

**FINDING OF NO SIGNIFICANT IMPACT & DECISION RECORD  
FOR**

Lance Oil & Gas Company Inc.

**Augusta Unit Zeta**

ENVIRONMENTAL ASSESSMENT –WY-070-08-154

**DECISION**

The EA and FONSI were posted to the Buffalo Field Office web site on June 7, 2009 for a 30 day public comment period. Copies were mailed to interested parties and an announcement of the comment period was published in local and regional newspapers on June 8, 2009. The comment period ended on July 8, 2009. Ten letters were received. A summary of the substantive comments and how they were addressed follows.

It is the BLMs decision to approve Alternative C as described in the attached Environmental Assessment (EA) and authorize Lance Oil & Gas Company Inc.’s Augusta Unit Zeta Coal Bed Natural Gas (CBNG) POD comprised of the following 134 Applications for Permit to Drill (APDs):

|    | <b>Well Name</b>           | <b>Well #</b> | <b>QTR</b> | <b>Sec</b> | <b>TWP</b> | <b>RNG</b> | <b>Lease</b> |
|----|----------------------------|---------------|------------|------------|------------|------------|--------------|
| 1  | AUGUSTA UNIT ZETA AUGUSTA  | 11-4BG        | NWNW       | 4          | 50N        | 76W        | WYW154406    |
| 2  | AUGUSTA UNIT ZETA AUGUSTA  | 11-4WA        | NWNW       | 4          | 50N        | 76W        | WYW154406    |
| 3  | AUGUSTA UNIT ZETA AUGUSTA  | 14-4BG*       | SWSW       | 4          | 50N        | 76W        | WYW132267    |
| 4  | AUGUSTA UNIT ZETA AUGUSTA  | 14-4WA        | SWSW       | 4          | 50N        | 76W        | WYW132267    |
| 5  | AUGUSTA UNIT ZETA AUGUSTA  | 31-4BG        | NWNE       | 4          | 50N        | 76W        | WYW53240     |
| 6  | AUGUSTA UNIT ZETA AUGUSTA  | 31-4WA        | NWNE       | 4          | 50N        | 76W        | WYW53240     |
| 7  | AUGUSTA UNIT ZETA AUGUSTA  | 33-4BG        | NWSE       | 4          | 50N        | 76W        | WYW53240     |
| 8  | AUGUSTA UNIT ZETA AUGUSTA  | 33-4WA        | NWSE       | 4          | 50N        | 76W        | WYW53240     |
| 9  | AUGUSTA UNIT ZETA AUGUSTA  | 34-4BG        | SWSE       | 4          | 50N        | 76W        | WYW53240     |
| 10 | AUGUSTA UNIT ZETA AUGUSTA  | 34-4WA        | SWSE       | 4          | 50N        | 76W        | WYW53240     |
| 11 | AUGUSTA UNIT ZETA AUGUSTA  | 41-4BG        | NENE       | 4          | 50N        | 76W        | WYW53240     |
| 12 | AUGUSTA UNIT ZETA AUGUSTA  | 41-4WA        | NENE       | 4          | 50N        | 76W        | WYW53240     |
| 13 | AUGUSTA UNIT ZETA AUGUSTA  | 43-4BG        | NESE       | 4          | 50N        | 76W        | WYW53240     |
| 14 | AUGUSTA UNIT ZETA AUGUSTA  | 43-4WA        | NESE       | 4          | 50N        | 76W        | WYW53240     |
| 15 | AUGUSTA UNIT ZETA POWDER R | 11-5BG        | NWNW       | 5          | 50N        | 76W        | WYW042305    |
| 16 | AUGUSTA UNIT ZETA POWDER R | 11-5WA        | NWNW       | 5          | 50N        | 76W        | WYW042305    |
| 17 | AUGUSTA UNIT ZETA POWDER R | 13-5BG        | NWSW       | 5          | 50N        | 76W        | WYW042305    |
| 18 | AUGUSTA UNIT ZETA POWDER R | 13-5WA        | NWSW       | 5          | 50N        | 76W        | WYW042305    |
| 19 | AUGUSTA UNIT ZETA POWDER R | 21-5BG        | NENW       | 5          | 50N        | 76W        | WYW042305    |
| 20 | AUGUSTA UNIT ZETA POWDER R | 21-5WA        | NENW       | 5          | 50N        | 76W        | WYW042305    |
| 21 | AUGUSTA UNIT ZETA POWDER R | 12-6BG        | SWNW       | 6          | 50N        | 76W        | WYW042305    |
| 22 | AUGUSTA UNIT ZETA POWDER R | 12-6WA        | SWNW       | 6          | 50N        | 76W        | WYW042305    |
| 23 | AUGUSTA UNIT ZETA POWDER R | 14-6BG        | SWSW       | 6          | 50N        | 76W        | WYW042305    |
| 24 | AUGUSTA UNIT ZETA POWDER R | 14-6WA        | SWSW       | 6          | 50N        | 76W        | WYW042305    |
| 25 | AUGUSTA UNIT ZETA POWDER R | 43-6BG        | NESE       | 6          | 50N        | 76W        | WYW042305    |
| 26 | AUGUSTA UNIT ZETA POWDER R | 43-6WA        | NESE       | 6          | 50N        | 76W        | WYW042305    |

