ball sealers & flush w/ 17 bbls 2% KCL water **Production Csg** 3326-3330', 3361-3365', 3380-3384' (2 SPF) - Mar 1982 [SQUEEZED] Acidized w/ 1800 gals 15% NEFE acid & 30 RCNBs; Frac w/ 26,000 gals gel, Size: 5-1/2 39,000# 20/40 sand & 16 RCNBs Wt.&Thrd: 15.5# 3138-3142', 3148-3152', 3168-3176', 3179-3181', 3184-3190', 3212-3228', 3240-3243', 3281-Grade: LT&C 3284', 3318-3333', 3350-3371', 3377-3385' (2 SPF) - Proposed Set @: 3618' Acidize 3138-3284' w/ 2500 gals 15% NEFE HCL acid, 750# rock salt, & flush w/ 500 Sxs Cmt: 1000 sxs bbls 2% KCL wtr Circ: 50 sxs TOC: Surface QUEEN (Top @ 3404') Hole Size: 3404-3409', 3449-3453', 3459-3465' (2 SPF) - Proposed PBTD 3560 Acidize 3318-3465' w/ 3000 gals 15% NEFE HCL acid, 1000# rock salt, & flush w/ 750 bbls 2% KCL wtr TD 3620' Tubulars - Capacities and Performance 4.7# 8rd EUE Tubing (106 jts 2-3/8" tbg, SN, 4' perf sub, MA w/ bull plug)

ARNOTT RAMSAY NCT-B #012 State Well Name: Lease No: Lease Type: 37-E 32-O Surface Location: 500' FSL & 1480' FEL Range: Sec: Township: Bottm Hole Location: 611' FSL & 749' FEL 30-025-27551 Lea State: NM API: County: Formation: Jalmat; TANSILL-YATES-7 RVRs CURRENT Surface Csg KB: 3000' **Directional Survey** Size: 8-5/8" DF: MD (feet) Incl. (Deg) 2989' Wt.&Thrd: 24# GL: 0.00 Grade: K-55 ST&C Spud Date: 1/13/1982 775 3.00 - KOP Set @: 350' Compl. Date: 3/11/1982 897 5.00 Sxs cmt: 225 sxs 1021 7.00 Circ: Circ 1114 9.50 TOC: Surface Severe dogleg 1100-1200' 1235 17.75 Hole Size: 12-1/4" 1397 17.75 1581 17.75 2015 17.25 2607 17.25 3107 15.50 3522 15.00 3615 15.00 History - Highlights 1999-08: CO2 foam frac YATES & 7 RVRs w/ 266,307 gals gel water (44.7% CO2), 60,000# 20/40 sand, 90,000# 10/20 sand, & 450,000# 8/16 sand All info from OCD well files ONLY DV tool 2660' YATES (Top @ 2722') 2725', 2733', 2743', 2752', 2768', 2776', 2779', 2795', 2811', 2817', 2823', 2860', 2944', 2953', 2956', 2966', 2969', 2981' (1 SPF) - Aug 1999 EOT 3451' Acidized w/ 3280 gal 15% MCA acid, 29 ball sealers & flush w/ 30 bbls 2% KCL water 7-RIVERS (Top @ 2989') **Production Csg** 3174', 3187', 3215', 3219', 3221' (1 SPF) - Aug 1999 5-1/2' Acidized w/ 920 gal 15% MCA acid, 8 ball sealers & flush w/ 17 bbls 2% KCL water Size: 3326-3330', 3361-3365', 3380-3384' (2 SPF) - Mar 1982 Wt.&Thrd: 15.5# Acidized w/ 1800 gals 15% NEFE acid & 30 RCNBs; Frac w/ 26,000 gals gel, Grade: LT&C 39,000# 20/40 sand & 16 RCNBs Set @: 3618' Sxs Cmt: 1000 sxs QUEEN (Top @ 3404') Circ: 50 sxs TOC: Surface Hole Size: PBTD 3560' TD 3620' Tubulars - Capacities and Performance 2-3/8" Tubing (106 jts 2-3/8" tbg + SN + 18' MA - 2' AGL + 10' KBC)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVER\$
 Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: 	A. Signature X
Commissioner of Public Lands Attn: Commingling Manager PO Box 1148 Santa Fe, NM 87504	D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No
9590 9402 6545 1028 5770 08 2. Article Number (Transfer from service label) 7020 0640 0000 9346 5552	3. Service Type □ Adult Signature □ Adult Signature Restricted Delivery □ Certified Mail® □ Certified Mail Restricted Delivery □ Collect on Delivery □ Collect on Delivery Restricted Delivery □ red Mail □ Priority Mail Express® □ Registered Mail™ □ Registered Mail™ □ Registered Mail™ □ Signature Confirmation™ □ Signature Confirmation □ Restricted Delivery □ Restricted Delivery
PS Form 3811, July 2020 PSN 7530-02-000-9053	

