

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

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

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Marshall Bates

Print or Type Name

Signature

Engineering Tech

Title

Marshall@FAEnergyus.com

e-mail Address

6/25/2021

Date

District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-107A
Revised August 1, 2011
APPLICATION TYPE
X Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE
X Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

FAE II Operating, LLC 11757 Katy Fwy. Ste. 1000, Houston, TX 77079

Operator Address
Rhodes Federal Unit 102 E-10-26S-37E Lea
Lease Well No. Unit Letter-Section-Township-Range County
329326 326344 30-025-24537 X
OGRID No. Property Code API No. Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Rhodes		Leonard
Pool Code	83810		38760
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2,812 – 2,984'		TBD – TBD
Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	35.0API / 1.415 BTU		35.0 API / 1.415 BTU
Producing, Shut-In or New Zone	Producing		New Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	See Attached Date: Rates:	Date: Rates:	See Attached Date: Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 0 % 7 %	Oil Gas % %	Oil Gas 100 % 93 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes X 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 X No
Will commingling decrease the value of production? Yes No X
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 X 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 TITLE Engineering Tech DATE 6/24/2021
TYPE OR PRINT NAME Marshall Bates TELEPHONE NO. (832) 706 - 0041
E-MAIL ADDRESS Marshall@FAEnergyus.com

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June 21, 2021

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

Re: Rhodes Federal Unit #102: API 30-025-24537
Rhodes Pool: 83810
Leonard Pool: 38760

Dear Mr. McClure:

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

If you have any questions, please feel free to contact the undersigned phone at (832) 220-9188 or by email at steven@faenergyus.com.

Thank you for your attention to this matter.

Sincerely,

FAE II Operating, LLC

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

Steven Lehrbass
Land

fae II operating

June 22, 2021

VIA ONLINE FILING

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

Re: Application of FAE II Operating, LLC for Administrative Approval to Downhole Commingle and Sell Oil and Gas Production from the Rhodes and Leonard Pools for the Rhodes Federal Unit #102 well located in Sec. 10, T-26S, R-37E, Lea County, New Mexico

Dear Mr. McClure:

FAE II Operating LLC, OGRID: 329326, requests administrative approval for downhole commingling of oil and gas production from the Rhodes and Leonard Pools for its Rhodes Federal Unit #102 well located in Unit Letter E, Section 10, T-26S, R-37E, 1980 feet FNL and 660 feet FWL, as shown in the attached C-102's for each zone.

Rhodes Federal Unit #102 is currently open to the Yates-Seven Rivers interval, which translates to the RHODES; YATES-SEVEN RIVERS (GAS) [Pool ID: 83810]. The production curve for this interval is shown in Exhibit A. To develop a forecast for this zone, a decline curve was utilized based on the aforementioned historical production.

The zone that does not have production history in the Rhodes Federal Unit #96 is the Queen, which translates to the LEONARD; QUEEN, SOUTH [Pool ID: 38760]. To develop a forecast for this zone, four (4) surrounding wells with production history from the Queen were used as an offset to prove up hole potential in the Rhodes Federal Unit #102 by taking the historical average of the oil, gas, and water production. The resulting historical average production curve for this interval is shown in Exhibit B. From there, a decline curve was utilized based on the aforementioned historical production.

Overall, the forecast for the proposed downhole commingled production was formed by combining the forecasts for both zones, as shown in the Synthetic Decline Curve column of Exhibit C. This forecast proved that an IP of 4.7 BOPD and 33.0 MCFPD is the expected total, and of that, 4.7 BOPD and 30.7 MCFPD will come from the Queen zone. The Yates-Seven Rivers is projected to yield 0.0 BOPD and 2.3 MCFPD with the additional intervals that will be opened up. This information along with the percentage allocation across the zones is shown in Exhibit D.

