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Signature

				Revised March 23, 2017
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	- Geologic 1220 South St. Fro	al & Engineering Incis Drive, Sant	<b>ATION DIVISION</b> g Bureau – a Fe, NM 87505	STOR NEW MARKS
THIS C	ADMINISTRA HECKLIST IS MANDATORY FOR ALL	ATIVE APPLICATI		O DIVISION PLILES AND
THIS C			DIVISION LEVEL IN SANTA	
oplicant: FAE II Op ell Name: Harrisc			API:30	D Number: 329326 0-025-11805
Jalmat			POOL	Code: 79240
) TYPE OF APPLIC	CATION: Check those v - Spacing Unit - Simulto	INDICATED BELO which apply for [A aneous Dedication	ow N	THE TYPE OF APPLICATION
[1] Comr [II] Injec	ne only for [1] or [1] mingling – Storage – Me DHC □CTB □PL tion – Disposal – Pressur WFX □PMX □SW	C PC C re Increase – Enh	anced Oil Recove	FOR OCD ONLY
A. Offset B. Royalt C. Applic D. Notific E. Notific F. Surfac G. For all	REQUIRED TO: Check to operators or lease hold y, overriding royalty ow ation requires publisher ation and/or concurres ation and/or concurres of the above, proof of tice required	lers vners, revenue ov d notice nt approval by SI nt approval by BI	vners .O .M	Notice Complete Application Content Complete
administrative understand the	I: I hereby certify that the approval is accurate and action will be taken to the Divi	and <b>complete</b> to the en on this applica	the best of my kno	owledge. I also
No	te: Statement must be complete	ed by an individual with	managerial and/or sup	ervisory capacity.
David Schellstede			Date // 2/	1505/
rint or Type Name			832-220-3202 Phone Number	

David@FAEnergyus.com e-mail Address Released to Imaging: 3/29/2021 5:40:59 PM

<u>District I</u> 1625 N. French Drive, Hobbs, NM 88240

<u>District II</u> 811 S. First St., Artesia, NM 88210

District IV

<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410

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

Released to Imaging: 3/29/2021 5:40:59 PM

\_X\_\_Single Well Establish Pre-Approved Pools EXISTING WELLBORE

#### APPLICATION FOR DOWNHOLE COMMINGLING

\_\_X\_\_ Yes \_\_\_\_No

FAE II Operating, LLC	11757 Katy Fwy. Ste. 1	000, Houston, TX 77079	
Operator  Harrison Federal WB		dress 7-25S-37E	Lea
Jease         329326           OGRID No.         Property Co.	329833 30-	-Section-Township-Range -025-11805 Lease Type:	
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)	2,515 – 3,270'		3,270' - 3,370'
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)	35.0 API / 1.387 BTU		35.0 API / 1.387 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 estimates and supporting data.)	See Attached Date: Rates:	Date: Rates:	See Attached Date: Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 0 % 1 %	Oil Gas %	Oil Gas  100 % 99 %
	ADDITIO	NAL DATA	
Are all working, royalty and overriding If not, have all working, royalty and over Are all produced fluids from all commit	erriding royalty interest owners be	en notified by certified mail?	YesXNo YesXNo
Will commingling decrease the value of		ould:	Yes No X
If this well is on, or communitized with or the United States Bureau of Land Ma	, state or federal lands, has either t		Yes X No
NMOCD Reference Case No. applicabl	e to this well:	N1	_
Attachments:  C-102 for each zone to be comming Production curve for each zone for a For zones with no production histor Data to support allocation method o Notification list of working, royalty Any additional statements, data or o	at least one year. (If not available, y, estimated production rates and sor formula.	attach explanation.) supporting data. or uncommon interest cases.	
	PDF_APPD(	OVED POOLS	
If application is		he following additional information wi	Il 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.