|    | <b>Well Name</b>          | <b>Well #</b> | <b>QTR</b> | <b>Sec</b> | <b>TWP</b> | <b>RNG</b> | <b>Lease</b> |
|----|---------------------------|---------------|------------|------------|------------|------------|--------------|
| 27 | AUGUSTA UNIT ZETA AUGUSTA | 11-9BG        | NWNW       | 9          | 50N        | 76W        | WYW53240     |
| 28 | AUGUSTA UNIT ZETA AUGUSTA | 11-9WA        | NWNW       | 9          | 50N        | 76W        | WYW53240     |
| 29 | AUGUSTA UNIT ZETA AUGUSTA | 12-9BG        | SWNW       | 9          | 50N        | 76W        | WYW53240     |
| 30 | AUGUSTA UNIT ZETA AUGUSTA | 12-9WA        | SWNW       | 9          | 50N        | 76W        | WYW53240     |
| 31 | AUGUSTA UNIT ZETA AUGUSTA | 32-19BG       | SWNE       | 19         | 51N        | 76W        | WYW134235    |
| 32 | AUGUSTA UNIT ZETA AUGUSTA | 32-19WA       | SWNE       | 19         | 51N        | 76W        | WYW134235    |
| 33 | AUGUSTA UNIT ZETA AUGUSTA | 34-19BG       | SWSE       | 19         | 51N        | 76W        | WYW149360    |
| 34 | AUGUSTA UNIT ZETA AUGUSTA | 34-19WA       | SWSE       | 19         | 51N        | 76W        | WYW149360    |
| 35 | AUGUSTA UNIT ZETA AUGUSTA | 41-19BG       | NENE       | 19         | 51N        | 76W        | WYW134235    |
| 36 | AUGUSTA UNIT ZETA AUGUSTA | 41-19WA       | NENE       | 19         | 51N        | 76W        | WYW134235    |
| 37 | AUGUSTA UNIT ZETA AUGUSTA | 43-19BG       | NESE       | 19         | 51N        | 76W        | WYW149360    |
| 38 | AUGUSTA UNIT ZETA AUGUSTA | 43-19WA       | NESE       | 19         | 51N        | 76W        | WYW149360    |
| 39 | AUGUSTA UNIT ZETA AUGUSTA | 12-20BG       | SWNW       | 20         | 51N        | 76W        | WYW149360    |
| 40 | AUGUSTA UNIT ZETA AUGUSTA | 12-20WA       | SWNW       | 20         | 51N        | 76W        | WYW149360    |
| 41 | AUGUSTA UNIT ZETA AUGUSTA | 14-20BG       | SWSW       | 20         | 51N        | 76W        | WYW134236    |
| 42 | AUGUSTA UNIT ZETA AUGUSTA | 14-20WA       | SWSW       | 20         | 51N        | 76W        | WYW134236    |
| 43 | AUGUSTA UNIT ZETA AUGUSTA | 21-20BG       | NENW       | 20         | 51N        | 76W        | WYW162029    |
| 44 | AUGUSTA UNIT ZETA AUGUSTA | 21-20WA       | NENW       | 20         | 51N        | 76W        | WYW162029    |
| 45 | AUGUSTA UNIT ZETA AUGUSTA | 23-20BG       | NESW       | 20         | 51N        | 76W        | WYW134236    |
| 46 | AUGUSTA UNIT ZETA AUGUSTA | 23-20WA       | NESW       | 20         | 51N        | 76W        | WYW134236    |
| 47 | AUGUSTA UNIT ZETA AUGUSTA | 12-21BG       | SWNW       | 21         | 51N        | 76W        | WYW149361    |
| 48 | AUGUSTA UNIT ZETA AUGUSTA | 12-21WA       | SWNW       | 21         | 51N        | 76W        | WYW149361    |
| 49 | AUGUSTA UNIT ZETA AUGUSTA | 21-21BG       | NENW       | 21         | 51N        | 76W        | WYW149361    |
| 50 | AUGUSTA UNIT ZETA AUGUSTA | 21-21WA       | NENW       | 21         | 51N        | 76W        | WYW149361    |
| 51 | AUGUSTA UNIT ZETA AUGUSTA | 32-21BG       | SWNE       | 21         | 51N        | 76W        | WYW149361    |
| 52 | AUGUSTA UNIT ZETA AUGUSTA | 32-21WA       | SWNE       | 21         | 51N        | 76W        | WYW149361    |
| 53 | AUGUSTA UNIT ZETA AUGUSTA | 41-21BG       | NENE       | 21         | 51N        | 76W        | WYW149361    |
| 54 | AUGUSTA UNIT ZETA AUGUSTA | 41-21WA       | NENE       | 21         | 51N        | 76W        | WYW149361    |
| 55 | AUGUSTA UNIT ZETA AUGUSTA | 43-21BG       | NESE       | 21         | 51N        | 76W        | WYW149361    |
| 56 | AUGUSTA UNIT ZETA AUGUSTA | 43-21WA       | NESE       | 21         | 51N        | 76W        | WYW149361    |
| 57 | AUGUSTA UNIT ZETA AUGUSTA | 44-21BG       | SESE       | 21         | 51N        | 76W        | WYW149361    |
| 58 | AUGUSTA UNIT ZETA AUGUSTA | 44-21WA       | SESE       | 21         | 51N        | 76W        | WYW149361    |
| 59 | AUGUSTA UNIT ZETA AUGUSTA | 12-28BG       | SWNW       | 28         | 51N        | 76W        | WYW134236    |
| 60 | AUGUSTA UNIT ZETA AUGUSTA | 12-28WA       | SWNW       | 28         | 51N        | 76W        | WYW134236    |
| 61 | AUGUSTA UNIT ZETA AUGUSTA | 22-28BG       | SENE       | 28         | 51N        | 76W        | WYW134236    |
| 62 | AUGUSTA UNIT ZETA AUGUSTA | 22-28WA       | SENE       | 28         | 51N        | 76W        | WYW134236    |
| 63 | AUGUSTA UNIT ZETA AUGUSTA | 12-29BG       | SWNW       | 29         | 51N        | 76W        | WYW134236    |
| 64 | AUGUSTA UNIT ZETA AUGUSTA | 12-29WA       | SWNW       | 29         | 51N        | 76W        | WYW134236    |
| 65 | AUGUSTA UNIT ZETA AUGUSTA | 21-29BG       | NENW       | 29         | 51N        | 76W        | WYW134236    |
| 66 | AUGUSTA UNIT ZETA AUGUSTA | 21-29WA       | NENW       | 29         | 51N        | 76W        | WYW134236    |