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

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

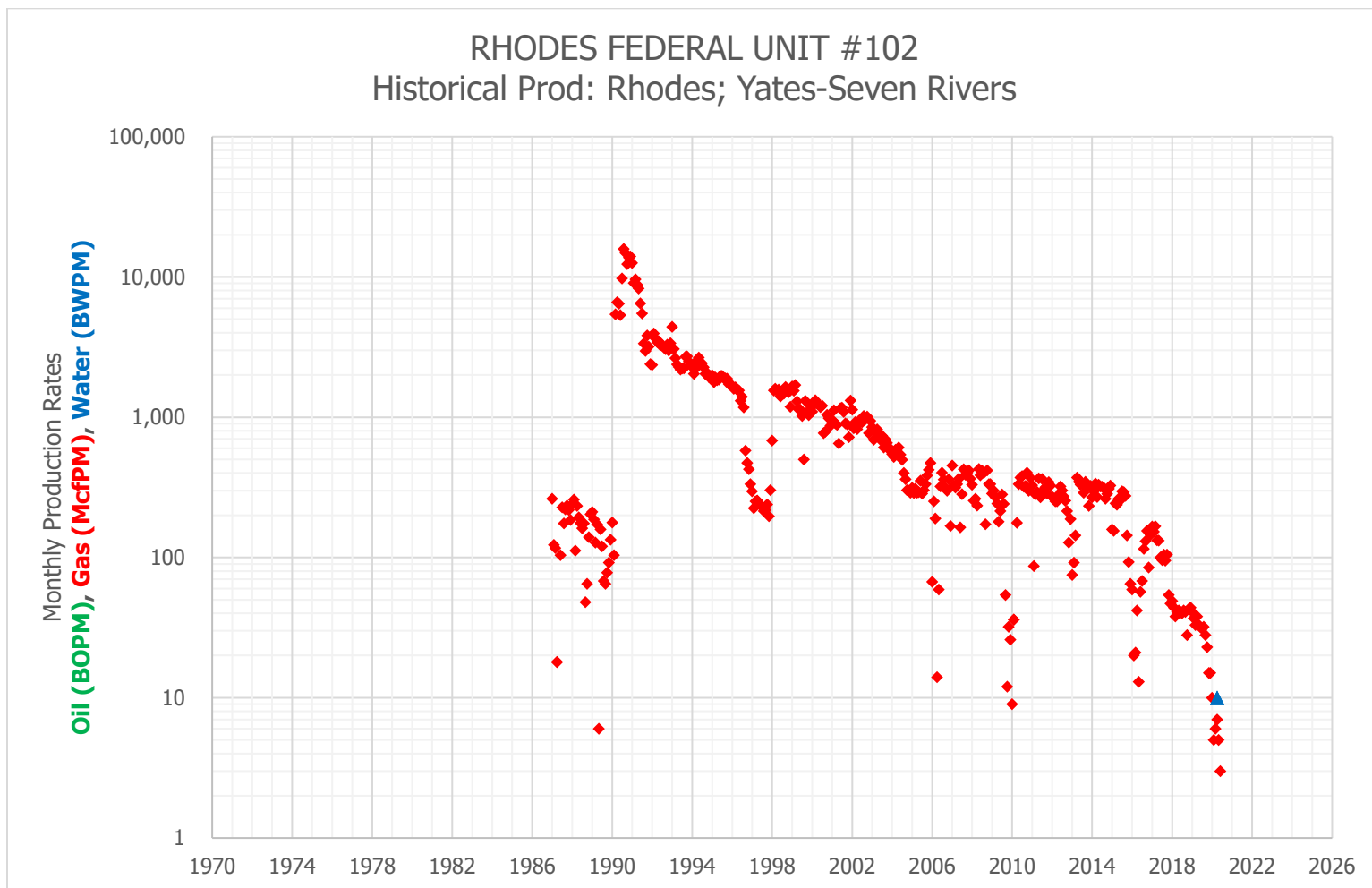
Very truly yours,



FAE II Operating, LLC

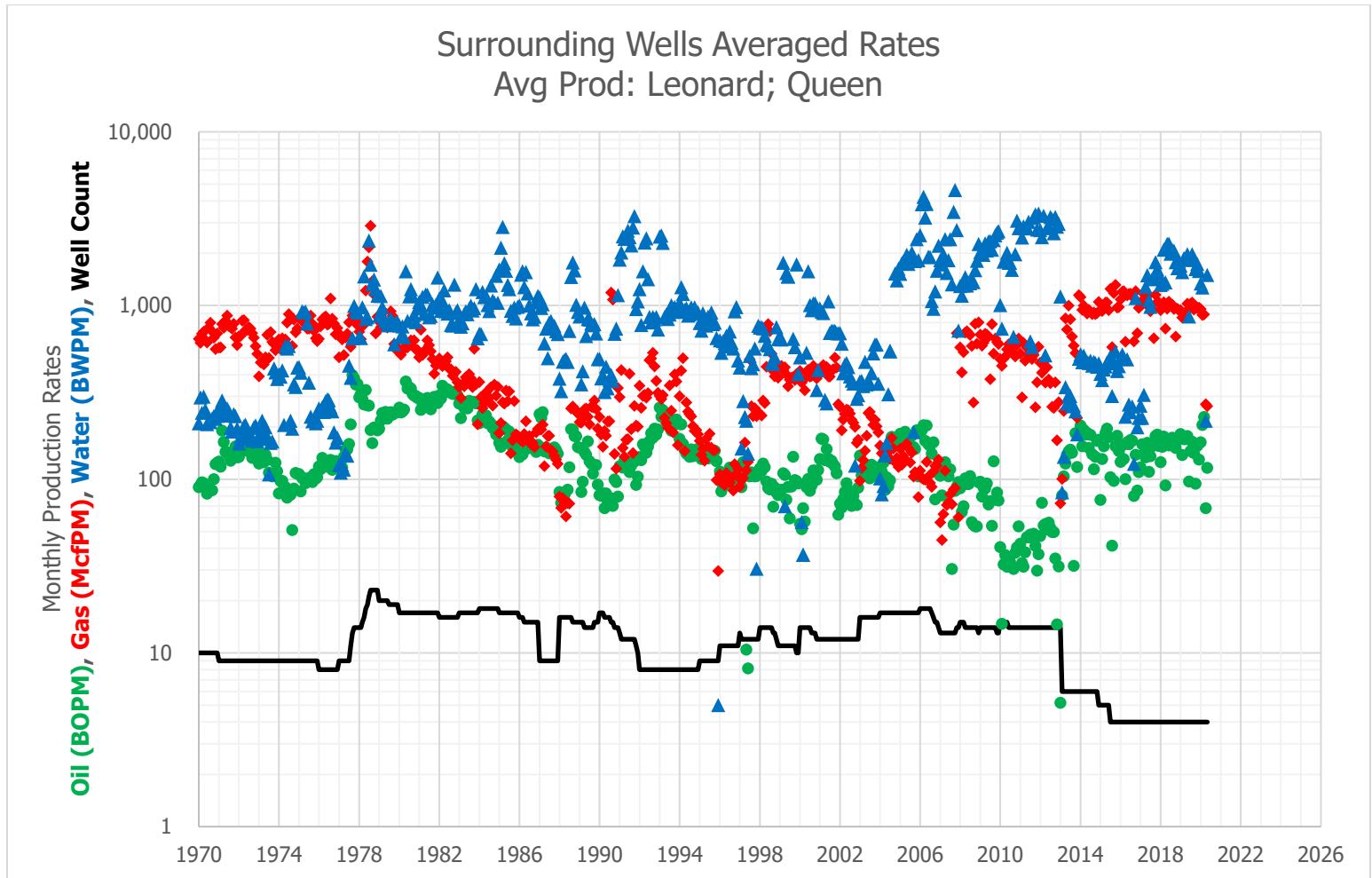
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Exhibit A – Historical and Forecast Production in the Current Zone



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Exhibit B – Historical Average Production in the Proposed Zone



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Exhibit C – Historical Production and Decline Curve