Hereby	certify th	at the	шиопш	auon a	DOVE 18	u uc and	complete	to the	best of my	kilowicuge a	mu bener.	
			-	1								

TITLE Engineering SIGNATURE M Batter

TELEPHONE NO. ( Marshall Bertes 832 TYPE OR PRINT NAME

Marshall @ FAEnergyus, com E-MAIL ADDRESS

# fae I operating

December 9, 2020

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

Re:

Harrison Federal WB #001: API 30-025-11805

Jalmat Pool: 79240 Langlie Mattix Pool: 37240

Dear Mr. McClure:

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

If you have any questions, please feel free to contact the undersigned phone at (832) 219-0809 or by email at rebecca@faenergyus.com.

Thank you for your attention to this matter.

Sincerely,

FAE II Operating, LLC

Land

# fae∐operating

January 24, 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 Harrison Federal WB #1 well located in Sec. 27, T-25S, 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 Harrison Federal WB #1 well located in Unit Letter L, Section 27, T-25S, R-37E, 1,980 feet FSL and 660 feet FWL, as shown in the attached C-102's for each zone.

The Harrison Federal WB #1 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 Harrison Federal WB #1 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, fourteen (14) surrounding wells with production history from the Seven Rivers-Queen were used as an offset to prove up hole potential in the Harrison Federal WB #1 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 Harrison Federal WB #1 proved that an IP of 0.8 BOPD and 12.7 MCFPD is the expected total, and of that, 0.8 BOPD and 12.5 MCFPD will come from the Seven Rivers-Queen zone. The Yates-Seven Rivers is projected to yield 0.0 BOPD and 0.2 MCFPD with the additional intervals that will be opened up. This information along with the percentage allocation across the zones is shown in Exhibit D.

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

This proposed commingling of production is in the interest of conservation and will not result in reduced royalty or improper measurement of production. If there are further questions concerning this application, please feel free to contact the undersigned by email at marshall@faenergyus.com or by telephone at (832) 241-8080.