From: Engineer, OCD, EMNRD

To: Vanessa Neal; Marshall Bates

Cc: McClure, Dean, EMNRD; Kautz, Paul, EMNRD; Hawkins, James, EMNRD; Powell, Brandon, EMNRD;

lisa@rwbyram.com; Dawson, Scott

Subject:Approved Administrative Order DHC-5131Date:Wednesday, December 22, 2021 5:33:02 PM

Attachments: DHC5131 Order.pdf

NMOCD has issued Administrative Order DHC-5131 which authorizes FAE II Operating, LLC (329326) to downhole commingle production from 2 pools in their Arnott Ramsay NCT B #12 well (30-025-27551).

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: <u>Vanessa Neal</u>

To: <u>McClure, Dean, EMNRD; Marshall Bates</u>

Subject: [EXTERNAL] RE: downhole commingling application DHC-5131

Date: Tuesday, December 21, 2021 11:21:25 AM

Attachments: image001.png

WBD AR NCT-B #012 CURRENT-PROPOSED 2021-12.pdf

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

Mr. McClure,

Please find the attached current and proposed wellbore diagrams for the downhole commingling application DHC-5131 which involves the Arnott Ramsay NCT B #12 (30-025-27551) operated by FAE II Operating, LLC (329326).

Thank you,

Vanessa Neal | Sr Reservoir Engineer

forty acres energy

O 832.219.0990 (ext 165)

C <u>979.255.3476</u>

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

Sent: Wednesday, November 24, 2021 4:02 PM

To: Marshall Bates <marshall@faenergyus.com>; Vanessa Neal <vanessa@faenergyus.com>

Subject: downhole commingling application DHC-5131

Mr. Bates, Ms. Neal,

I am reviewing downhole commingling application DHC-5131 which involves the Arnott Ramsay NCT B #12 (30-025-27551) 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-5131

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

Order No. DHC-5131 Page 1 of 3

- 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

Order No. DHC-5131 Page 2 of 3

- 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.

DATE: 12/22/2021

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Woul
ADRIENNE SANDOVAL
DIRECTOR

Order No. DHC-5131 Page 3 of 3

Bottom: 3,304

State of New Mexico Energy, Minerals and Natural Resources Department

Exhibit A

Order: DHC-5131

Operator: FAE II Operating, LLC (329326) Well Name: Arnott Ramsay NCT B #12

Well API: 30-025-27551

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

Pool ID: 33820 Current: X New: **Upper Zone Allocation: Fixed Percent** Oil: 52% Gas: 79% **Interval: Perforations**

Pool Name:

Pool ID: Current: New: **Intermediate Zone** Oil: Allocation: Gas:

> Interval: Top: **Bottom:**

Top: 2,725

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

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

Pool ID: 37240 **Current:** New: X **Lower Zone Allocation: Fixed Percent** Oil: 48% Gas: 21%

> **Interval: Perforations** Top: 3,304 **Bottom: 3,465**

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

Top of Queen Formation: 3,404

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

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 23144

CONDITIONS

Operator:	OGRID:
FAE II Operating LLC	329326
11757 Katy Freeway, Suite 1000	Action Number:
Houston, TX 77079	23144
	Action Type:
	[C-107] Down Hole Commingle (C-107A)

CONDITIONS

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