|     | <b>Well Name</b>          | <b>Well #</b> | <b>QTR</b> | <b>Sec</b> | <b>TWP</b> | <b>RNG</b> | <b>Lease</b> |
|-----|---------------------------|---------------|------------|------------|------------|------------|--------------|
| 67  | AUGUSTA UNIT ZETA AUGUSTA | 23-29BG       | NESW       | 29         | 51N        | 76W        | WYW134236    |
| 68  | AUGUSTA UNIT ZETA AUGUSTA | 23-29WA       | NESW       | 29         | 51N        | 76W        | WYW134236    |
| 69  | AUGUSTA UNIT ZETA AUGUSTA | 24-29BG       | SESW       | 29         | 51N        | 76W        | WYW134236    |
| 70  | AUGUSTA UNIT ZETA AUGUSTA | 24-29WA       | SESW       | 29         | 51N        | 76W        | WYW134236    |
| 71  | AUGUSTA UNIT ZETA AUGUSTA | 23-30BG       | NESW       | 30         | 51N        | 76W        | WYW149360    |
| 72  | AUGUSTA UNIT ZETA AUGUSTA | 23-30WA       | NESW       | 30         | 51N        | 76W        | WYW149360    |
| 73  | AUGUSTA UNIT ZETA AUGUSTA | 34-30WA       | SWSE       | 30         | 51N        | 76W        | WYW149360    |
| 74  | AUGUSTA UNIT ZETA AUGUSTA | 41-30BG       | NENE       | 30         | 51N        | 76W        | WYW149360    |
| 75  | AUGUSTA UNIT ZETA AUGUSTA | 41-30WA       | NENE       | 30         | 51N        | 76W        | WYW149360    |
| 76  | AUGUSTA UNIT ZETA AUGUSTA | 43-30BG       | NESE       | 30         | 51N        | 76W        | WYW149360    |
| 77  | AUGUSTA UNIT ZETA AUGUSTA | 43-30WA       | NESE       | 30         | 51N        | 76W        | WYW149360    |
| 78  | AUGUSTA UNIT ZETA AUGUSTA | 44-30BG       | SESE       | 30         | 51N        | 76W        | WYW149360    |
| 79  | AUGUSTA UNIT ZETA AUGUSTA | 12-31BG       | SWNW       | 31         | 51N        | 76W        | WYW134235    |
| 80  | AUGUSTA UNIT ZETA AUGUSTA | 12-31WA       | SWNW       | 31         | 51N        | 76W        | WYW134235    |
| 81  | AUGUSTA UNIT ZETA AUGUSTA | 14-31BG       | SWSW       | 31         | 51N        | 76W        | WYW134235    |
| 82  | AUGUSTA UNIT ZETA AUGUSTA | 14-31WA       | SWSW       | 31         | 51N        | 76W        | WYW134235    |
| 83  | AUGUSTA UNIT ZETA AUGUSTA | 21-31BG       | NENW       | 31         | 51N        | 76W        | WYW134235    |
| 84  | AUGUSTA UNIT ZETA AUGUSTA | 21-31WA       | NENW       | 31         | 51N        | 76W        | WYW134235    |
| 85  | AUGUSTA UNIT ZETA AUGUSTA | 23-31BG       | NESW       | 31         | 51N        | 76W        | WYW134235    |
| 86  | AUGUSTA UNIT ZETA AUGUSTA | 23-31WA       | NESW       | 31         | 51N        | 76W        | WYW134235    |
| 87  | AUGUSTA UNIT ZETA AUGUSTA | 32-31BG       | SWNE       | 31         | 51N        | 76W        | WYW134235    |
| 88  | AUGUSTA UNIT ZETA AUGUSTA | 32-31WA       | SWNE       | 31         | 51N        | 76W        | WYW134235    |
| 89  | AUGUSTA UNIT ZETA AUGUSTA | 33-31BG       | NWSE       | 31         | 51N        | 76W        | WYW134235    |
| 90  | AUGUSTA UNIT ZETA AUGUSTA | 33-31WA       | NWSE       | 31         | 51N        | 76W        | WYW134235    |
| 91  | AUGUSTA UNIT ZETA AUGUSTA | 41-31BG       | NENE       | 31         | 51N        | 76W        | WYW134235    |
| 92  | AUGUSTA UNIT ZETA AUGUSTA | 41-31WA       | NENE       | 31         | 51N        | 76W        | WYW134235    |
| 93  | AUGUSTA UNIT ZETA AUGUSTA | 43-31BG       | NESE       | 31         | 51N        | 76W        | WYW134235    |
| 94  | AUGUSTA UNIT ZETA AUGUSTA | 43-31WA       | NESE       | 31         | 51N        | 76W        | WYW134235    |
| 95  | AUGUSTA UNIT ZETA AUGUSTA | 12-32BG       | SWNW       | 32         | 51N        | 76W        | WYW139108    |
| 96  | AUGUSTA UNIT ZETA AUGUSTA | 12-32WA       | SWNW       | 32         | 51N        | 76W        | WYW139108    |
| 97  | AUGUSTA UNIT ZETA AUGUSTA | 14-32BG       | SWSW       | 32         | 51N        | 76W        | WYW139108    |
| 98  | AUGUSTA UNIT ZETA AUGUSTA | 14-32WA       | SWSW       | 32         | 51N        | 76W        | WYW139108    |
| 99  | AUGUSTA UNIT ZETA AUGUSTA | 21-32BG       | NENW       | 32         | 51N        | 76W        | WYW139108    |
| 100 | AUGUSTA UNIT ZETA AUGUSTA | 21-32WA       | NENW       | 32         | 51N        | 76W        | WYW139108    |
| 101 | AUGUSTA UNIT ZETA AUGUSTA | 23-32BG       | NESW       | 32         | 51N        | 76W        | WYW139108    |
| 102 | AUGUSTA UNIT ZETA AUGUSTA | 23-32WA       | NESW       | 32         | 51N        | 76W        | WYW139108    |
| 103 | AUGUSTA UNIT ZETA AUGUSTA | 31-32BG       | NWNE       | 32         | 51N        | 76W        | WYW139108    |
| 104 | AUGUSTA UNIT ZETA AUGUSTA | 31-32WA       | NWNE       | 32         | 51N        | 76W        | WYW139108    |
| 105 | AUGUSTA UNIT ZETA AUGUSTA | 32-32BG       | SWNE       | 32         | 51N        | 76W        | WYW139108    |
| 106 | AUGUSTA UNIT ZETA AUGUSTA | 32-32WA       | SWNE       | 32         | 51N        | 76W        | WYW139108    |

