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

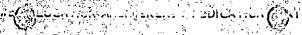




|  | T IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REQULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE   |
|--|--|
| Application Acros  | nyme:<br>-Standard Location) [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication)  |
|  | Downhote Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] C-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]   |
| r og fallgred til et skalende skalende skalende skalende skalende skalende skalende skalende skalende skalend<br>Norskalende skalende  | [WPX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  |
| (EOR-  | [SWD-Salt Water Disposal] [IPI-injection Pressure Increase] Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]  |
| III - TYPE OF  | FAPPLICATION - Check Those Which Apply for [A] - DHC 4719  |
|  | Location - Spacing Unit - Simultaneous Dedication   Vang 4and Permitty LLC   |
|  | heck One Only for [B] or [C]   |
|  | Corporingling - Storage - Measurement  |
|  | PLC □ PLC □ PC □ OLS □ OLM   |
| is is  | Injection - Disposal - Pressure Increase - Enhanced Oil Recovery - Cole State #10  |
|  | WFX   PMX   SWD   IPI   EOR   PPR   3 0-025-22/6   |
|  |  |
| [2] NOTIFIC  | CATION REQUIRED TO: • Check Those Which Apply, or Does Not Apply   |
|  | Moderner Royalty or Overriding Royalty Interest Owners   |
| TE CONTRACTOR OF THE CONTRACTO | Egman+JyAtes-7Runs   |
|  | Offset Operators, Leaseholders or Surface Owner  Grant Coll  Application is One Which Requires Published Legal Notice  2280 c  |
|  | 2 Application is One Which Requires Published Legal Notice   |
|  | Notification and/or Concurrent Approval by BLM or SLO US Bureau of Land Management - Commissions of Public Londs State Lond Office   |
| 1  | For all of the above, Proof of Notification or Publication is Attached, and/or,  |
| in the second of | 원가 보면 사람들은 회사 등에 가장 통해 가장 하는 것이 되었다. 그는 그는 그는 그를 가장하는 것이 나를 하는 것이 없다.  |
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| · · · · · · · · · · · · · · · · · · ·  | ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE   |
| 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1   |  |
| normal is accura   | ICATION: I hereby certify that the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with this application for administrative with the information submitted with the information with the information submitted with the information with the in |
|  | ne required information and notifications are submitted to the Division.   |
| $\mathcal{D}$  | Hote: Statement must 19 completed by an individual with managerial and/or supervisory capacity.  |
| LANDALL  | Hills Remition Str. Ups Eng. 11/4204 SKelly  |
| Print or Type Name   | Thicks & Vnrlle. Lom GnAybung  |
| Stephen Comments of the Commen | c-mail Address   |
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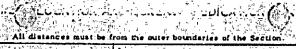
| District I   | State of New<br>Energy, Minerals and N   | Mexico   | Form C-107A<br>Revised August 1, 2011  |  |  |
|--|--|--|--|--|--|
| District II  |  | Causervation Division  | APPLICATION TYPE   |  |  |
| Pistrict III   | THE SECOND CONTRACTOR OF THE SECOND CONTRACTOR | . Francis Dr.<br>New Mexico 87505  | Single Well  Establish Pre-Approved Pouls  |  |  |
| District IV  | APPLICATION FOR I  | OWNHOLE COMMINGLING  | EXISTING WELLBORE  |  |  |
| Vanguard Permian, L  | LC 5847 So   | Ello Sult 30   | bo Houston TK 2705   |  |  |
| Operator State   |  |  |  |  |  |
| lene 222 C   | a Well No Lant Letter-   | 16 22-5 37E<br>Section-Township-Range  | County   |  |  |
| OGRID No 2583 CD Property Co   | ac 312404 API No. 30-  | 025-22/13 Lease Type:  | Federal State Fee  |  |  |
| DATA ELEMENT   | CPPER ZONE   | INTERMEDIATE ZONE  | LOWER ZONE   |  |  |
| Pool Name  | Gumnt, 45ts 7R.Q   | Penrose-Skelly Grayling  | Eunice Son Andry St  |  |  |
| Pool Code  | 22800  | 50350  | 24180  |  |  |
| Top and Buttom of Pay Section tentorated or Open-Hole Interval)  | 3488 - 3540  | 367-3720   | 3786 - 3896  |  |  |
| Method of Production (   | A.L.   | AL   | A.L.   |  |  |
| Bottomhole Pressure  | COLUMN TO THE PARTY OF THE PART |  |  |  |  |
| When to the first the wint in the latest some !  |  |  |  |  |  |
| Oil Gravity or Gas BTU   | 37%  | 379  | 32.5   |  |  |
| Producing Shut-In or New Zone  | Pridneins  | Producing  | Shirt in   |  |  |
| Date and Oil/Gas/Water Rates of Last Production.   | Date: 10/17/14   | Date: 10 /17/14 ==4  | Date: 11/7/2010  |  |  |
| anumitional solutions and temperature at the feature and the indicates and indicat | Rales: 3 /23 10 6  | Rates 3/23/9   | Rates 1/2/15   |  |  |
| Fixed Allocation Percentage  | 10118 - A Gas San  | Oil to Purch Gas were to   | Olf Control Gas 15   |  |  |
| then exists a begin supplied substitution aper   | 7/19 1 2/1/ 1  | 43 . 34  |  |  |  |
| esploanian And Perusperal Paris.   | <u> </u>   |  | 1.14 · 32 ·  |  |  |
|  | THE STATE OF THE S | SAL DATA 45  |  |  |  |
| Are all working, royalty and overriding<br>If not, have all working, myalty and ov   |  |  | 49 Millionaria   |  |  |
| Are all produced fluids from all commi   | ngled zones compatible with each o   | ther's and the state of the sta | Yes No.  |  |  |
|  | (production)   |  | Volume Notes   |  |  |
| If this well is on, or communitized with or the United States Bureau of Land M.  | inagement been notified in writing   |  | Ya North A   |  |  |
| NMOCD Reference Case No. applicable  | NMOCD Reference Case No. applicable in this well:  |  |  |  |  |
| Attachments C-102 for each zone to be commingled shirwing its spacing unit and acreage dedication  |  |  |  |  |  |
| Production curve for each zone for at least one year. (If not available, attach explanation the 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   | uncommun interest cases  |  |  |  |
|  |  |  |  |  |  |
| PRE-APPROVED POOLS  Wapplication 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.  Bottombole pressure data.   |  |  |  |  |  |
| I hereby certify that the information  | above is true and complete to the  | he best of my knowledge and belie  | A TOTAL CONTRACTOR OF THE STATE |  |  |
| SIGNATURE NAME WILL TITLE TO DATE 11/11/14   |  |  |  |  |  |
| 是一个人。 (1965年) 新疆安徽新疆(1964)   | VOALL HICKS  | TELEPHONE NO. ( 8  | 12:132)-2207   |  |  |
| E-MAIL ADDRESS Kicks   | @ vnrllc. com  |  | A Company of the Comp |  |  |
|  |  |  | april (mark) (ma |  |  |

