

DATE: 11/16/14	SUPPLANT: [blank]	ENGINEER: [blank]	LOCATION: [blank]	TITLE: DHC	APP NO: PMAM431047109
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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.

RANDALL HICKS
 Print or Type Name

RANDALL HICKS
 Signature

Sr. Ops. Eng.
 Title

11/16/14
 Date

rhicks@vnrllc.com
 e-mail Address

Penrose
 Skelly's Grubhouse
 50352

- EUMONT JAMES
 TRUCKS-Queen
 Oil
 22800

- DHC 4716
 - Vanguard Permining LLC
 258350
 well
 Cole state #14
 30-025-25838
 Pool
 - Eynice SAN
 Andres SW
 24180

RECEIVED OGD
 NOV - 6 AM '14

District I
1625 N. Frankford Dr. Hobbs, NM 88241

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

District III
1100 Red River Road, Aztec, NM 87412

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

Operator Vanguard Permian, LLC Address 5547 San Felipe, Suite 3000 Houston, TX
Lease Code State Well No 14 Unit Letter-Section-Township-Range F 16 22S 37E County Lee
OGRID No. 258350 Property Code 312404 API No. 30-025-23929 Lease Type ☐ Federal ☒ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	<u>Eumont, Upta, JR-Q</u>	<u>Penrose Skully, Grayling</u>	<u>Eunice, San Andres, SW</u>
Pool Code	<u>22800</u>	<u>50350</u>	<u>24180</u>
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	<u>3476' - 3530'</u>	<u>3656' - 3662'</u>	<u>3806' - 3990'</u>
Method of Production (Flowing or Artificial Lift)	<u>A.L.</u>	<u>A.L.</u>	<u>A.L.</u>
Bottomhole Pressure (Note: Pressure data will not be required if the bottomhole pressure is in the lower zone or within 150' of the depth of the perforated interval in the upper zone)			
Oil Gravity or Gas BTU (100 cc API or Gas BTU)	<u>36°/1100</u>	<u>36°/1100</u>	<u>34.8°/1100</u>
Producing, Shut-In or New Zone	<u>Producing</u>	<u>Producing</u>	<u>Shut in</u>
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 <u>10/7/2014</u> Rates <u>0.5/20/1</u>	Date <u>10/7/2014</u> Rates <u>0.5/20/1</u>	Date <u>6/1/2014</u> Rates <u>1/55/10</u>
Fixed Allocation Percentage (Note: Allocation is based upon a matching ratio of then current gas production supporting data or explanation is still be required.)	Oil <u>25</u> Gas <u>21</u>	Oil <u>25</u> Gas <u>21</u>	Oil <u>50</u> Gas <u>58</u>

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 ☐

NMOC 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 Randy Hicks TITLE Sr. Ops. Eng. DATE 11/6/2014
TYPE OR PRINT NAME RANDALL Hicks TELEPHONE NO. (832) 377-2207
E-MAIL ADDRESS r.hicks@vnrllc.com

Cole State #14
API # 30-025-23828

Pool Name
Pool Code
Pay Interval
Status
Rates from 24 hr tests, O,G,W
Allocation %

Eumont; Yates,7R-Queen		
22800		
3476' - 3530'		
Producing		
0.5	20	1
25%	21%	
Pool 24 hrTest	0.5	
Combined Test	2	25.00%
Pool 24 hrTest	20	
Combined Test	95	21.05%
Pool 24 hrTest		
Combined Test		
Pool 24 hrTest		
Combined Test		

Penrose Skelly;Gray		
50350		
3656' - 3662'		
Producing		
0.5	20	1
25%	21%	
Combined Tests		
2	95	12
Pool 24 hrTest	0.5	
Combined Test	2	25.00%
Pool 24 hrTest	20	
Combined Test	95	21.05%
Pool 24 hrTest		
Combined Test		

Eunice;San Andres, SW

24180

3806' - 3838'

