

RECEIVED: 11/15/2018	REVIEWER: MAM	TYPE: DHC	APP NO: DMAM1238 58146
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & 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

**Applicant:** Breitburn Operating LP **OGRID Number:** 370080  
**Well Name:** ENCORE M STATE #23 **API:** 30-025-44966  
**Pool:** BLINBRY; TUBB; DRINKARD; WANTZ; ABO **Pool Code:** 6660; 60240; 19190; 62700

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION  
 INDICATED BELOW**

DHC-4876

**1) TYPE OF APPLICATION:** Check those which apply for [A]

A. Location - Spacing Unit - Simultaneous Dedication

☐ NSL☐ NSP (PROJECT AREA)☐ NSP (PRORATION UNIT)☐ SD

B. Check one only for [I] or [II]

[I] Commingling - Storage - Measurement

DHC-436a ☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR**2) NOTIFICATION REQUIRED TO:** Check those which apply.A. ☐ Offset operators or lease holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☐ Application requires published noticeD. ☐ Notification and/or concurrent approval by SLOE. ☐ Notification and/or concurrent approval by BLMF. ☐ Surface ownerG. ☐ For all of the above, proof of notification or publication is attached, and/or,H. ☒ No notice required**FOR OCD ONLY**☐ Notice Complete☐ Application  
Content  
Complete

**3) 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.**

Deborah Marberry

Print or Type Name

Signature

11/12/18

Date

713-452-2883

Phone Number

deborah.marberry@mavresources.com

e-mail Address

District I  
1625 N. French Drive, Hobbs, NM 88240

District II  
8111 S. First St., Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

Form C-107A  
Revised August 1, 2011

APPLICATION TYPE  
☒ Single Well  
Establish Pre-Approved Pools  
EXISTING WELLBORE  
☐ Yes ☒ No

APPLICATION FOR DOWNHOLE COMMINGLING

BREITBURN OPERATING LP 1111 BAGBY ST. SUITE 1600 ATTN:REGULATORY HOUSTON, TX 77002

Operator Address  
ENCORE M STATE 23 A, SEC.29, T22S, R37E

Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 370080 Property Code 314022 API No. 30-025-44966 Lease Type: ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Blinebry Oil & Gas (oil)	Tubb Oil & Gas (Oil)	Drinkard
Pool Code	6660	60240	19190
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	5565'-5775'	6150'-6170'	6604'-6624'
Method of Production (Flowing or Artificial Lift)	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)	2340 psi	2590 psi	2780 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	38* API 1342 BTU	38* API 1342 BTU	38* API 1342 BTU
Producing, Shut-In or New Zone	NEW	NEW	NEW
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.)	Date: 11/11/18 Rates: 148/257/342	Date: 3/20/16 Rates: 17/101/27	Date: 11/7/18 Rates: 155/266/326
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil 25 % Gas 25 %	Oil 25 % Gas 25 %	Oil 25 % Gas 25 %

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 ☐  
Yes ☐ No ☐

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

Yes ☒ No ☐

Will commingling decrease the value of production?

Yes ☐ No ☒

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

Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: 4781-0

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 Deborah Marberry Sr. Regulatory Analyst DATE 11/12/18

TYPE OR PRINT NAME Deborah Marberry TELEPHONE NO. ( 713 ) 452-2883

E-MAIL ADDRESS deborah.marberry@breitburn.com

District I  
1625 N. French Drive, Hobbs, NM 88240

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☒ Single Well  
Establish Pre-Approved Pools  
EXISTING WELLBORE  
Yes ☒ No