Actual Footage Location of Wells 990 WEST Eunice, San Andry 1. Outline the acreage dedicated to the subject well by colored pencil or bachure marks on the plat below. 2. Il more than one lease is dedicated to the well, outline each 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, bave the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? Yes No !! I answer is "yes," type of consolidation 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, eliminating such interests, has been approved by the Commis-I hereby certify that the information con-I heraby certify that the well location on this plat was platted from field 6-20-67 Registered Professional Engineer



All distances must be from the outer boundaries of the Section.

| Unguard Permian LL  |  | Locasa Cole  | State  | 312404   | Well No 10   |
|---|--|--|--|--|--|
| Unit Letter Section 1 Towns   | hip in the same  | Benge A  | County   |  |  |
| Actual Foolage Location of Wells  | 22 SOUTH   | 37 EAST  | A Super State of Age   | Cea Marie  |  |
| 2310 feet from the NORTH Ground Level Elevi Producing Formation             | line and   |  | feet from th   | WEST   |  |
| 3394 66 Grayburg  |  | Penrose  | -Skill, G  | 20320 Degle  | ated Acreage; 40   |
| 1. Outline the acreage dedicated to   | the subject w  | ell by colored pe  | neil or bachy  | ire marks on the pla   |  |
| 2. If more than one lease is dedicate                                       | ated to the wel  | l. outline each a  | nd identify th   | e ownership thereof  | (both as to working  |
| interest and royalty).  |  |  |  | A THE STATE OF THE |  |
| 3. If more than one lease of differen                                       | t ownership is   | dedicated to the   | well, have th  | e interests of all o   | wners been consoli-  |
| deted by communitization, unitized  | ion, force-pooli   | ng. etc?   |  |  | and the second s |
| Yes No If answer  | в "yes;" type o  | f consolidation_   |  | The second secon |  |
| If answer is "no," list the owners  | and tract desc   | riptions which he  | ve actually  | been consolidated. (   | Use reverse side of  |
| this form if necessary.)  | Markett Carried  |  | 9 2 3  |  |  |
| No allowable will be assigned to the forced-pooling, or otherwise) or until | il a non-standar   | interests have b<br>d'unit, climinatin   | een consolid<br>g such intere  | lated (by communiti<br>stà has been appro  | zation, unitization,   |
| 6ion.   |  |  |  |  |  |
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| 4 12 2 4 7 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2                            |  |  | e stage was to   | Certalicate No.  | 676  |