Shut in

1 55 10

50% 58%

1

2 50.00%

55

95 57.89%

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-85

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

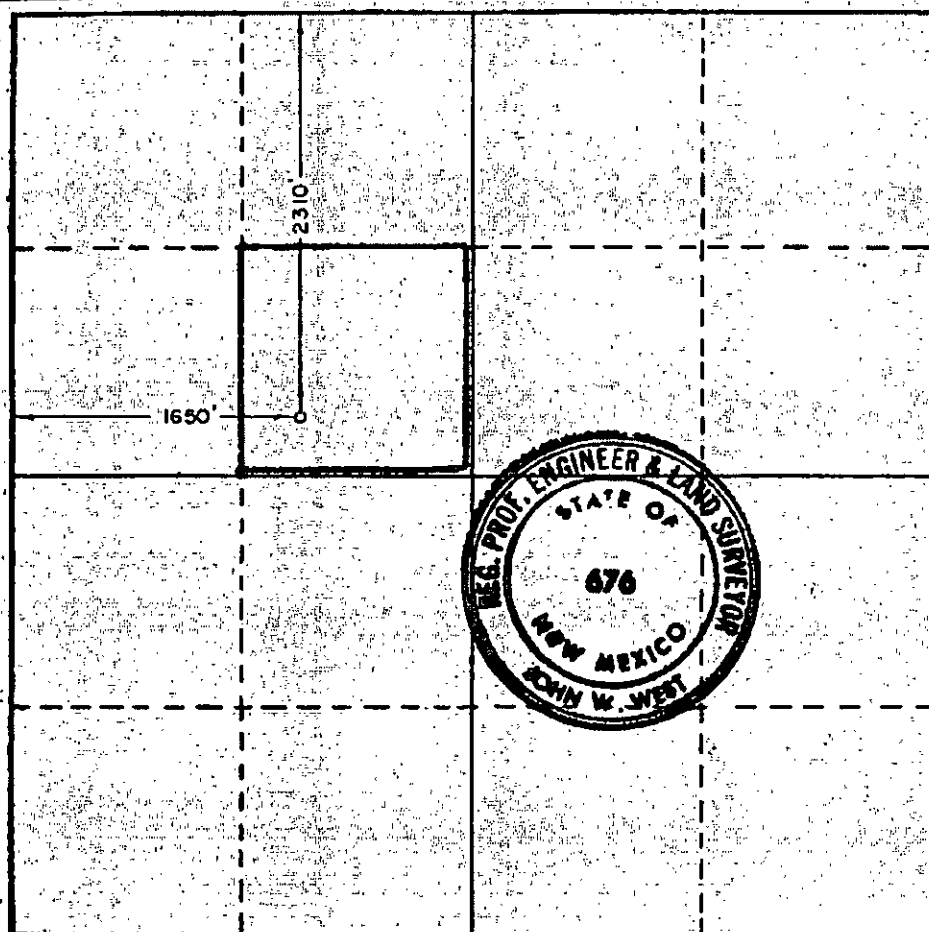
Operator Vanguard Permian, LLC		Lease Cole State 312404		Well No. 14
Unit Letter F	Section 16	Township 22 SOUTH	Range 37 EAST	County LEA
Actual Footage Location of Well: 2310 feet from the NORTH line and 1650 feet from the WEST line				
Ground Level Elev. 3396'	Producing Formation San Andres	Pool Ennis, San Andres, SW (24180)	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If 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, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

☐ Yes ☐ No If 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 communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Randall Hicks
Signature

RANDALL Hicks
Name

Sr. Ops. Eng
Position

Vanguard Permian, LLC
Company

11-6-14
Date

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 knowledge and belief.