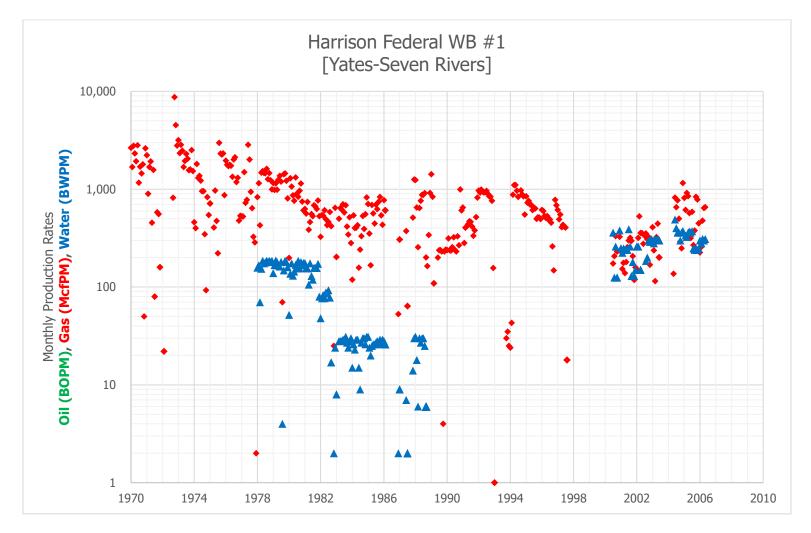
Very truly yours,

AE II Operating, LLC

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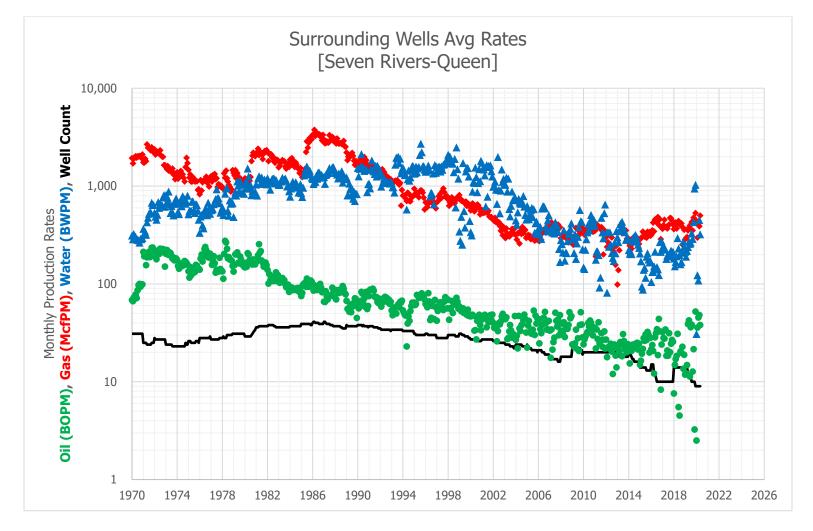
# fae I operating

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



# fae∏operating

Exhibit B – Historical Average Production in the Proposed Zone



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#### **Exhibit C – Historical Production and Decline Curve**

