

|                    |          |                    |                      |             |                          |
|--------------------|----------|--------------------|----------------------|-------------|--------------------------|
| 7/14/08<br>DATE IN | SUSPENSE | Brooks<br>ENGINEER | 7/14/08<br>LOGGED IN | USC<br>TYPE | PKR0819652801<br>APP NO. |
|--------------------|----------|--------------------|----------------------|-------------|--------------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



High Plains Operating Co  
Eagle Springs 8 Fed #1H

### 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.

Arthur W. Butler III  
Print or Type Name

Signature

Managing Partner  
Title

7/9/2008  
Date

bbutler@highplainsop.com  
e-mail Address

NSL-5887  
2008 JUL 14 PM 2 19  
RECEIVED

Wednesday, July 09, 2008

RECEIVED

David Brooks

New Mexico Oil Conservation Division

1220 South St. Francis Drive

Santa Fe, NM 87505

2008 JUL 14 PM 12 26

**Re: Arena Blanca Entrada Southeast Pool—Application for Administrative Approval for “Unorthodox Location” for horizontally drilling the Entrada from the Eagle Springs 8 Federal #1 existing wellbore**

Dear David:

High Plains Operating Company (HPOC) does hereby apply for administrative approval pursuant to subsection B (3) of NMAC 19.15.3.111 and subsection F of NMAC 19.15.3.104 to drill an “Unorthodox Location” in its proposed Eagle Springs 8 Federal #1H horizontal well. HPOC plans to enter the Eagle Springs 8 Federal #1 well, the Entrada discovery well originally drilled by Penwell Energy in 1999, make a casing exit and horizontally drill the Entrada reservoir in a south-southwest direction. See the accompanying C-102. At present, the Eagle Springs 8 Federal #1 well is a saltwater disposal well into the lower Entrada formation operated by HPOC, with injection perforations from 5,668' to 5,712'. The original Penwell producing Entrada perforations were from 5,542' to 5,547'. HPOC also operates the Eagle Springs 8 Federal #2M well on the property, which is currently producing oil from the Entrada formation at low rates (about a 2% oil cut).

An unorthodox location is required as the proposed lateral will be closer than the minimum setback requirements to the outer boundaries of the proposed horizontal project area. Our proposed lateral encroaches on Unit G. The map on the next page shows the proposed “project area/spacing unit” for HPOC's proposed horizontal 8 Federal #1H well along with all wells in the area. HPOC is the 100% owner of Federal lease NM/NM 99705, which is shown in yellow on this map. Ownership is the same for this entire lease.

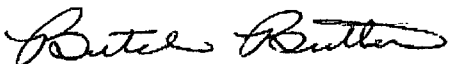
HPOC has carefully studied the 3D seismic available over the project area and has interpreted the producing Entrada dune reservoir to lie in a north-northeast to south-southwest direction. The outline of the interpreted dune is shown on the next page. Due to the large water interval below the relatively thin oil pay in the field, reservoir modeling indicates two distinct benefits of a horizontal lateral:

1. A longer period of water free production—from several months to perhaps as much as 2 years.
2. Additional reserves recovered—perhaps as much as 50% additional oil from a single horizontal lateral versus a single vertical wellbore.

So, to conserve waste and maximize recovery from the Arena Blanca Entrada Southeast pool, HPOC does respectfully request that administrative approval be granted for an “Unorthodox Location” for its Eagle Springs 8 Federal #1H well.

Please direct any questions to me at the contact points below.