|     | <b>Well Name</b>          | <b>Well #</b> | <b>QTR</b> | <b>Sec</b> | <b>TWP</b> | <b>RNG</b> | <b>Lease</b> |
|-----|---------------------------|---------------|------------|------------|------------|------------|--------------|
| 107 | AUGUSTA UNIT ZETA AUGUSTA | 34-32BG       | SWSE       | 32         | 51N        | 76W        | WYW139108    |
| 108 | AUGUSTA UNIT ZETA AUGUSTA | 34-32WA       | SWSE       | 32         | 51N        | 76W        | WYW139108    |
| 109 | AUGUSTA UNIT ZETA AUGUSTA | 44-32BG       | SESE       | 32         | 51N        | 76W        | WYW139108    |
| 110 | AUGUSTA UNIT ZETA AUGUSTA | 44-32WA       | SESE       | 32         | 51N        | 76W        | WYW139108    |
| 111 | AUGUSTA UNIT ZETA AUGUSTA | 13-33BG       | NWSW       | 33         | 51N        | 76W        | WYW86735     |
| 112 | AUGUSTA UNIT ZETA AUGUSTA | 13-33WA       | NWSW       | 33         | 51N        | 76W        | WYW86735     |
| 113 | AUGUSTA UNIT ZETA AUGUSTA | 23-33BG       | NESW       | 33         | 51N        | 76W        | WYW86735     |
| 114 | AUGUSTA UNIT ZETA AUGUSTA | 23-33WA       | NESW       | 33         | 51N        | 76W        | WYW86735     |
| 115 | AUGUSTA UNIT ZETA AUGUSTA | 24-33BG       | SESW       | 33         | 51N        | 76W        | WYW86735     |
| 116 | AUGUSTA UNIT ZETA AUGUSTA | 24-33WA       | SESW       | 33         | 51N        | 76W        | WYW86735     |
| 117 | AUGUSTA UNIT ZETA AUGUSTA | 44-33BG       | SESE       | 33         | 51N        | 76W        | WYW86735     |
| 118 | AUGUSTA UNIT ZETA AUGUSTA | 44-33WA       | SESE       | 33         | 51N        | 76W        | WYW86735     |
| 119 | AUGUSTA UNIT ZETA AUGUSTA | 12-34BG       | SWNW       | 34         | 51N        | 76W        | WYW86735     |
| 120 | AUGUSTA UNIT ZETA AUGUSTA | 12-34WA       | SWNW       | 34         | 51N        | 76W        | WYW86735     |
| 121 | AUGUSTA UNIT ZETA AUGUSTA | 14-34BG       | SWSW       | 34         | 51N        | 76W        | WYW139109    |
| 122 | AUGUSTA UNIT ZETA AUGUSTA | 14-34WA       | SWSW       | 34         | 51N        | 76W        | WYW139109    |
| 123 | AUGUSTA UNIT ZETA AUGUSTA | 22-34BG       | SENW       | 34         | 51N        | 76W        | WYW90975     |
| 124 | AUGUSTA UNIT ZETA AUGUSTA | 22-34WA       | SENW       | 34         | 51N        | 76W        | WYW90975     |
| 125 | AUGUSTA UNIT ZETA AUGUSTA | 23-34BG       | NESW       | 34         | 51N        | 76W        | WYW139109    |
| 126 | AUGUSTA UNIT ZETA AUGUSTA | 23-34WA       | NESW       | 34         | 51N        | 76W        | WYW139109    |
| 127 | AUGUSTA UNIT ZETA AUGUSTA | 32-34BG       | SWNE       | 34         | 51N        | 76W        | WYW90975     |
| 128 | AUGUSTA UNIT ZETA AUGUSTA | 32-34WA       | SWNE       | 34         | 51N        | 76W        | WYW90975     |
| 129 | AUGUSTA UNIT ZETA AUGUSTA | 34-34BG       | SWSE       | 34         | 51N        | 76W        | WYW139109    |
| 130 | AUGUSTA UNIT ZETA AUGUSTA | 34-34WA       | SWSE       | 34         | 51N        | 76W        | WYW139109    |
| 131 | AUGUSTA UNIT ZETA AUGUSTA | 41-34BG       | NENE       | 34         | 51N        | 76W        | WYW90975     |
| 132 | AUGUSTA UNIT ZETA AUGUSTA | 41-34WA       | NENE       | 34         | 51N        | 76W        | WYW90975     |
| 133 | AUGUSTA UNIT ZETA AUGUSTA | 42-34BG       | SENE       | 34         | 51N        | 76W        | WYW90975     |
| 134 | AUGUSTA UNIT ZETA AUGUSTA | 42-34WA       | SENE       | 34         | 51N        | 76W        | WYW90975     |