	Avg Prod: Se	-	raged Rates Queen [Oil]		Historical	Harrison Fe Prod: Yates	-Seven Rive		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)
1/1/2015	15	286	204	14	1/1/2015	(BOI WI)	6	(DVVI IVI)	1	23.9	386	226
2/1/2015	16	295	170	14	2/1/2015		6		2	23.8	385	225
3/1/2015	19	298	94	14	3/1/2015		6		3	23.7	384	224
4/1/2015	22	342	87	14	4/1/2015		6		4	23.6	383	224
5/1/2015	28	332	139	14	5/1/2015		6		5	23.5	382	223
6/1/2015	26	304	146	14	6/1/2015		6		6	23.4	381	222
7/1/2015	30	315	115	14	7/1/2015		2		7	23.3	380	221
8/1/2015	27	295	189	13	8/1/2015		9		8	23.1	379	221
9/1/2015	32	341	205	13	9/1/2015		-		9	23.0	378	220
10/1/2015 11/1/2015	30 20	314 337	177 165	13 13	10/1/2015 11/1/2015		9		10 11	22.9 22.8	377 376	219 219
12/1/2015	28	310	171	13	12/1/2015				12	22.7	375	219
1/1/2016	22	316	104	15	1/1/2016		-		13	22.6	374	217
2/1/2016	24	353	132	15	2/1/2016		_		14	22.5	373	216
3/1/2016	21	423	133	15	3/1/2016		-		15	22.4	372	216
4/1/2016	12	344	151	12	4/1/2016		-		16	22.3	371	215
5/1/2016	28	456	213	12	5/1/2016		-		17	22.2	370	214
6/1/2016	31	451	140	11	6/1/2016		-		18	22.1	369	214
7/1/2016	34	421	148	10	7/1/2016		-		19	22.0	369	213
8/1/2016	19	482	141	10	8/1/2016		9		20	21.9	368	212
9/1/2016	44	400	123	10	9/1/2016	-	-	-	21	21.7	367	211
10/1/2016	33	457	267	10	10/1/2016	-	-	-	22	21.6	366	211
11/1/2016	8	287	212	10	11/1/2016	-	-	-	23	21.5	365	210
12/1/2016	24	377	273	10	12/1/2016	-	-	-	24	21.4	364	209
1/1/2017	32	365	236	10	1/1/2017	-	-	-	25	21.3	363	209
2/1/2017	28	397	244	10	2/1/2017	-	-	-	26	21.2	362	208
3/1/2017	28	453	229	10	3/1/2017	-	-	-	27	21.1	361	207
4/1/2017	34	380	223	10	4/1/2017	-	-	-	28	21.0	360	207
5/1/2017	18	383	180	10	5/1/2017	-	-	-	29	20.9	359	206
6/1/2017	21 18	367 396	195 199	10 10	6/1/2017	-	-	-	30 31	20.8	359 358	205 205
7/1/2017 8/1/2017	31	403	199	10	7/1/2017 8/1/2017		-	-	32	20.7	357	203
9/1/2017	20	471	206	10	9/1/2017		_	_	33	20.5	356	203
10/1/2017	24	467	218	10	10/1/2017	_	_	_	34	20.4	355	203
11/1/2017	27	444	194	10	11/1/2017	-	-	-	35	20.3	354	202
12/1/2017	26	404	213	10	12/1/2017	-	-	-	36	20.2	353	201
1/1/2018	8	362	181	14	1/1/2018		-	-	37	20.1	352	201
2/1/2018	15	386	151	14	2/1/2018		-	-	38	20.0	351	200
3/1/2018	17	425	167	14	3/1/2018		-	-	39	19.9	351	199
4/1/2018	18	368	191	14	4/1/2018		-	-	40	19.9	350	199
5/1/2018	31	424	294	14	5/1/2018		-	-	41	19.8	349	198
6/1/2018	6	438	229	14	6/1/2018		-	-	42	19.7	348	197
7/1/2018	5	422	197	14	7/1/2018		-	-	43	19.6	347	197
8/1/2018	20	397	159	14	8/1/2018		-	120	44	19.5	346	196
9/1/2018	20	414	167	14	9/1/2018		-		45	19.4	345	195
10/1/2018	23 14	252 374	208 270	14 14	10/1/2018 11/1/2018		- 1		46 47	19.3 19.2	345	195 194
11/1/2018 12/1/2018	19	356	240	14	11/1/2018		1		47	19.2	344 343	194
1/1/2019	12	285	212	14	1/1/2019		3		48	19.1	343	194
2/1/2019	12	294	189	14	2/1/2019	_	-	-	50	18.9	341	193
3/1/2019	15	301	217	14	3/1/2019	-	-	-	51	18.8	340	192
4/1/2019	39	351	237	12	4/1/2019	-	-	-	52	18.7	339	191
5/1/2019	42	376	271	11	5/1/2019	-	-	-	53	18.7	339	190
6/1/2019	11	394	256	11	6/1/2019	-	-	-	54	18.6	338	190
7/1/2019	36	403	264	11	7/1/2019	-	-	-	55	18.5	337	189
8/1/2019	38	430	328	10	8/1/2019	-	-	-	56	18.4	336	188
9/1/2019	13	351	288	10	9/1/2019	-	-	-	57	18.3	335	188
10/1/2019	22	474	428	10	10/1/2019	-	-	-	58	18.2	334	187
11/1/2019	3	458	942	10	11/1/2019	-	-	-	59	18.1	334	187
12/1/2019	52	529	1,028	9	12/1/2019	-	-	-	60	18.0	333	186
1/1/2020	3	440	31	9	1/1/2020	-	-	-				
2/1/2020	36	297	122	9	2/1/2020	-	-	-				
3/1/2020	45	412	108	9	3/1/2020	-	-	-				
4/1/2020	48	387	449	9	4/1/2020	-	-	-	1			

# fae∏operating

# Exhibit D – Decline Curve IP Rates and Zone Allocation Percentage

Zone (1)	Zone (2)	Oil IP (BOPD)	Gas IP (MCFD)	Water IP (BWPD)
Jalmat	Yates-Seven Rivers	0.0	0.2	0.1
Langlie Mattix	Seven Rivers-Queen	0.8	12.5	7.4
	Total	8.0	12.7	7.5
Jalmat	Yates-Seven Rivers	0%	1%	1%
Langlie Mattix	Seven Rivers-Queen	100%	99%	99%
	Total (%)	100%	100%	100%