Surrounding Wells Averaged Rates					RHODES FEDERAL UNIT #102				Synthetic Decline Curve			
Avg Prod: Langlie-Mattix; Seven Rivers-Queen					Historical Prod: Rhodes; Yates-Seven Rivers							
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	1,243	507	4	7/1/2015		296		1	142.9	1,004	1,101
8/1/2015	41	576	301	4	8/1/2015		293		2	142.2	1,001	1,098
9/1/2015	98	1,178	474	4	9/1/2015		275		3	141.6	999	1,094
10/1/2015	155	1,312	543	4	10/1/2015		144		4	140.9	996	1,090
11/1/2015	178	970	419	4	11/1/2015		93		5	140.2	994	1,087
12/1/2015	145	977	447	4	12/1/2015		65		6	139.5	991	1,083
1/1/2016	126	1,083	498	4	1/1/2016		59		7	138.9	989	1,080
2/1/2016	156	1,201	521	4	2/1/2016		20		8	138.2	986	1,076
3/1/2016	131	1,208	498	4	3/1/2016		21		9	137.6	984	1,073
4/1/2016	100	618	229	4	4/1/2016		42		10	136.9	981	1,069
5/1/2016	163	1,143	490	4	5/1/2016		13		11	136.2	979	1,066
6/1/2016	159	1,162	269	4	6/1/2016		57		12	135.6	977	1,062
7/1/2016	168	1,170	243	4	7/1/2016		68		13	134.9	974	1,059
8/1/2016	166	1,124	262	4	8/1/2016		115		14	134.3	972	1,055
9/1/2016	80	620	122	4	9/1/2016		131		15	133.7	969	1,052
10/1/2016	138	1,210	1,106	4	10/1/2016		155		16	133.0	967	1,048
11/1/2016	86	693	199	4	11/1/2016		85		17	132.4	964	1,045
12/1/2016	110	968	226	4	12/1/2016		145		18	131.7	962	1,041
1/1/2017	117	1,042	265	4	1/1/2017		166		19	131.1	960	1,038
2/1/2017	159	1,011	226	4	2/1/2017		153		20	130.5	957	1,035
3/1/2017	140	1,163	306	4	3/1/2017		167		21	129.9	955	1,031
4/1/2017	133	1,048	1,279	4	4/1/2017		133		22	129.2	952	1,028
5/1/2017	162	1,128	1,494	4	5/1/2017		132		23	128.6	950	1,024
6/1/2017	110	980	1,073	4	6/1/2017		100		24	128.0	948	1,021
7/1/2017	136	923	981	4	7/1/2017		96		25	127.4	945	1,018
8/1/2017	156	953	1,416	4	8/1/2017		105		26	126.8	943	1,014
9/1/2017	156	646	1,432	4	9/1/2017		95		27	126.2	941	1,011
10/1/2017	177	1,151	1,773	4	10/1/2017		105		28	125.6	938	1,008
11/1/2017	180	1,044	1,615	4	11/1/2017		54		29	125.0	936	1,004
12/1/2017	155	1,040	1,516	4	12/1/2017		47		30	124.4	934	1,001
1/1/2018	125	939	1,313	4	1/1/2018		49		31	123.8	931	998
2/1/2018	153	989	1,332	4	2/1/2018		44		32	123.2	929	994
3/1/2018	176	1,042	2,096	4	3/1/2018		38		33	122.6	927	991
4/1/2018	92	736	1,358	4	4/1/2018		41		34	122.0	924	988
5/1/2018	159	958	2,262	4	5/1/2018		42		35	121.4	922	985
6/1/2018	156	1,050	2,262	4	6/1/2018		41		36	120.9	920	981
7/1/2018	166	1,010	1,990	4	7/1/2018		40		37	120.3	917	978
8/1/2018	173	1,009	2,077	4	8/1/2018		42		38	119.7	915	975
9/1/2018	170	952	2,067	4	9/1/2018		41		39	119.1	913	972
10/1/2018	151	661	1,773	4	10/1/2018		28		40	118.6	911	969
11/1/2018	171	957	1,638	4	11/1/2018		43		41	118.0	908	965
12/1/2018	168	940	1,793	4	12/1/2018		44		42	117.4	906	962
1/1/2019	182	938	1,696	4	1/1/2019		41		43	116.9	904	959
2/1/2019	137	851	1,555	4	2/1/2019		37		44	116.3	901	956
3/1/2019	170	857	1,867	4	3/1/2019		33		45	115.8	899	953
4/1/2019	170	871	1,840	4	4/1/2019		38		46	115.2	897	950
5/1/2019	177	1,024	1,968	4	5/1/2019		33		47	114.7	895	947
6/1/2019	97	961	864	4	6/1/2019		32		48	114.1	892	943
7/1/2019	145	1,021	1,826	4	7/1/2019		31		49	113.6	890	940
8/1/2019	164	1,041	1,975	4	8/1/2019		32		50	113.0	888	937
9/1/2019	141	947	1,837	4	9/1/2019		28		51	112.5	886	934
10/1/2019	94	982	1,618	4	10/1/2019		23		52	111.9	884	931
11/1/2019	155	966	1,732	4	11/1/2019		15		53	111.4	881	928
12/1/2019	129	972	1,580	4	12/1/2019		15		54	110.9	879	925
1/1/2020	163	955	1,337	4	1/1/2020		10	-	55	110.3	877	922
2/1/2020	205	882	1,270	4	2/1/2020		5	-	56	109.8	875	919
3/1/2020	228	889	1	4	3/1/2020		6	-	57	109.3	873	916
4/1/2020	68	270	217	4	4/1/2020		7	10	58	108.8	870	913
5/1/2020	116	263	1,498	4	5/1/2020		5		59	108.2	868	910
6/1/2020	81	224	1,450	4	6/1/2020		3		60	107.7	866	907
7/1/2020	77	525	37	4	7/1/2020	-	-	-				
8/1/2020	149	1,011	1	4	8/1/2020	-	-	-				
9/1/2020	155	1,145	7	4	9/1/2020	-	-	-				
10/1/2020	32	939	0	4	10/1/2020	-	-	-				
11/1/2020	158	977	2	4	11/1/2020	-	-	-				
12/1/2020	165	923	24	4	12/1/2020	-	-	-				