This approval is subject to adherence with all of the operating plans and mitigating measures contained in the master surface use plan of operations, drilling plan, water management plan, and information in individual APDs. This approval is also subject to operator compliance with all mitigation and monitoring requirements contained within the Powder River Oil and Gas Project Final Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS) approved April 30, 2003. The proposed water line that will transport water off location was inspected and approved for use in EA WY-070-08-013.

#### Rights of Ways

Two rights of way are associated with this project and were analyzed in the EA. They will be issued concurrently with these APDs. The following Right-of-Way applications are associated with this project.

| <b>Amend Grant</b> | <b>ROW Action</b>      | <b>SEC.</b> | <b>T.</b> | <b>R.</b> | <b>Length</b> | <b>Width</b> |
|--------------------|------------------------|-------------|-----------|-----------|---------------|--------------|
| WYW-161617         | Road, Water & Electric | 6,15,22,32  | 50/51     | 76        | 3290-add      | 45',30', 20' |

| <b>Amend Grant</b> | <b>ROW Action</b> | <b>SEC.</b> | <b>T.</b> | <b>R.</b> | <b>Length</b> | <b>Width</b> |
|--------------------|-------------------|-------------|-----------|-----------|---------------|--------------|
| WYW-163668         | Gas               | 6,15,22,32  | 50/51     | 76        | 3290-add      | 30'          |

Water Management Plan

1. Reverse Osmosis and/or Rohm Haas water treatment technologies are not authorized at the Barber Creek West water treatment facility prior to the operator submitting Sundry Notice 3160-5 and approval for the appropriate water treatment technology. The Sundry will include a revised site facility diagram that ensures compliance with Onshore Orders #7.
2. No discharge of CBNG produced water from federal wells is authorized at outfalls 012, 013 or 014 (WY0056081) until the operator has submitted an “as-built” site facility diagram of the Camp John & Augusta EMITS and water pump station as per Onshore Order #7.
3. No surface disturbance is authorized at the **14-32-5176 well location** prior to Lance Oil & Gas submitting to BLM an amendment to the water management plan reporting flow measurement and water quality analysis at the Christmas Spring #1 located SWSW Section 32, T51N/R76W.

Surface Use Plan

The engineered Road Section 21 Alternate within the Augusta Unit Zeta POD Road Designs package is not authorized and therefore, will not be constructed.

No surface disturbance is allowed at the 14-32-5176 well location prior to Lance Oil & Gas completing survey for Ute ladies-tresses orchid at the Christmas Spring #1 located SWSW Section 32, T51N/R76W.

- a. If the survey confirms that suitable Ute ladies’- tresses orchid habitat is present, Lance Oil & Gas will submit a mitigation plan to ensure the habitat is *not likely to be adversely affected* prior to drilling and construction of the 14-32-5176 wells.
- b. If the survey confirms that Ute ladies’- tresses orchid is present, drilling and construction of the 14-32-5176 wells is not authorized.

**RESPONSE TO COMMENTS**

- *Proposed condition of approval that limits site visits to one visit per month is unduly burdensome and unfeasible.*

Industry provided the following information to support their claim. “From an operational and safety standpoint, multiple visits per month are required to identify needed repairs. Make plans for addressing any problems, and then perform any required repairs or maintenance. Not all problems can be detected by remote sensing equipment, e.g. pipeline/flowline leaks (both gas and water) along with electrical problems, or hazards that could ultimately result in fire or injury. Only by site visits will the operator be able to ensure that its equipment is in working order and no leaks or other problems have developed on the POD. Identifying problems early is critical in avoiding larger safety and environmental hazards, and wildlife issues. Further, if the operator does identify a problem, it is not likely that the necessary repair can be accomplished during the same visit. Multiple visits may be required to address the issue.”

BFO has coordinated with other operators to reduce routine site visits by limiting site visits during the first two months of operation to once a week.

To address this concern, multiple visits will be allowed monthly, 3 per week for the first six months, after the wells are completed. The company will be required to record frequency of site visits along

with repairs made and problems identified resulting from the visits. The company will submit these reports to BLM at the end of every month. The BLM will use this data to determine the necessary frequency of site visits.

- *Requirement for monthly work reports and reporting of elk observations are overly burdensome to the operator.*

On July 6, 2009, Lance Oil and Gas Company Inc. met with BLM at the Buffalo Field Office and presented a conceptual work plan for the Augusta Unit Zeta Plan broken down into 4 geographic areas within the project area with definitive time lines for the mobilization and completion of work. Although Lance did not submit this plan to the BLM, it appears that the operator has voluntarily developed a plan that would facilitate monthly work reports.