# Received by OCD: 1/25/2021 9:34:18 AM

Form C+1+2 Supersedes C-174 Effective 1-1-55

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FAE IL Open	ating, LLC	Harrison Fed	eral WB	1
L 27	25 South	37 East	Lea	
1980 Location of W	Cauth	660	West	Rue
	ites-Seven Rivers	Jalmat		40
. Outline the acreas	e dedicated to the subject w	ell by solved pencil	or hachure marks on	the plat below.
interest and royalt  House than one b	lease is dedicated to the we y). case of different ownership is exaction, unitization, force pool	dedicated to the well		
Yes No	If answer is "yes!" type	of considerior		
this form if necess No ellowable will I forced-pooling, or o	list the owners and tract desary.) or assigned to the well until altherwise) or until a non-standar	l interests have been	consolidated (by co	manunitization, unitization,
1011.				CERTIFICATION
			tained	certify that the information con- herein is true and complete to the my knowledge and belief.
			Marsh	hall Bates
			1	incering Tech
			D:12	I Operating, LLC.
С-032579-Ь			shown on the second of the sec	by certify that the well location on this plot was plotted from field of actual surveys made by me or by supervision, and that the same and correct to the best of my age and belief.
6			Trut- Yerv	eged.
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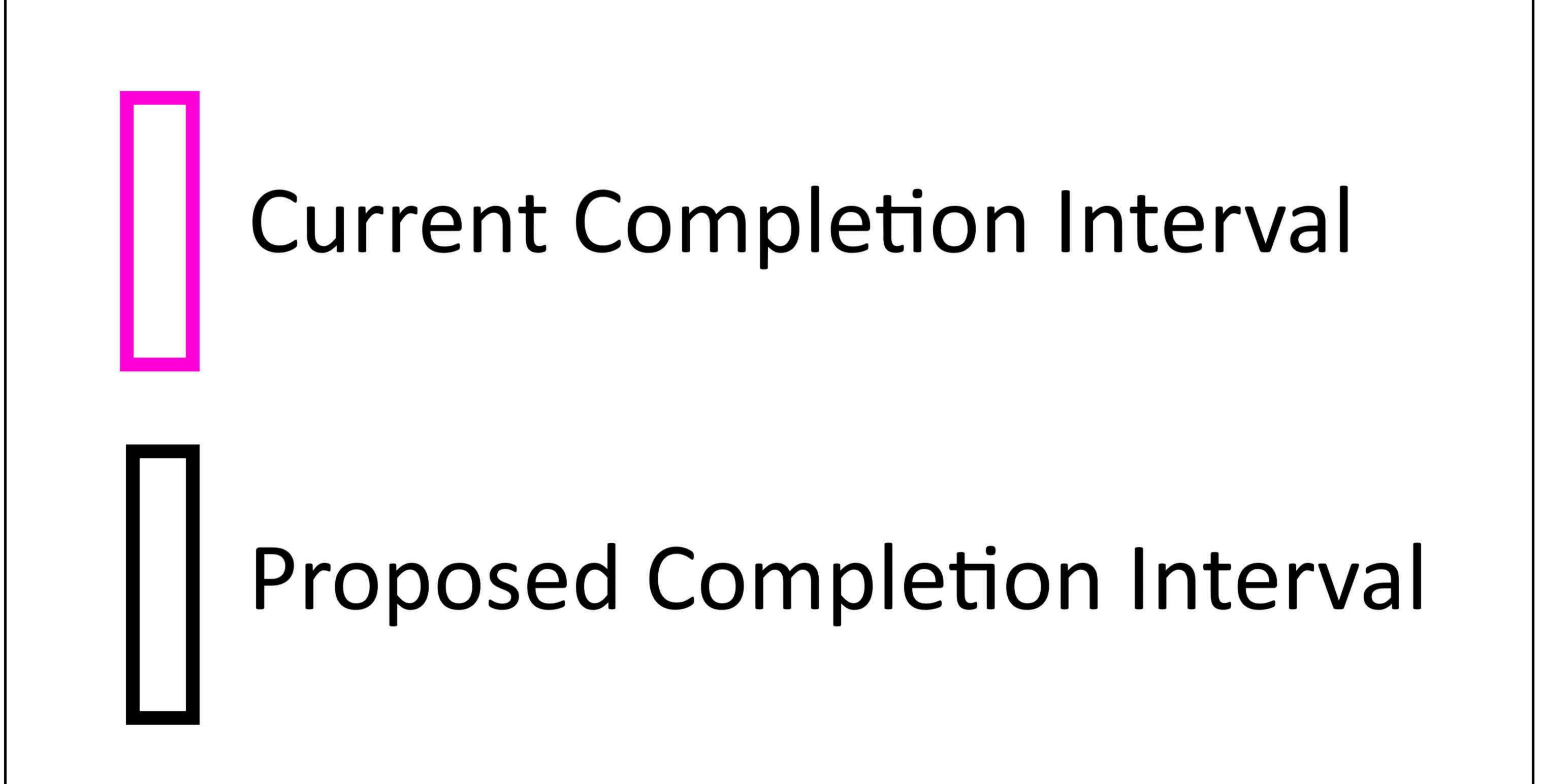
### V MEXICO OLL SON CRIVATION COMMIN WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-1/2 Effective 1-1-65