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Exhibit D – Decline Curve IP Rates and Zone Allocation Percentage

Zone (1)	Zone (2)	Oil IP (BOPD)	Gas IP (MCFD)	Water IP (BWPD)
Rhodes	Yates-Seven Rivers	0.0	2.3	0.0
Leonard	Queen	4.7	30.7	36.2
	Total	4.7	33.0	36.2
Rhodes	Yates-Seven Rivers	0%	7%	0%
Leonard	Queen	100%	93%	100%
	Total (%)	100%	100%	100%

30025245370000

FAE



RHODES FEDERAL UNIT 102

SPUD_DATE : 10/20/1973

T26S R37E S10

Log
Depth(ft)

2650

2700

2750

2800

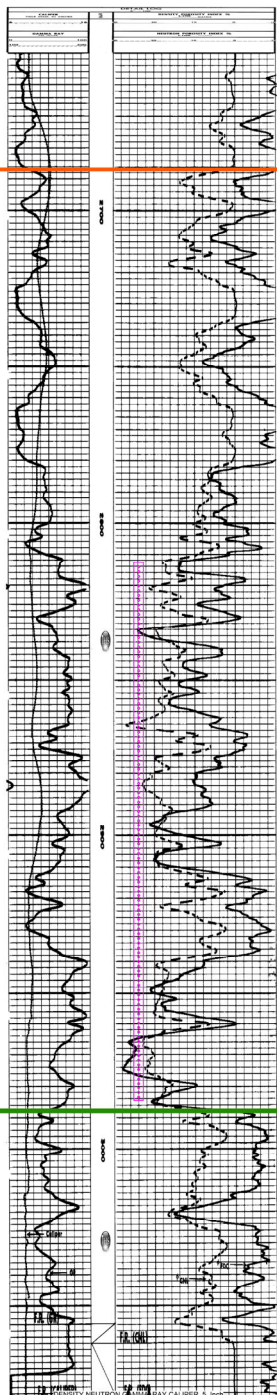
2850

2900

2950

3000

3050



RHODES FEDERAL UNIT 102

TD : 3,080

ELEV_KB : 2,972

Queen fm,
approx 3340'

Proposed completion interval,
exact perms pending logs

Deepen well to 3475'

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-24537	² Pool Code 83810	³ Pool Name RHODES; YATES-SEVEN RIVERS (GAS)
⁴ Property Code 326344	⁵ Property Name RHODES FEDERAL UNIT	⁶ Well Number #102
⁷ OGRID No. 329326	⁸ Operator Name FAE II OPERATING, LLC	⁹ Elevation 2961'

¹⁰ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	10	26S	37E		1980	N	660	W	LEA