JULY 12, 1971
Date Surveyed

Registered Professional Engineer and/or Land Surveyor

John W. West
Signature

676
Certificate No.



**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-83

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

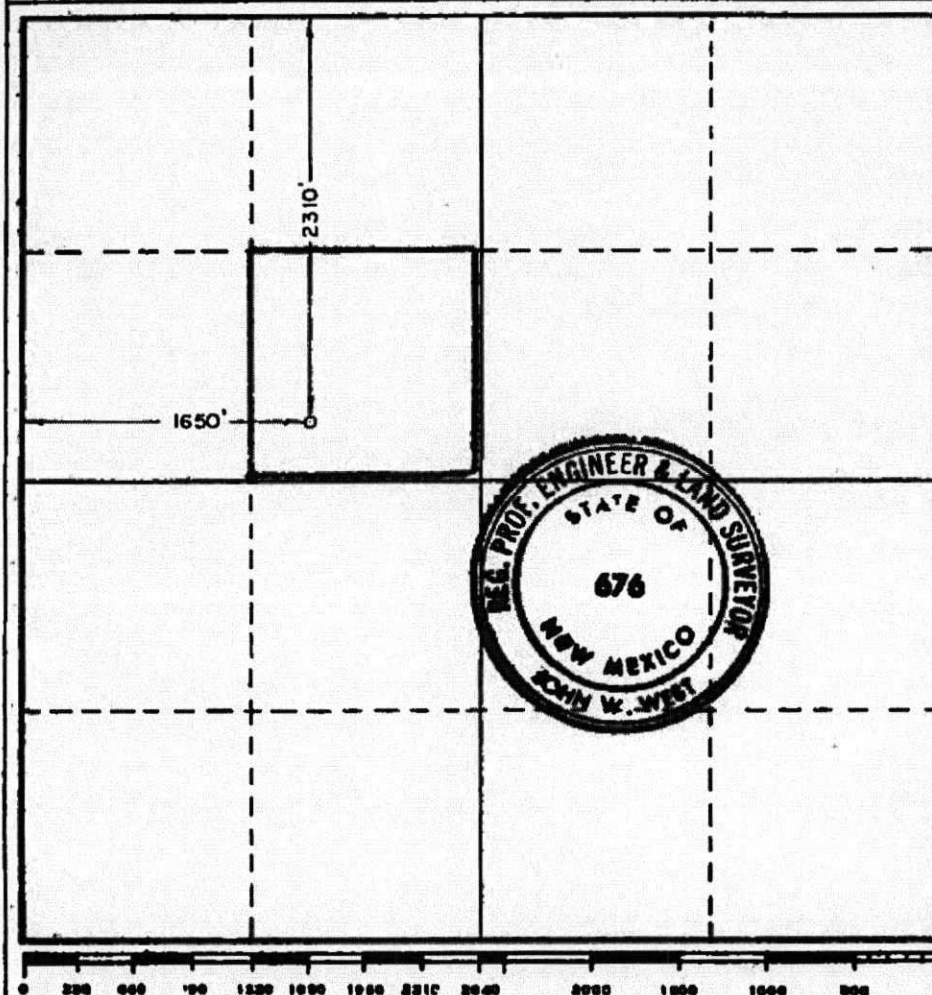
Operator Vanguard Permian, LLC		Section 258350		Locate Cole State		Well No. 14	
Unit Letter F	Section 16	Township 22 SOUTH	Range 37 EAST	County LEA			
Actual Footage Location of Well: 2310 feet from the NORTH line and 1650 feet from the WEST line							
Ground Level Elev. 3396'	Producing Formation Penrose Skelly, Grayburg		Pool Penrose Skelly, Grayburg (50350)		Dedicated Acreage: 40 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If 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, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If 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 Commission.



CERTIFICATION

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

Signature: *R. M. Hicks*
Name: **RANDALL Hicks**
Position: **Sr. Ops. Eng**
Company: **Vanguard Permian, LLC**
Date: **11-6-14**

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 knowledge and belief.