Well Do. LLC Harrison Federal WB 1 Operation who life 27 25 South 37 East Lea Location of Wala-1980 660 South West free more than feret frim, to it sited Acresper 3019 Math'x SEVEN RIVERS-QUEEN Langlie 40 1. Outline the acreage dedicated to the subject well by coloral pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, online cach and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force pooling, etc.? If answer is "ves!" type of consolidation .. 1 Yes If answer is "no." list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)\_ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, climinating such interests, has been approved by the Commiswion. CERTIFICATION I hereby critity that the information contained herein is true and complete to the hest of my knowledge and belief. Marshall Engineering Tech FAE II Operating, LLC 1/24/2021 LC-032579-b i hereby certify that the well location shown on this plot was plotted from field Released to Imaging: 3/29/2021 5:40:59 under my supervision, and that the same is true and correct to the best of my knowledge and belief. Late Park and Ti Peralahan this tenalogial Englisher constant Land Conveyor Septiments to

30025118050000 HARRISON FEDERAL WB 1 SPUD DATE: 3/25/1955 T25S R37E S27 GAMMA RAY TANSILL 2550 7-RVRS C 3150

3350



9590 9402 5648 9308 7217 13 2. Article Number (Transfer from service label)	BLM- NEW Mexico State Office 301 Dinosaur Trail Santa Fe, NM 87508	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.	23 ENDER: COMPLETE THIS SECTION
3. Service Type  Adult Signature  Adult Signature Restricted Delivery  Certified Mail Restricted Delivery  Collect on Delivery  Collect on Delivery Restricted Delivery	If YES, enter delivery address below:	A. Signature  X D. Man  B. Received by (Printed Name)  Required by (Printed Name)	COMPLETE THIS SECTION ON DELIVER
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From: <u>Marshall Bates</u>
To: <u>McClure, Dean, EMNRD</u>

Subject: [EXT] RE: Downhole Commingling Application DHC-5106

Date: Wednesday, February 3, 2021 3:16:09 PM

Mr. McClure,

Following our conversation today about how to notify the BLM, here is the certified mail tracking number – 7020 0640 0000 9346 8362 – this will be the same number for all of the following downhole commingling applications:

- 1. DHC 5106 Wells A #8
- 2. DHC 5114 Harrison Federal WB #1
- 3. DHC 5104 Carlson Harrison Federal Com #4
- 4. DHC 5115 Santa Fe Federal #1
- 5. DHC 5101 Jack B 30 #1
- 6. DHC 5092 Jack B 30 #3

We are grateful for your guidance on this, and we hope that this tracking number is sufficient to demonstrate BLM notification for the aforementioned applications.