¹¹ Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	10	26S	37E		1980	N	660	W	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ 1980' 660' SW/4 NW/4 Sec 9 (40 acres)					¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature <u>Mr Bates</u> Date <u>6/22/2021</u> Marshall Bates Printed Name Marshall@FAEnergyus.com E-mail Address
					¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey Signature and Seal of Professional Surveyor: Certificate Number

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-24537	² Pool Code 38760	³ Pool Name LEONARD; QUEEN, SOUTH
⁴ Property Code 326344	⁵ Property Name RHODES FEDERAL UNIT	⁶ Well Number #102
⁷ OGRID No. 329326	⁸ Operator Name FAE II OPERATING, LLC	⁹ Elevation 2961'

¹⁰ Surface Location


UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	10	26S	37E		1980	N	660	W	LEA

¹¹ Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	10	26S	37E		1980	N	660	W	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ 1980' 660' SW/4 NW/4 Sec 9 (40 acres)					¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  Signature Date Marshall Bates Printed Name Marshall@FAEnergyus.com E-mail Address

Well Name: **RHODES FEDERAL UNIT #102** Lease No: _____ Lease Type: **Federal**
 Township: **26-S** Range: **37-E** Sec: **10-E** Location: **1980' FNL & 660' FWL**
 County: **Lea** State: **NM** API: **30-025-24537** Formation: **Rhodes-Langlie Mattix; Y-7R-Q-GB**

Surface Csg

Size: **8-5/8"**
 Wt.&Thrd: **20#**
 Grade: **MU-46**
 Set @: **638'**
 Sxs cmt: **300 sxs**
 Circ: **35 sxs**
 TOC: **Surface**
 Hole Size: **12-7/8"**

KB: **2972.1'**
 DF: **2971.1'**
 GL: **2961.1'**
 Spud Date: **10/20/1973**
 Compl. Date: **11/30/1973**

PROPOSED**History - Highlights****1993-08:** Clean out to PBTD.

Proposed: MIRU. POOH w/ tbg. RIH w/ 3-3/4" bit & deepen to base of QUEEN (est 3475'). Circulate clean. POOH w/ bit. RIH w/ pkr. Set pkr above open hole. Acidize open hole w/5000 gals 15% NEFE HCL acid, 1500# rock salt diverter, & flush w/ 1000 bbls 2% KCL water. POOH w/ pkr. TIH w/ tbg, pump & rods. RTP

Production Csg

Size: **4-1/2"**
 Wt.&Thrd: **10.5#**
 Grade: **K-55**
 Set @: **3080'**
 Sxs Cmt: **400 sxs**
 Circ: _____
 TOC: **2240'**
 Hole Size: **7-7/8"**

YATES (Top @ 2690')

2813-2985' (27 holes) - Nov 1973
 Frac w/ 30,000 gals GW-60, 6000# 20/40 sand & 27,000# 10/20 sand

SEVEN RIVERS (Top @ 2988')

SN **3077'**
 EOT **3114'**

3080-3475' Open Hole - Proposed
 Acidize open hole w/5000 gals 15% NEFE HCL acid, 1500# rock salt diverter, & flush w/ 1000 bbls 2% KCL water

QUEEN (Top @ ~3340')**Open Hole**

Size: **3-3/4"**
 Down to: **3475'**

PBTD 3475'
TD 3475'

Tubulars - Capacities and Performance

2-3/8" 4.7# J-55 EUE 8rd Tubing (~98 jts 2-3/8" tbg, SN, 4' perf sub, MA w/ bull plug)

Well Name: **RHODES FEDERAL UNIT #102** Lease No: _____ Lease Type: **Federal**
 Township: **26-S** Range: **37-E** Sec: **10-E** Location: **1980' FNL & 660' FWL**
 County: **Lea** State: **NM** API: **30-025-24537** Formation: **RHOADES; YATES-7 RIVERS**

CURRENTSurface Csg

Size: **8-5/8"**
 Wt.&Thrd: **20#**
 Grade: **MU-46**
 Set @: **638'**
 Sxs cmt: **300 sxs**
 Circ: **35 sxs**
 TOC: **Surface**
 Hole Size: **12-7/8"**

KB: **2972.1'**
 DF: **2971.1'**
 GL: **2961.1'**
 Spud Date: **10/20/1973**
 Compl. Date: **11/30/1973**

History - Highlights

1993-08: Clean out to PBTD.