In order to monitor the effects to the Fortification elk herd, the operator's monthly work reports in conjunction with Wyoming Game and Fish Department and BLM monitoring of the collared elk, will enable elk responses to be evaluated for possible adaptive management. The monthly work reports, as well as documenting elk observations, will assist BLM in directing further design of elk monitoring.

The Powder River Basin Oil and Gas Project Final Environmental Impact Statement (PRB-FEIS) Record of Decision (BLM 2003) included a Mitigation Monitoring and Reporting Plan (MMRP). The MMRP purpose and need section states "Because development may not occur exactly as portrayed in the FEIS, it will be important to monitor effects as development progresses over time. It will also be important to assess the effectiveness of the mitigation measures adopted."

- *Impacts described in the EA to sage grouse and elk would cause unnecessary and undue degradation. BLM is not using the full range of mitigation that it could to reduce unnecessary and undue degradation.*

BLM actions during project development and COA application incorporated sufficient mitigation to result in a FONSI and therefore prevent unnecessary and undue degradation.

Potential effects to sage-grouse identified from the implementation of this action were disclosed in the 2003 PRB-FEIS. The PRB-FEIS stated that, "significance threshold and population viability assumptions are based on the analysis that sufficient functioning habitat for sage grouse will remain to support population viability within the project area."

In May 2008, the BFO proposed greater sage-grouse interim management areas to preserve decision space during the Resource Management Plan revision process. The IMAs were based on lek locations, habitat suitability, and existing development; the IMAs included all remaining undeveloped sage-grouse habitat. The IMAs were refined in cooperation with the WGFD, governor's office, and public review. On August 13, 2008, BFO released "Guidance for general management actions during BFO Resource Management Plan Revision" and a map identifying "focus areas". The objective of the focus areas is to maintain greater sage-grouse population viability within the BFO.

BLM's assumption of focus area adequacy is based on a number of factors, including:

1. Site-specific mitigation implemented outside of focus areas will enhance the potential for population persistence through the "life of the project in the PRB."

2. Focus areas added seasonal habitats and interstate connectivity (Montana) to the state's core population areas significantly enlarging protected areas from 400,000 acres to one million acres.) The state's core population areas are based on lek density, designed to protect 65% or more of the sage-grouse population and their nesting habitat.

A number of mitigation measures were included for elk resulting in the ability to reach a FONSI. Examples of elk mitigation included are as follows:

1. Proposed infrastructure was moved to avoid elk habitat,
2. Limitations on well visitation,
3. Parturition and crucial winter range timing limitations, and
4. A requirement to monitor elk activity and report work plans to facilitate adaptive management.

Because it is estimated a viable population and functioning habitat will be maintained within the scope identified in the PRB-FEIS and that no significant effects will occur to elk or their habitats as a result of the approval of this action, there is no unnecessary or undue degradation occurring regarding these species.

- *BLM should not disassociate impacts to elk in the AUZ POD from the existing and pending impacts in the Fortification Creek Planning Area (FCPA). Phased development should be considered as in the FCPA amendment.*

Phased development was an alternative considered but eliminated from detailed analysis in the PRB EIS from which this EA is tiered. The PRB FEIS was legally challenged and upheld on this issue

BLM recognizes that the effects to the Fortification elk herd due to CBNG development within the identified elk ranges will be similar whether inside or outside the Fortification Creek Planning Area. Impacts to the whole Fortification Creek elk herd and their entire yearlong range are analyzed cumulatively, not separately within the FCPA and outside.

The FCPA was delineated in the 1975 framework plan and acknowledged in later documents including the 1980 Fortification Oil & Gas Surface Protection Plan and the 1985 Resource Management Plan. These plans all contained management decisions specific to the FCPA and not the larger elk yearlong range. Several of the previous management decisions are being re-evaluated in the RMP amendment and therefore it was decided to limit the RMP amendment to the planning area.

Wyoming Game & Fish Department has verbally commented to the BLM that the security habitat thresholds proposed in the RMP amendment should not necessarily apply to the entire yearlong range. Population viability of the Fortification Creek elk herd will not be threatened by the projected impacts of the Augusta Unit Zeta POD.

- *Cumulative impacts for elk don't address all wells already drilled and those foreseeable.*

The potential impacts to the Fortification elk herd and their habitats due to the past and foreseeable CBNG development are displayed in the "Environmental Report: Coalbed Natural Gas Effects on the Fortification Creek Area Elk Herd" (BLM 2007).

See page 47 and 56 of the EA for the foreseeable development within the Augusta Unit.

To further mitigate the impacts of energy development on wildlife BLM is collecting information on direct and indirect disturbances associated with energy development. This data will assist in more effective project planning and mitigation. In June 2009, the BLM in conjunction with the University

of Wyoming and WGFDD initiated a study to identify the levels of direct and indirect disturbances from fee, state and federal development that influence elk habitat selection. The University will document their findings in quarterly reports. The University reports along with the operator's monthly work reports and the monitoring of radio collared elk, will facilitate adaptive management to further minimize direct and indirect impacts will facilitate adaptive management to further minimize direct and indirect impacts.

- *No justification for need of these wells.*

Justification for the CBNG development is clearly illustrated in the Purpose and Need within the 2003 PRB-FEIS as well as within the Augusta Unit Zeta- EA (page 14).