Thank you,

Marshall Bates
Forty Acres Energy
11757 Katy Fwy. Ste. 1000
Houston, TX 77079
C: (713) 253-2885

From: Marshall Bates

**Sent:** Friday, January 29, 2021 12:53 AM

**To:** McClure, Dean, EMNRD **Cc:** Shepard, Jonathon W

Subject: RE: Downhole Commingling Application DHC-5106

Mr. McClure,

Please see the attached Sundry Notice that I am happy to send to the BLM, although I have learned that these Sundries are not necessary when there is identical ownership between the pools. Are you looking for certified mail tracking number?

Sorry for the confusion on the Jalmat pool, we would like to confirm that it is the gas pool (79240).

Thank you,

Marshall Bates

Forty Acres Energy 11757 Katy Fwy. Ste. 1000 Houston, TX 77079

From: McClure, Dean, EMNRD

Sent: Tuesday, January 19, 2021 3:03 PM

To: Marshall Bates

Subject: Downhole Commingling Application DHC-5106

Mr. Bates,

I am reviewing the downhole commingling application (DHC-5106) for the Wells A #8 (30-025-23857) operated by FAE II Operating, LLC (329326).

Please confirm the Jalmat pool for this well. The application and attached C-102 indicates that the well is within the oil pool (33820), but OCD currently has it as the gas pool (79240).

Please submit either the tracking number for the certified mail sent to the BLM or a copy of the sundry submitted to the BLM notifying them of the application.

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

 From:
 Marshall Bates

 To:
 McClure, Dean, EMNRD

 Cc:
 Kautz, Paul, EMNRD

Subject: [EXT] RE: downhole commingling applications
Date: Thursday, March 25, 2021 3:52:32 PM

Dean,

Here is where the top of the Queen is for each well according to our Geology department:

Wells A #8 - 3,563 ft. Arnott Ramsay NCT-B #1 - 3,429 ft. Citgo AS State #4 - 3,705 ft. Langlie A State #3 - 3,397 ft. Harrison Federal WB #1 - 3,378 ft.

Thank you,

Marshall Bates Forty Acres Energy 11757 Katy Fwy. Ste. 1000 Houston, TX 77079 C: (713) 253-2885

From: McClure, Dean, EMNRD

Sent: Wednesday, March 17, 2021 6:52 AM

To: <u>Marshall Bates</u>
Cc: <u>Kautz, Paul, EMNRD</u>

Subject: RE: downhole commingling applications

Actually, it looks like we do have access to logs from IHS, but my search turned up limited logs for these wells. We may have enough for Harrison Federal WB #1 and Citgo AS State #4, but I did not see anything of use for the other 3 wells.

Dean McClure

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

From: McClure, Dean, EMNRD

Sent: Wednesday, March 17, 2021 5:19 AM
To: Marshall Bates <marshall@faenergyus.com>
Cc: Kautz, Paul, EMNRD <paul.kautz@state.nm.us>
Subject: downhole commingling applications

Hello Mr. Bates,

Please provide FAE's picks for the top of the Queen formation for the wells listed below. Prior to approval of the C-104 for the second pool being added to these wells, FAE will need to get with Paul and provide him with data sufficient for him to confirm the picks. Alternatively, if you confirm the top with him prior to issuance of the DHC Orders, then you will not need to submit a sundry with the correction at a later date. Regarding the logs for these wells, it is my understanding that we had an agreement with the predecessor to IHS to receive logs from them, but I do not think any discussions have occurred with IHS regarding logs.