APPLICATION FOR DOWNHOLE COMMINGLING

BREITBURN OPERATING LP 1111 BAGBY ST. SUITE 1600 ATTN:REGULATORY HOUSTON, TX 77002

Operator Address  
ENCORE M STATE 23 A SEC.29, T22S, R37E LEA  
Lease Well No. Unit Letter-Section-Township-Range County  
OGRID No. 370080 Property Code 314022 API No. 30-025-44966 Lease Type: Federal ☒ State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name			WANTZ; ABO
Pool Code			62700
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)			6764'-6784'
Method of Production (Flowing or 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)			2840 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)			38* API 1342 BTU
Producing, Shut-In or New Zone			NEW
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.)	Date:  Rates:	Date:  Rates:	Date: 3/23/16  Rates: 20/134/48
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 25 % 25 %	Oil Gas 25 % 25 %	Oil Gas 25 % 25 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ No  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No  
Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No  
Will commingling decrease the value of production? Yes No ☒  
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No  
NMOCD Reference Case No. applicable to this well: 4781-0

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 Deborah Marberry TITLE Sr. Regulatory Analyst DATE 10/01/18  
TYPE OR PRINT NAME Deborah Marberry TELEPHONE NO. ( 713 ) 452-2883  
E-MAIL ADDRESS deborah.marberry@breitburn.com

**DISTRICT I**  
1625 N. French Dr., Hobbs, NM 88240  
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**DISTRICT IV**  
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Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-025-44966	<sup>2</sup> Pool Code 62700	<sup>3</sup> Pool Name Wantz; Abo
<sup>4</sup> Property Code 314022	<sup>5</sup> Property Name Encore M State	<sup>6</sup> Well Number 23
<sup>7</sup> OGHD No. 370080	<sup>8</sup> Operator Name Breitburn Operating LP	<sup>9</sup> Elevation 3359'

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	22 S	37 E		660'	North	660'	East	Lea

<sup>11</sup>Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.

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

<p>Encore M State #23 Elev. 3359' NAD 83 NM East N = 499637.6' E = 897837.2' Lot. = 32°22'05.83" Long. = -103°10'43.26"</p> <p>Sec. 29</p> <p>Encore M State Lease</p>	<p><b><sup>17</sup>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Deborah Marberry</i> 11/8/18 Signature Date</p> <p>Deborah Marberry Printed Name</p> <p>deborah.marberry@breitburn.com E-mail Address</p>
	<p><b><sup>18</sup>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>5-4-2018 Date of Survey</p> <p><i>Michael L. Stanford</i> Signature and Seal of Professional Surveyor</p> <p>10324 Certificate Number</p>

4.9 Miles SW of Eunice, New Mexico.

File No. A-12220.1

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-44966	<sup>2</sup> Pool Code 6660	<sup>3</sup> Pool Name Blinebry Oil & Gas (Oil)
<sup>4</sup> Property Code 314022	<sup>5</sup> Property Name Encore M State	<sup>6</sup> Well Number 23
<sup>7</sup> OGED No. 370080	<sup>8</sup> Operator Name Breitburn Operating LP	<sup>9</sup> Elevation 3359'