| Operator /  | Lease  | boundaries of the Section   | Well No.   |
|---|--|---|--|
| Unit Letter   Section Township  | 258350 C   |   | 12404 10   |
| 16 The Paris  | 22-South 37 E  | County  | Lea  |
| Actual Footage Location of Well:  2310  Leet from the NORTH                 | line and 990   |   | WEST TO HER THE STATE OF THE ST |
| Ground Level Elev: Producing Formation                                      | Pool   |   | Dedicated Acreage:   |
| 1. Outline the acreage dedicated to t                                       | 24   |   | 22800 40 <sub>Acres</sub>  |
|   |  |   | · · · · · · · · · · · · · · · · · · ·  |
| 2. If more than one lease is dedicat interest and royalty).                 | d to the well, outline es  | ach and identify the own  | nership thereof (both as to working  |
| 3. If more than one lease of different                                      | numerahin is dedicated to  | sha wall haya the inte  | Same at all annual barrelling for  |
| dated by communitization unitization  | in force-pooling etc?  | THE WELL BEING THE  | rests of all owners been consoli-  |
| Yes No If answer is   | 'yes'' type of consolida   | tion.   | A second  |
| If answer is "no," list the owners  |  |   |  |
| this form if necessary.)  | and any of the contract of the | ್ ಇವೇ ಇವರ ಇತ್ತಿಗೆ ಬೆಂದಾಗಿ ಮಾಡಿತ್ರಾಗಿ ಇತ್ತಿ  | عِمْ أَنْ لِنَا اللَّهِ فِي اللَّهِ فِي اللَّهِ فِي اللَّهِ فِي اللَّهِ فَيْ اللَّهِ فَيْ اللَّهِ فَي  |
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| sion.   |  |   | ras peets abbitage by the Commis-  |
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|   |  |   | best of my knowledge and belief.   |
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|   |  |   | KANDALL HICKS  |
|   |  |   | Sr. Ops. Eng   |
|   |  | a   | Vanghand Armian LLC  |
| 990   |  | D.  |  |
|   |  |   | 11/1/14  |
|   |  |   |  |
|   | 1847) The second of the second | · • • • • • • • • • • • • • • • • • • •   | I hernby certify that the well location shown on this plat was platted from field  |
|   |  | 建金属灰(花)(R.Y.G.   15   1   17   15   17   1  | notes of actual surveys made by me or<br>under my supervision, and that the same   |
|   |  |   | is true and correct to the best of my  |
|   |  |   | unawledge and bellef.  |
|   |  |   |  |
|   |  | Do<br>New York  | te Surveyed.<br>6-20-67  |
|   |  |   | gistered Professional Engineer Vor Land Surveyor   |
|   |  |   | 01 1111 4  |
|   |  |   | Jam W West   |



November 11, 2014

Engineering and Geological Services Bureau, Oil Conservation Division Attn: Michael A. McMillan 1220 South St. Francis Dr. Santa Fe, NM 87505

Re:

**DHC Application** 

Cole State #10 API#30-025-22163

Dear Mr. McMillan:

The Pools to be comingled in the Cole State #10 well are the Eumont; Yates, 7R,Queen (22800), Penrose Skelly; Grayburg (S03S0) and the Eunice; San Andres, Southwest (24180). The comingling of the Eumont; Yates, 7R,Queen, Penrose Skelly; Grayburg and the Eunice, San Andres, Southwest will not reduce the value of total remaining production.

The production percentages were calculated based on the last 24 hr daily test from the Eunice; San Andres, Southwest dated 11/7/2010 prior to the workover. The Eumont; Yates, 7R,Queen/Penrose Skelly; Grayburg production was based on the most recent 24 hr daily test dated 10/17/14 and divided equally between the two. The two pools were completed simultaneously with one large fracture stimulation job. Those tests were then divided by the combined tests to get a percentage for each pool. This was done for oil and gas.

Ownership between all pools is identical.

This is a State property.