The economic feasibility of developing the fluid minerals from the lease(s) is the decision of the operator. A prudent operator would not purposely drill uneconomic wells.

- *Don't address connectivity and what this action will likely do between the elk in the south and those in the north of the yearlong range.*

Trends observed of movement patterns of the Fortification elk herd differ for those elk captured north of Fortification Creek versus those elk capture south of Fortification Creek. Typically, those elk captured in the northern portion of the elk Yearlong range stay north of Fortification Creek where as the elk captured in the southern portion of the Yearlong range tend to roam more between the north and south halves of the Yearlong range. Nine (50%) of the 18 elk collared south of Fortification Creek spent considerable time north of Fortification Creek (April 1, 2008 - July 17, 2009), with 37% of the locations from these 'southern' elk being north of Fortification Creek. Of 37 elk collared north of Fortification Creek only three (8%) spent much time south of Fortification Creek; only 4% of the locations from the 'northern' elk were south of Fortification Creek.

Effective elk habitat along the southern boundary of the FCPA provides connectivity for these elk between the north and south halves of the elk Yearlong range. The Augusta Unit Zeta project area lies at the southern boundary of the FCPA. Nonfederal CBNG development was initiated within the Augusta Unit in May of 2008. Elk use during the development period was approximately 25 percent of their predevelopment use. Following development elk used the Augusta Unit 50 to 75% less than before Lance's activities. This is consistent with published literature which reports approximately 50% of the elk return to the development area (Sawyer 2005, Powell 2003). Though connectivity of the effective habitat within the Augusta Unit Zeta POD it is likely to be further compromised, connectivity is not predicted to be eliminated. (AUZ-EA, page 56)

- *Contradiction BLM makes between “With application of mitigation measures in Alt. C, Sage-Grouse population viability in the Project Area, will not be compromised” versus, “action will most likely contribute towards extirpation of the local grouse population and abandonment of leks.”*

The “Project Area” referenced above is a quote from the PRB-FEIS. That project area encompasses the PRB EIS scope, i.e. the entire Power River geologic basin, not the AUZ project area.

- *Need to consider global warming.*

The BLM Instruction Memorandum No. 2008-171 (<http://web.blm.gov/internal/wo-500/directives/dir-08/im2008-171.html>) addresses how the BLM should address Global Warming and climate change primarily in the planning process. This will be incorporated in the BFO plan revision. Whatever the incremental contributions to global green house gas emissions from potential development of this parcel, they cannot be translated into incremental effects on the global climate system or the environment in the project area.

- *Current actual air quality conditions not in the EA.*

The potential effects to air quality identified from the implementation of this action were fully disclosed in the 2003 PRB-FEIS. In conversations with EPA officials, they indicated that air quality modeling done for the PRB-F EIS did not include modeling for ozone which is now required and that no modeling was conducted for this project. The BLM is currently in the process of updating air models for the PRB associated with the coal program which will include ozone relative to cumulative impacts. The EPA acknowledged in their letter that ozone increase impact from this project is anticipated to be minimal.

- *Failed to address direct impact to aquatic life.*

As disclosed beginning on pg. 59 of the Augusta Unit Zeta EA, impacts to aquatic life were analyzed for the primary water management strategy of treatment at the Baber Creek East and West facilities and surface discharge in the Williams Draw Unit Alpha POD Environmental Assessment (WY-070-05-134) and Williams Draw Unit Alpha, Water Management Sundry (CX06-1-022).

The Wyoming Game and Fish Department, in their letter, conveyed that they had no aquatic concerns relative to this project. Therefore, no additional analysis was conducted.

- *Sharp-tailed grouse were not sufficiently analyzed.*

BLM recognized on page 74 of the EA, the project area has the potential to support sharp-tailed grouse during most of the year. The operator's wildlife consultant Big Horn Environmental Consultants, reported observations of sharp-tailed grouse within the greater Augusta Unit area since 2004. No sharp-tailed grouse were observed by BLM during the onsite inspections. The nearest documented lek, Fortification I, is over 5 mile from the project area. (AUZ-EA, page 45)

The AUZ EA concludes that due to the lack of a lek being present impacts to sharp-tailed grouse are anticipated to be minimal. The Wyoming Game and Fish Department did not comment on impacts to sharp-tailed grouse.

Because BLM concluded sharp-tailed grouse effects would be minimal and the WGFD did not disagree, the analysis is appropriate as an EA; an EA should be a concise public document providing sufficient evidence and analysis to determine whether an EIS is necessary (CEQ 40 Questions).

- *Do any leases in the POD have the “acceptable plan” stipulation attached?*

Two leases with the Augusta Unit Zeta POD have the lease stipulations related to the Fortification Planning Area.

- WYW134236 – CSU (1) Surface occupancy or use within the Fortification Creek plan area will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts. (2) as mapped on the Buffalo RMP map; (3) protecting elk crucial winter range.
- WYW149361 - CSU (1) Surface occupancy or use within the Fortification Creek plan area will be restricted or prohibited unless the operator and surface managing agency arrive at an acceptable plan for mitigation of anticipated impacts. This may include development, operations and maintenance of facilities; (2) as mapped on the Fortification Creek plan; (3) protecting wilderness values and wildlife habitat.

The BLM concludes that the lease stipulation has been misapplied. The two leases with the stipulation lie outside the FCPA delineated in the 1975 Framework. The stipulation applies only within the FCPA.