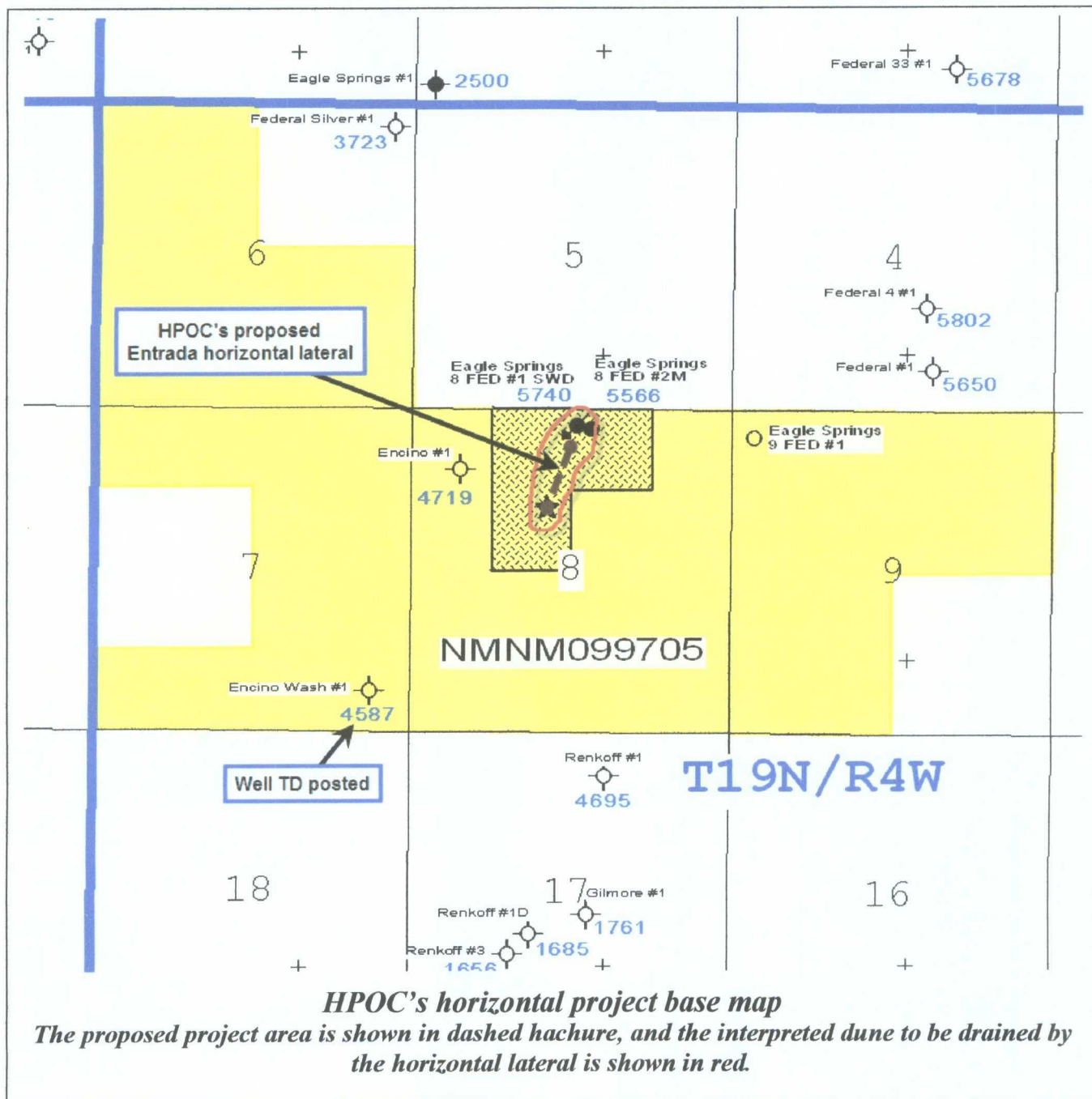
Yours truly,



Arthur W. (Butch) Butler III

Manager—High Plains Operating Company, LLC

SWP 1103-0



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

|  |   |  |
|--|---|--|
| <sup>1</sup> API Number<br><b>30-043-20949</b> | <sup>2</sup> Pool Code<br><b>96899</b>                                  | <sup>3</sup> Pool Name<br><b>Arena Blanca Entrada, Southeast</b> |
| <sup>4</sup> Property Code<br><b>25148</b>     | <sup>5</sup> Property Name<br><b>Eagle Springs 8 Federal</b>            | <sup>6</sup> Well Number<br><b>1H</b>                            |
| <sup>7</sup> OGRID No.<br><b>246238</b>        | <sup>8</sup> Operator Name<br><b>High Plains Operating Company, LLC</b> | <sup>9</sup> Elevation<br><b>6,717' (GR)</b>                     |

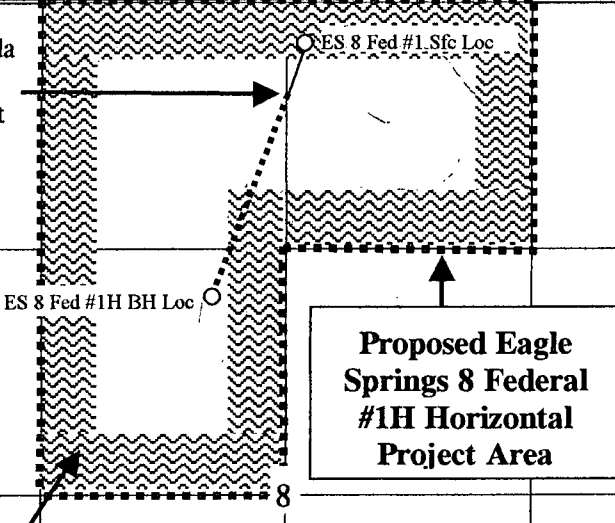
<sup>10</sup> **Surface Location**

|                           |                     |                        |                    |         |                              |                                  |                                |                               |                           |
|---------------------------|---------------------|------------------------|--------------------|---------|------------------------------|----------------------------------|--------------------------------|-------------------------------|---------------------------|
| UL or lot no.<br><b>B</b> | Section<br><b>8</b> | Township<br><b>19N</b> | Range<br><b>4W</b> | Lot Idn | Feet from the<br><b>263'</b> | North/South line<br><b>North</b> | Feet from the<br><b>2,545'</b> | East/West line<br><b>East</b> | County<br><b>Sandoval</b> |
|---------------------------|---------------------|------------------------|--------------------|---------|------------------------------|----------------------------------|--------------------------------|-------------------------------|---------------------------|

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

|   |                               |                                  |                         |         |                                |                                  |                                |                               |                           |
|---|-------------------------------|----------------------------------|-------------------------|---------|--------------------------------|----------------------------------|--------------------------------|-------------------------------|---------------------------|
| UL or lot no.<br><b>F</b>                   | Section<br><b>8</b>           | Township<br><b>19N</b>           | Range<br><b>4W</b>      | Lot Idn | Feet from the<br><b>1,600'</b> | North/South line<br><b>North</b> | Feet from the<br><b>2,240'</b> | East/West line<br><b>West</b> | County<br><b>Sandoval</b> |
| <sup>12</sup> Dedicated Acres<br><b>120</b> | <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>16. Penetrate Entrada approx 300' south-southwest from sfc loc at 535' FNL and 2,635' FEL</p>  <p>ES 8 Fed #1 Sfc Loc</p> <p>ES 8 Fed #1H BH Loc</p> <p>Proposed Eagle Springs 8 Federal #1H Horizontal Project Area</p> <p>330' Setback from Project Area boundary</p> <p>NSL-1724<br/>2048</p> | <p>17 <b>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>Arthur W. Butler III</i> 7/9/08<br/>Signature Date</p> <p><b>Arthur W. Butler III</b><br/>Printed Name</p> <p><b>Managing Partner</b><br/><b>High Plains Operating Company, LLC</b></p> <p>18 <b>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<br/>Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p> |
|---|--|

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