All info from OCD well files ONLY

EOT 2854'

Production Csg

Size: **4-1/2"**
 Wt.&Thrd: **10.5#**
 Grade: **K-55**
 Set @: **3080'**
 Sxs Cmt: **400 sxs**
 Circ: _____
 TOC: **2240'**
 Hole Size: **7-7/8"**

YATES (Top @ 2690')

2813-2985' (27 holes) - Nov 1973

Frac w/ 30,000 gals GW-60, 6000# 20/40 sand & 27,000# 10/20 sand

SEVEN RIVERS (Top @ 2988')

PBTD 3042'
 TD 3080'

Tubulars - Capacities and Performance

2-3/8" 4.7# 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>

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

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

Subject: [EXTERNAL] DHC Applications Format & Missing Items?

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

Hi Dean,

I hope everything is going great in your world.

I am going to be helping Marshall Bates submit downhole commingle applications in the future and I was wondering if you had a preferred format for submissions? I would also like to make sure you get everything you need for approval upon initial submission, if possible; is there anything that we have repeatedly missed in the past that you have had to ask for?

I know that we are planning a lot of work in 2022 that will require DHC permits, so I am hoping to get those to you as soon as possible. For the DHC applications currently in your queue, are you waiting on any missing items from us? If you let me know what you need I will get it to you ASAP.

Looking forward to working with you!

Vanessa Neal | Sr Reservoir Engineer

forty acres **energy**

11757 Katy Freeway, Suite 725 | Houston, TX 77079

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

C [979.255.3476](tel:979.255.3476)

E vanessa@faenergyus.com

From: [Engineer, OCD, EMNRD](#)
To: [Marshall Bates](#); [Vanessa Neal](#)
Cc: [McClure, Dean, EMNRD](#); [Kautz, Paul, EMNRD](#); [Hawkins, James, EMNRD](#); [Powell, Brandon, EMNRD](#); [lisa@rwbyram.com](#); [Glover, James](#); [Paradis, Kyle O](#); [Walls, Christopher](#)
Subject: Approved Administrative Order DHC-5142
Date: Wednesday, December 8, 2021 11:21:39 AM
Attachments: [DHC5142 Order.pdf](#)

NMOCD has issued Administrative Order DHC-5142 which authorizes FAE II Operating, LLC (329326) to downhole commingle production from 2 pools in their Rhodes Federal Unit 102 well (30-025-24537).

The administrative order is attached to this email and can also be found online at OCD Imaging.

Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.

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

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**APPLICATION FOR DOWNHOLE COMMINGLING
SUBMITTED BY FAE II OPERATING, LLC**

ORDER NO. DHC-5142

ORDER

The Director of the New Mexico Oil Conservation Division ("OCD"), having considered the application and the recommendation of the Engineering Bureau, issues the following Order.

FINDINGS OF FACT

1. FAE II Operating, LLC ("Applicant") submitted a complete application ("Application") to downhole commingle the pools described in Exhibit A ("the Pools") within the well bore of the well identified in Exhibit A ("the Well").
2. Applicant proposed a method to allocate the oil and gas production from the Well to each of the Pools that is satisfactory to the OCD and protective of correlative rights.
3. Applicant has certified that all produced fluids from all the Pools are compatible with each other.
4. Applicant has certified that downhole commingling the Pools will not decrease the value of the oil and gas production.
5. To the extent that ownership is identical, Applicant submitted a certification by a licensed attorney or qualified petroleum landman that ownership in the Pools is identical as defined by 19.15.12.7(B) NMAC.
6. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools, provided evidence a copy of the Application was given to each person, and those persons either submitted a written waiver or did not file an objection to the Application.
7. Applicant provided notice of the Application to the Bureau of Land Management ("BLM") or New Mexico State Land Office ("NMSLO"), as applicable.