<sup>10</sup>Surface Location

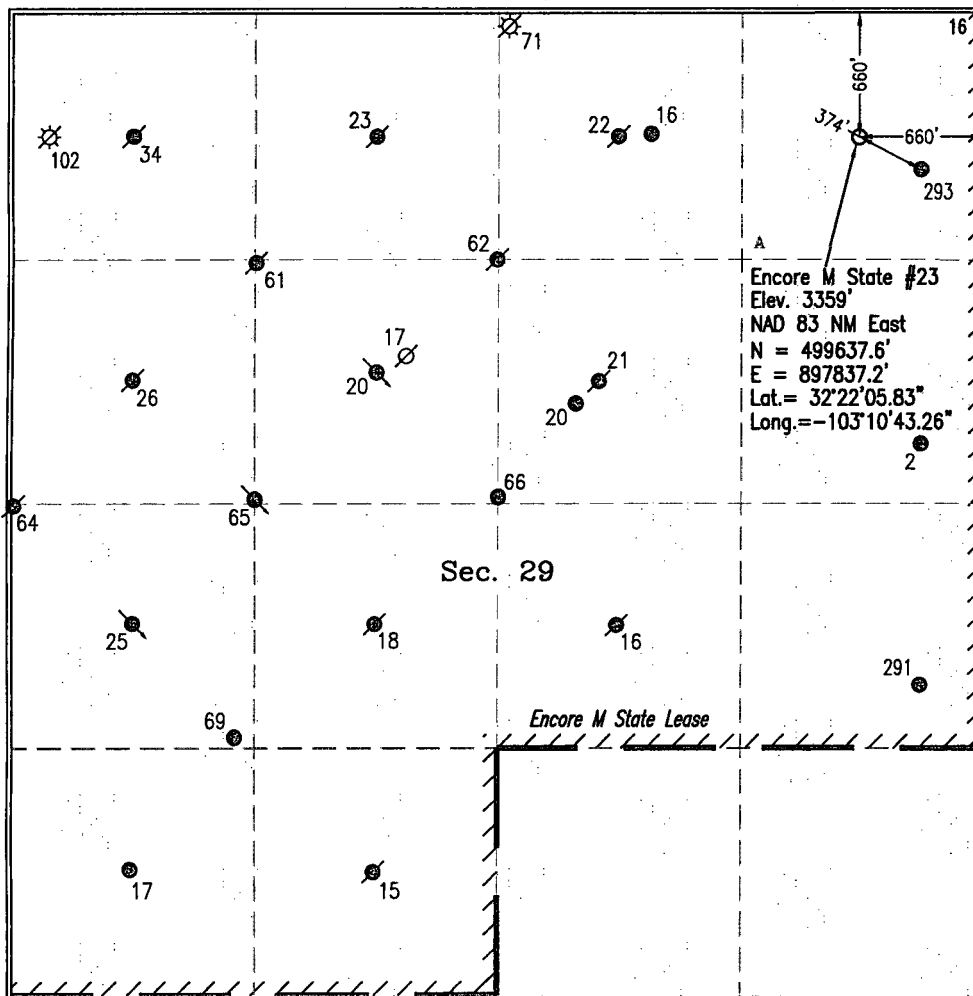
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	22 S	37 E		660'	North	660'	East	Lea

## 11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.

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



## 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 Deborah Mackery Date 11/8/18

Deborah Marberry

Printed Name \_\_\_\_\_

deborah.marberry@breitburn.com

E-mail Address

### <sup>18</sup>SURVEYOR CERTIFICATION

*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.*

5-4-2018

**Date of Survey**

Signature and Seal of Professional Surveyor

10324

*Michael J. [Signature]*

10324

Certificate Number

10324

**Certificate Number**

**DISTRICT I**  
1625 N. French Dr., Hobbs, NM 88240  
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Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-025-44966	<sup>2</sup> Pool Code 60240	<sup>3</sup> Pool Name Tubb Oil & Gas (Oil)
<sup>4</sup> Property Code 314022	<sup>5</sup> Property Name Encore M State	<sup>6</sup> Well Number 23
<sup>7</sup> GRID No. 370080	<sup>8</sup> Operator Name Breitburn Operating LP	<sup>9</sup> Elevation 3359'

**<sup>10</sup>Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	22 S	37 E		660'	North	660'	East	Lea

**<sup>11</sup>Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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

	<p><b><sup>17</sup>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <u>Deborah Marberry</u> Date: <u>11/8/15</u></p> <p>Printed Name: <u>Deborah Marberry</u></p> <p>E-mail Address: <u>deborah.marberry@breitburn.com</u></p>
	<p><b><sup>18</sup>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey: <u>5-4-2018</u></p> <p>Signature and Seal of Professional Surveyor: <u>Michael L. Stanford</u></p> <p>Certificate Number: <u>10324</u></p>

4.9 Miles SW of Eunice, New Mexico.

File No. A-12220.1

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☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-025-44966	<sup>2</sup> Pool Code 19190	<sup>3</sup> Pool Name Drinkard
<sup>4</sup> Property Code 314022	<sup>5</sup> Property Name Encore M State	<sup>6</sup> Well Number 23
<sup>7</sup> GRID No. 370080	<sup>8</sup> Operator Name Breitburn Operating LP	<sup>9</sup> Elevation 3359'

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	22 S	37 E		660'	North	660'	East	Lea

<sup>11</sup>Bottom Hole Location If Different From Surface

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<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.