	Commingling Applications													
Admin	Applicant	OGRID Number	ID	Request Number	Title	API	Allocation	CA	(C) (4) (g)	Infill	Status	Notes	Date	Folder
DHC-	FAE II	329326	14697	pDM2101942023	Wells A	30-	Fixed				Under	The top	3/8/2021	E:\NM
5106	Operating,				8	025-	Percent				Review	of the		WORK\DHC\DHC5106
	LLC					23857						Queen		
												not		
												identified		
DHC-	FAE II	329326	14702	pDM2101942616	Arnott	30-	Fixed				Under	The top	3/8/2021	E:\NM
5108	Operating,				Ramsay	025-	Percent				Review	of the		WORK\DHC\DHC5108
	LLC				NCT B 1	11864						Queen		
												not		

									identified		
DHC-	FAE II	329326	14714	pDM2101943692	Citgo AS	30-	Fixed	Under	The top	3/8/2021	E:\NM
5112	Operating,				State 4	025-	Percent	Review	of the		WORK\DHC\DHC5112
	LLC					34486			Queen		
									not		
									identified		
DHC-	FAE II	329326	14716	pDM2101943934	Langlie	30-	Fixed	Under	The top	3/8/2021	E:\NM
5113	Operating,				A State	025-	Percent	Review	of the		WORK\DHC\DHC5113
	LLC				3	28067			Queen		
									not		
									identified		
DHC-	FAE II	329326	<u>15507</u>	pDM2102555034	Harrison	30-	Fixed	Under	The top	3/8/2021	E:\NM
5114	Operating,				Federal	025-	Percent	Review	of the		WORK\DHC\DHC5114
	LLC				WB 1	11805			Queen		
									not		
									identified		

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

From: Engineer, OCD, EMNRD

To: <u>Marshall Bates</u>

Cc: McClure, Dean, EMNRD; Bratcher, Mike, EMNRD; Kautz, Paul, EMNRD; Powell, Brandon, EMNRD;

lisa@rwbyram.com; Glover, James; kparadis@blm.gov; Walls, Christopher

Subject: Approved Administrative Order DHC-5114

Date: Monday, March 29, 2021 5:27:35 PM

Attachments: DHC5114 Order.pdf

NMOCD has issued Administrative Order DHC-5114 which authorizes FAE II Operating, LLC (329326) to downhole commingle production from 2 pools in their Harrison Federal WB #1 well (30-025-11805).

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.

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

# **Notice**

Order: DHC-5114

Operator: FAE II Operating, LLC (329326)

**Publication Date:** 

Date Sent: 2/3/2021

# **Noticed Persons**

			<b>Noticed Persons</b>				
Date		Person		<b>Certified Tracking Number</b>	Status		
2/8/2021	BIM			7020 0640 0000 9346 8362	Delivered		
				7020 00 10 0000 50 10 0002	20		

# 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-5114** 

#### **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-5114 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 District Geologist. If the depth confirmed by OCD's District Geologist 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 downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred Applicant shall submit a new downhole commingling application to OCD to amend this Order to remove the pool that caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
- 6. OCD retains jurisdiction and reserves the right to modify or revoke this Order as it deems necessary to prevent waste or protect correlative rights, public health, or the environment.

Order No. DHC-5114 Page 2 of 3

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

ADRIENNE SANDOVAL DIRECTOR AS/dm

**DATE:** 3/29/2021

Order No. DHC-5114 Page 3 of 3

# State of New Mexico Energy, Minerals and Natural Resources Department

# **Exhibit A**

Order: DHC-5114

Operator: FAE II Operating, LLC (329326)

Well Name: Harrison Federal WB #1

Well API: 30-025-11805

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

Upper Zone Pool ID: 79240 Current: X New:
Allocation: Fixed Percent Oil: 0% Gas: 1%

**Interval: Perforations** 

Pool Name:

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

Interval: Top: Bottom:

Top: 2,515

**Bottom: 3,278** 

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

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

Lower Zone Pool ID: 37240 Current: New: X
Allocation: Fixed Percent Oil: 100% Gas: 99%

Interval: Perforations Top: 3,278 Bottom: 3,370

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

**Top of Queen Formation: 3378** 

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

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 15507

#### **CONDITIONS OF APPROVAL**

Operator:			OGRID:	Action Number:	Action Type:
FAE II OPERATING LLC	11757 Katy Freeway, Suite 1000	Houston, TX77079	329326	15507	C-107A

OCD Reviewer	Condition	
dmcclure	Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval.	