Date Surveyed
JULY 12, 1971

Registered Professional Engineer
and/or Land Surveyor

Signature: *John W. West*
Certificate No. **676**

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-63

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

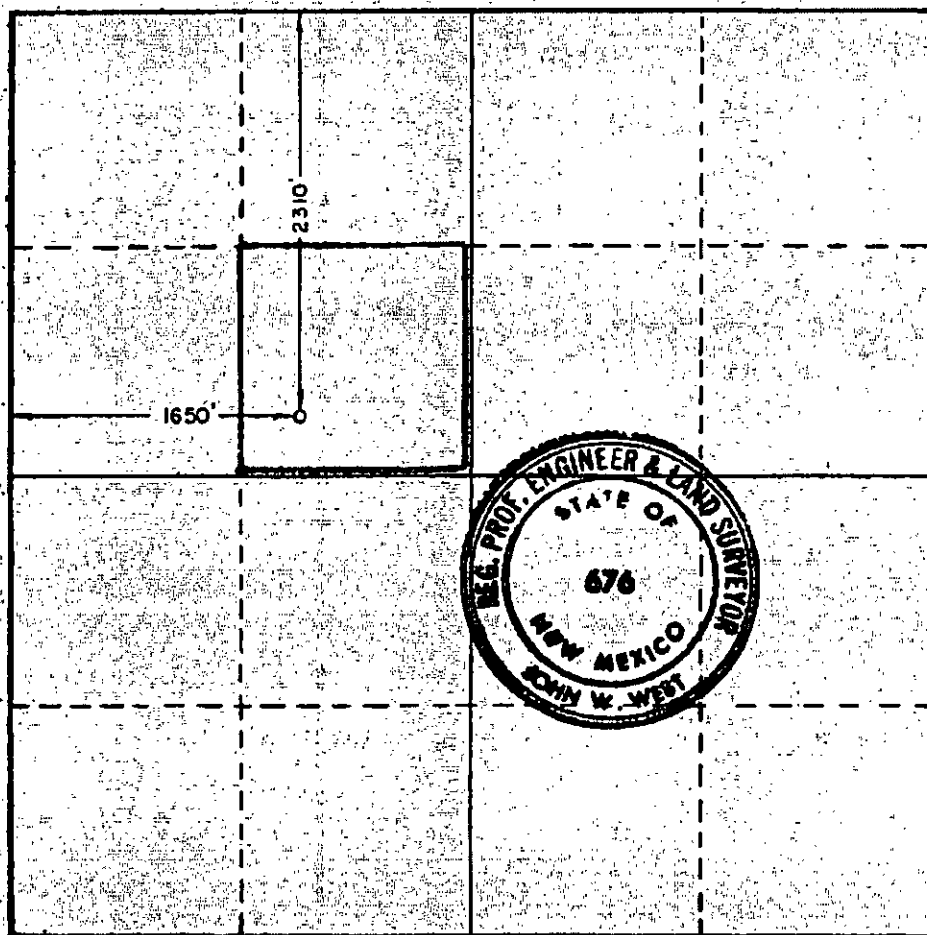
Operator <i>Vanguard Permian, LLC</i>		Lease <i>258350</i>		State <i>Colo State</i>		Well No. <i>312404</i>	
Unit Letter <i>F</i>	Section <i>16</i>	Township <i>22 SOUTH</i>	Range <i>37 EAST</i>	County <i>LEA</i>			
Actual Footage Location of Well: <i>2310</i> feet from the <i>NORTH</i> line and <i>1650</i> feet from the <i>WEST</i> line							
Ground Level Elev. <i>3396'</i>	Producing Formation <i>Queen</i>		Pool <i>Eumont, Yates 7R-Q (22800)</i>		Dedicated Acreage: <i>40</i>		Acre

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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?

☐ Yes ☐ No If 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 Commission.



CERTIFICATION

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

RANDALL Hicks
Name
Randall Hicks
Position
Sr. Ops. Eng.
Company
Vanguard Permian, LLC
Date
11-6-14

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 knowledge and belief.

Date Surveyed
JULY 12, 1971

Registered Professional Engineer and/or Land Surveyor

John W. West
Signature No. *676*





November 5, 2014

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:

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 csledge@vnrlc.com or for technical questions please contact Randall Hicks at 832.377.2207 or rhicks@vnrlc.com.

Respectfully submitted,

Vanguard Permian, LLC

Carol M. Sledge, CPL
Senior Landman

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



October 31, 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 #14 API#30-025-23828

Dear Mr. McMillan:

The Pools to be comingled in the Cole State #14 well are the Eunice; Yates, 7R-Queen (22800), the Penrose Skelly; Grayburg (50350) and the Eunice; San Andres, Southwest (24180). The comingling of the Eunice; 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 6/1/2014 prior to the workover. The Eunice; Yates, 7R-Queen and Penrose Skelly; Grayburg production was based on an even split of the most recent 24 hr daily test dated 10/7/14 which was 4 months after the workover. Those tests were then divided by the combined tests to get a percentage for each pool. This was done for both oil and gas.

Ownership interests between all pools is identical.

This is a State property and the SLO is being notified by this letter. A hard copy of this application with a \$30 processing fee will be mailed to the SLO.

Thank you,

Randall Hicks
Sr. Operations Engineer
Vanguard Natural Resources

THE MONTHLY DISTRIBUTION MLPTM

McMillan, Michael, EMNRD

From: Randall Hicks <rhicks@vnrllc.com>
Sent: Tuesday, November 11, 2014 10:49 AM
To: McMillan, Michael, EMNRD
Subject: Vanguard - Cole State #14 - DHC Application

Mr. McMillan,

For the DHC application, the production between the Eumont; Yates, 7R-Queen (22800) and the Penrose-Skelly; Grayburg (50350) was split evenly because one large fracture stimulation was put on both zones at one time. Further, a similar number of perforations are in the Queen and as are in the Grayburg creating an even split for the fracture treatment.

The 24 hr production test for the combined Queen and Grayburg 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.

Thank you,

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