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

<p>Sec. 29</p> <p>Encore M State Lease</p> <p>Encore M State #23 Elev. 3359' NAD 83 NM East N = 499637.6' E = 897837.2' Lat = 32°22'05.83" Long = -103°10'43.26"</p>	<p><b><sup>17</sup>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature <u>Deborah Marberry</u> Date <u>11/8/18</u></p> <p>Printed Name Deborah Marberry</p> <p>E-mail Address deborah.marberry@breitburn.com</p>
	<p><b><sup>18</sup>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>5-4-2018 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p>
	<p>10324</p> <p>Certificate Number</p>



**Breitbart Operating LP**  
(a wholly owned subsidiary of  
Maverick Natural Resources, LLC)  
1111 Bagby Street • Suite 1600  
Houston • Texas • 77002  
713-437-8000

October 31, 2018

**SENT VIA EMAIL**

Mr. Michael McMillan  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

Re: Request to add Encore M 22 and Encore M 23 to Commingle Order PLC-436-a: Application of Breitbart Operating LP for administrative approval to surface commingle oil and gas production from the Encore M 21 Fee Lease located in Section 21, T22S-R37E, Lea Co., NM and New Mexico State Lease B-934 in T22S-R37E, Lea Co., NM

Dear Mr. McMillan,

This letter is to clarify ownership in the Encore M 22 and Encore M 23 on New Mexico State Lease B-934 and include both wells in the application for the above surface commingle.

The ownership is consistent and identical in the Encore M 22 and Encore M 23 for all of the pools (zones) to be surface commingled: Blinbry Oil and Gas (Oil) (6660); Tubb Oil and Gas (Oil) (60240); Drinkard (19190); Wantz;Abo (62700).

Please contact me at 713-437-8063 or [scott.hartman@mavresources.com](mailto:scott.hartman@mavresources.com) if you have any questions or if you'd like any additional information. Thank you for your assistance in this matter.

Sincerely,

Scott Hartman, RPL  
Senior Landman



**McMillan, Michael, EMNRD**

---

**From:** McMillan, Michael, EMNRD  
**Sent:** Tuesday, December 4, 2018 2:01 PM  
**To:** 'Deborah Marberry'  
**Subject:** RE: Encore M State #23

Yes-with the caveat that you will submit updated allocation percentages after the production log has been ran

---

**From:** Deborah Marberry <[deborah.marberry@mavresources.com](mailto:deborah.marberry@mavresources.com)>  
**Sent:** Tuesday, December 4, 2018 1:20 PM  
**To:** McMillan, Michael, EMNRD <[Michael.McMillan@state.nm.us](mailto:Michael.McMillan@state.nm.us)>  
**Subject:** [EXT] RE: Encore M State #23

Good Afternoon Michael: Based on a conversation with Alex our plan is to submit a new allocation after the well completes and the Weatherford analysis is received. One issue we will have is the length of time that it will take for the well to disburse the frac treatments in order for us to get a true test. So, is it possible to keep our initial 25% across the board allocation for our completion report to be submitted on time then revise our numbers based off of the analysis?

Thank you so much for your time and patience.

---

**From:** McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]  
**Sent:** Monday, December 03, 2018 3:40 PM  
**To:** Deborah Marberry <[deborah.marberry@mavresources.com](mailto:deborah.marberry@mavresources.com)>  
**Subject:** [EXTERNAL]: RE: Encore M State #23

Then do you plan to go back to the Division with the final allocation percentages?