CONCLUSIONS OF LAW

8. OCD has jurisdiction to issue this Order pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-6, 70-2-11, 70-2-12, 70-2-16, 70-2-17, and 19.15.12 NMAC.
9. The downhole commingling of the Pools is common, or Applicant has provided evidence that the fluids are compatible and will not damage the Pools in accordance with 19.15.12.11(A)(1) NMAC.
10. The bottom perforation of the lower zone is within one hundred fifty percent (150%) of the depth of the top perforation in the upper zone or Applicant has provided evidence that the

proposed commingling of the Pools shall not result in shut-in or flowing well bore pressure in excess of the commingled pool's fracture parting pressure in accordance with 19.15.12.11(A)(3) NMAC.

11. Applicant's proposed method of allocation, as modified herein, complies with 19.15.12.11(A)(8) NMAC.
12. To the extent that ownership is diverse, Applicant identified all owners of interest in the Pools and provided evidence the application was given to those persons in accordance with 19.15.12.11(C)(1)(b) NMAC.
13. By granting the Application with the conditions specified below, this Order prevents waste and protects correlative rights, public health, and the environment.

ORDER

1. Applicant is authorized to downhole commingle the Pools described in Exhibit A within the well bore of the well identified in Exhibit A.
2. Applicant shall allocate a fixed percentage of the oil and gas production from the Well to each of the Pools as described in Exhibit A.
3. If any of the pools being commingled is prorated, or the Well's production has been restricted by an OCD order in any manner, the allocated production from each producing pool in the commingled well bore shall not exceed the top oil or gas allowable rate for a well in that pool or rate restriction applicable to the well.
4. Prior to commingling production from the Pools within the Well's well bore, Applicant shall confirm the depth of the top of the Queen Formation with OCD's Engineering Bureau. If the depth confirmed by OCD's Engineering Bureau is different than the depth submitted within the Application as identified in Exhibit A, then no later than sixty (60) days after commingling production, Applicant shall submit Form C-103 to the OCD Engineering Bureau correcting the depth of the top of the Queen Formation.
5. If the Well is deepened, then Applicant shall conduct and, no later than forty-five (45) days after the Well is deepened, provide logs to OCD that are sufficient for OCD to determine which pool(s) each new completed interval of the Well will produce from.
6. If the downhole commingling of the Pools reduces the value of the oil and gas production to less than if it had remained segregated, no later than sixty (60) days after the decrease in value has occurred Applicant shall submit a new downhole commingling application to OCD to amend this Order to remove the pool that caused the decrease in value. If Applicant fails to submit a new application, this Order shall terminate on the following day, and if OCD denies the application, this Order shall terminate on the date of such action.
7. If a completed interval of the Well is altered from what is submitted within the Application as identified in Exhibit A, then no later than sixty (60) days after the alteration, Applicant

shall submit Form C-103 to the OCD Engineering Bureau detailing the alteration and completed interval.

8. If OCD determines that Applicant has failed to comply with any provision of this Order, OCD may take any action authorized by the Oil and Gas Act or the New Mexico Administrative Code (NMAC).
9. OCD retains jurisdiction of this matter and reserves the right to modify or revoke this Order as it deems necessary.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



**ADRIENNE SANDOVAL
DIRECTOR**

DATE: 12/07/2021

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit A

Order: **DHC-5142**

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

Well Name: **Rhodes Federal Unit #102**

Well API: **30-025-24537**

Upper Zone	Pool Name: RHODES;YATES-SEVEN RIVERS (GAS)		
	Pool ID: 83810	Current: X	New:
	Allocation: Fixed Percent	Oil: 0%	Gas: 7%
	Interval: Open-Hole	Top: 2,812	Bottom: 3,240
Intermediate Zone	Pool Name:		
	Pool ID:	Current:	New:
	Allocation:	Oil:	Gas:
	Interval:	Top:	Bottom:
Bottom of Interval within 150% of Upper Zone's Top of Interval:			
Lower Zone	Pool Name: LEONARD;QUEEN, SOUTH		
	Pool ID: 38760	Current:	New: X
	Allocation: Fixed Percent	Oil: 100%	Gas: 93%
	Interval: Open-Hole	Top: 3,240	Bottom: 3,475
Bottom of Interval within 150% of Upper Zone's Top of Interval: YES			
Top of Queen Formation: 3,340			

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 33754

CONDITIONS

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 1000 Houston, TX 77079	OGRID: 329326
	Action Number: 33754
	Action Type: [C-107] Down Hole Commingle (C-107A)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.	12/8/2021