Thank you,

Randall Hicks

Sr. Operations Engineer

**Vanguard Natural Resources** 



Michael A. McMillan
Engineering & Geological Services Bureau
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: DHC Application
Cole State #10 (API 300252216300);
Cole State #12 (API 300252248600);
Cole State #14 (API 300252382800);
Cole State #17 (API 300253739900);
Cole State #18 (API 300253782700);
Cole State #19 (API 300253740000);

Lea County, NM

## Gentlemen:

A Ho

Please be advised that Vanguard Permian, LLC, ("Vanguard"), owns 100% of the working interest in the above captioned wells. Additionally, the various interest owners in all of the wells noted above are identical. In order to more efficiently produce the captioned wells and avoid waste, we respectfully request to downhole commingle the specified wells.

Should you have additional questions or comments in this regard, please feel free to contact me directly at 832.399.3764 or <a href="mailto:csiedge@vnrllc.com">csiedge@vnrllc.com</a> or for technical questions please contact Randall Hicks at 832.377.2207 or rhicks@vnrllc.com.

Respectfully submitted,

Vanguard Permian, LLC

Carol M. Sledge, CPL Senior Landman

cc: Randall Hicks via email at rhicks@vnrllc.com

# Cole State #10 API # 30-025-22163

| Pool Name                     | Eumont;Y,7R-Queen |        |        |
|-------------------------------|-------------------|--------|--------|
| Pool Code                     | 22800             |        |        |
| Pay Intervai                  | 3488' - 3540'     |        |        |
| Status                        | Producing         |        |        |
| Rates from 24 hr tests, O,G,W | 3                 | 27     | 9.5    |
| Allocation %                  | 43%               | 34%    |        |
|                               |                   |        |        |
| Pool 24 hrTest                | 3                 |        |        |
| Combined Test                 | 7                 | 42.86% |        |
| Pool 24 hrTest                | _                 | 27     |        |
| Combined Test                 | <u> </u>          | 79.5   | 33.96% |
| Pool 24 hrTest                |                   |        |        |
| Combined Test                 |                   |        |        |
| Pool 24 hrTest                |                   |        |        |
| Combined Test                 |                   |        |        |
|                               | <u> </u>          |        |        |

| Penrose   | Skelly;Gray   | yburg  |  |  |  |
|-----------|---------------|--------|--|--|--|
|           | 50350         |        |  |  |  |
| 36        | 3667' - 3720' |        |  |  |  |
| Producing |               |        |  |  |  |
| 3         | 27            | 9.5    |  |  |  |
| 43%       | 34%           | 3.5    |  |  |  |
| 4370      | 3470          |        |  |  |  |
| Con       | nbined Test   | ·s     |  |  |  |
| 7         | 80            | 24     |  |  |  |
| ,         | 00            | 24     |  |  |  |
|           |               | ı      |  |  |  |
|           |               |        |  |  |  |
|           |               |        |  |  |  |
| 3         |               |        |  |  |  |
| 7         | 42.86%        |        |  |  |  |
|           |               |        |  |  |  |
|           | 27            |        |  |  |  |
| _         | 79.5          | 33.96% |  |  |  |
|           |               |        |  |  |  |
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| l         |               |        |  |  |  |
|           |               |        |  |  |  |
|           |               |        |  |  |  |

Eunice;San Andres, SW
24180
3842' - 3967'
Shut in
1 26 5
14% 32%

25.5 79.5 32.08%

# McMillan, Michael, EMNRD

From:

Randall Hicks <rhicks@vnrllc.com>

Sent: To: Thursday, November 13, 2014 3:20 PM

Subject:

McMillan, Michael, EMNRD; Martin, Ed RE: DHC applications Lea Co. NM - State Wells

Attachments:

Cole State #10 DHC Application Packet.pdf; Cole State #10 DHC Letter.pdf; Cole State #

10 Landman Letter.pdf; Cole State #10 rev 2 Production Spreadsheet.xlsx

### Gentlemen,

Attached is the Cole State #10 well needing a DHC permit. This well is very similar to the previous applications in that it is a State well with consistent interest between pools.

Copies will be mailed to each of you with the necessary processing fee.

For this DHC application, the production between the Eumont; Yates, 7R-Queen (22800) and the Penrose-Skelly; Grayburg (50350) was based on 24 hr production test that was split evenly because both zones were completed together in 2010 with a single fracture stimulation and equal number of perforations in each Pool.

The 24 hr production test for the Eumont; Yates, Queen/Grayburg and for the San Andres is a more accurate number and should be used to determine the percentages for each pool. The daily production graph is an allocated number from a single tank battery with 17 wells producing to it. Due to certain wells contributing to the tank battery being down or other factors, the allocated production may not match the 24 hr test number exactly, however the 24 production test is an accurate indication of the production from that well.

If you have any other questions, feel free to call.

Thanks,

Randall Hicks
Sr Operations Engineer
Vanguard Natural Resources, LLC
832-377-2207 office
713-252-1626 mobile