---

**From:** Deborah Marberry <[deborah.marberry@mavresources.com](mailto:deborah.marberry@mavresources.com)>  
**Sent:** Monday, December 3, 2018 2:38 PM  
**To:** McMillan, Michael, EMNRD <[Michael.McMillan@state.nm.us](mailto:Michael.McMillan@state.nm.us)>  
**Subject:** [EXT] RE: Encore M State #23

Michael: I am so sorry for the lateness of this response. Our engineer has been traveling a lot. Below is the response:

We are currently working on gathering individual zones flow contributions for allocation purposes through some selective completion projects as well as gathering oil samples to utilize Weatherford's oil fingerprinting technology to help with understanding downhole commingled-flow effects. At this time, I think the most appropriate allocations would be to simply divide the production to be coming equally from the 4 targeted formations.

---

**From:** McMillan, Michael, EMNRD [<mailto:Michael.McMillan@state.nm.us>]  
**Sent:** Thursday, November 15, 2018 1:45 PM  
**To:** Deborah Marberry <[deborah.marberry@mavresources.com](mailto:deborah.marberry@mavresources.com)>  
**Subject:** [EXTERNAL]: RE: Encore M State #23

I need a statement from an engineer on how you will determine the allocation percentages.

Mike

---

**From:** Deborah Marberry <[deborah.marberry@mavresources.com](mailto:deborah.marberry@mavresources.com)>  
**Sent:** Thursday, November 15, 2018 7:13 AM  
**To:** McMillan, Michael, EMNRD <[Michael.McMillan@state.nm.us](mailto:Michael.McMillan@state.nm.us)>  
**Subject:** [EXT] Encore M State #23

Good Morning Michael: I am so sorry. Attached is the Application Checklist and the Landman Statement for the above well. Let me know if I need to send originals. I am headed to morning meetings I will call you later to discuss.

Thank you for your time.

Deborah Marberry  
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Maverick Natural Resources  
1111 Bagby Street, Suite 1600  
Houston, TX 77002  
713-452-2883 office  
[deborah.marberry@mavresources.com](mailto:deborah.marberry@mavresources.com)

Effective immediately, my email address has changed. Please update your address book accordingly.

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**McMillan, Michael, EMNRD**

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**From:** Deborah Marberry <deborah.marberry@mavresources.com>  
**Sent:** Friday, December 7, 2018 6:27 AM  
**To:** McMillan, Michael, EMNRD  
**Subject:** [EXT] FW: Encore M State #23 - DHC Property Code 314022  
**Attachments:** McCaffrey 2011 -SPE-144618.pdf; McCaffrey et al 2012.pdf; McCaffrey et al OTC 2017.pdf; Jensen et al 2016 SPE-180445-MS final.pdf; Allocation Webinar 9-15.pdf; Dead Oil Sample Collection Instructions.docx

Good Morning Michael: We are requesting on keeping our allocations for the above referenced well on a 25% allocation across the board as previously used in the Encore M State #19 (30-025-42779). As in the #19 well the interest ownership between the zones to be commingled is common throughout.

Once the frac fluids have been disbursed from the well the oil samples from each pool will be analyzed by Weatherford Laboratories. Attached are the instructions for sampling and abstracts from SPE, OTC, etc. After the sampling results are obtained we will submit updated allocation percentages.

Thank you so much for your time.

Debbi Marberry  
713-452-2883

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**From:** Alex McCammon  
**Sent:** Thursday, December 06, 2018 10:34 AM  
**To:** Deborah Marberry <deborah.marberry@mavresources.com>  
**Subject:** RE: Encore M State #23

The oil allocations will be based on their individual hydrocarbon signatures and the ratio of that production to the entire sample. This technology has been proven to be quite accurate and is probably more representative of oil production as opposed to fluid flow percentages (spinner/production survey).

Attached is some information on the process.

Thanks,  
Alex McCammon

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