- *What will these elk likely do as a result of the disturbance and how does it relate to significance for the whole especially related to the loss of the security habitat?*

The best available scientific literature relative to isolated prairie residing elk herds in the western United States indicates that typical elk response to Oil & Gas development is initial displacement during intense development with 50% of those individuals displaced returning to the developed area once the wells are in production (Sawyer 2005, Powell 2003). Though not specifically noted, it is assumed that this observation included loss of effectiveness of security habitat. The GPS tracking data collected to date indicates this trend occurring within the Augusta Unit area following nonfederal CBNG development. Loss of effective elk habitat and therefore security habitat in proximity to CBNG development is also predicted in the “Environmental Report: Coalbed Natural Gas Effects on the Fortification Creek Area Elk Herd” (BLM 2007).

- *BLM should provide for maintenance or sustainability of intact leks within these areas.*

Components of alternative C and E incorporate recommendations from the best available science to reduce impacts to sage grouse. These measures will minimize the cumulative effects to leks within four miles of the AUZ project. They include:

- Limiting visitation
- Burying power
- Habitat based timing limitations

- *EA fails to reconcile elevated SAR and how it may potentially impact agriculture.*

Wyoming DEQ established the effluent limits and water quality requirement for the operator’s WYPDES Permit # WY0052809. It is not within the authority of the BLM to impose more rigid water quality standards than those imposed by the State of Wyoming.

- *The addition of the Augusta Unit Zeta wells will cumulatively impact the Class 1 airshed on the*

*Northern Cheyenne reservation.*

The PRB-FEIS concluded for all alternatives that the potential direct project air quality impacts would not violate any local, state, tribal or federal air quality standards. Under all alternatives the cumulative annual NO<sub>2</sub> concentrations and the 24 hour PM 10 were predicted to be above the PSD Class 1 increment within the Northern Cheyenne Reservation. These predictions were made under numerous assumptions e.g. 90% of CBNG wells and 30% of conventional wells were fully operational as well as the wells proposed in the Montana CBNG EIS area. The current development conditions in the PRB are much less than the assumptions that were used for the air quality modeling done for the PRB EIS. The incremental proportions of impacts, associated with this project, are unlikely to exceed the standards for Class I on the Northern Cheyenne Reservation.

## **RATIONALE**

The decision to authorize Alternative C as described in the attached Environmental Assessment (EA), is based on the following:

1. The Operator, in their POD, has committed to:
  - Comply with all applicable Federal, State and Local laws and regulations.
  - Obtain the necessary permits from other agencies for the drilling, completion and production of these wells including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.
  - Offer water well agreements to the owners of record for permitted water wells within ½ mile of a federal CBNG producing well in the POD.
  - Provide water analysis from a designated reference well in each coal zone.
2. The Operator has certified that a Surface Use Agreement has been reached with the Landowner(s).
3. Alternative C will not result in any undue or unnecessary environmental degradation.
4. It is in the public interest to approve this development to help meet the nation's future needs for energy reserves and reduce the U.S. dependence on foreign sources of energy. It also helps to stimulate local economies by maintaining stability for the workforce.
5. Mitigation measures identified under alternative C and applied by the BLM will alleviate or minimize environmental impacts.
6. Elk displacement is anticipated to be temporary, with complete displacement during the drilling and construction phases, followed by 50% of the elk returning during the production phase.
7. The selected alternative was developed with the recognition that many of the project components modified to mitigate elk impacts may also benefit sage-grouse, and that portions of the analyzed alternatives did not correspond to the desires of the surface owner in the project area. Mitigating measures were selected from the range of alternatives were selected in this context to best meet the purpose and need.
8. The selected alternative incorporates appropriate local sage-grouse research and the best available science from across the species' range in development of conditions of approval attached.

Mitigating measures applied by the BLM will lessen environmental impacts to sage-grouse.

- a. Surface-disturbing activities will be restricted during sage-grouse breeding and nesting periods (March 1 to June 15). This condition will be implemented on an annual basis for the life of the project. See Appendix 1 for areas where the timing limit applies.
- b. Well metering, maintenance and other site visits will be restricted to 3 per week for the first six months, after the wells are completed. The company will be required to report frequency

of site visits along with repairs made and problems identified resulting from the visits. The company will submit these reports to BLM at the end of every month. The BLM will use this data to determine the necessary frequency of site visits.

Mitigating measures applied by the BLM will lessen environmental impacts to elk:

- c. Surface disturbing activities will be restricted within identified elk critical winter range November 15 to April 30 and elk parturition range May 1 to June 30 for the life of the project.
  - d. The operator will be required to submit a monthly work report that in conjunction with monitoring the collared elk will enable elk responses to be evaluated for possible adaptive management alternatives development.
9. Approval of this alternative is in conformance with the PRB-FEIS, and the Approved Resource Management Plan for the Public Lands Administered by the Bureau of Land Management, Buffalo Field Office, April 2001 (refer to Appendix E of that document relative to adaptive management).
  10. The selected alternative incorporates components of the Wyoming Governor's Sage Grouse Implementation Team's "core population area" strategy and executive order and local research to provide appropriate protections for sage-grouse, while meeting the purpose and need for the AUZ project (WYGF, 2009).

## **FINDING OF NO SIGNIFICANT IMPACT**

Based on the analysis of the potential environmental impacts, I have determined that NO significant impacts are expected from the implementation of the selected alternative and, therefore, an environmental impact statement is not required.

In conformance with Appendix E, *Record of Decision, Powder River Oil and Gas Project Environmental Impact Statement and Resource Management Plan Amendment* BLM Buffalo Field Office has initiated actions within the PRB FEIS analysis area in response to additional information regarding impacts to sage-grouse. These measures include:

1. Early initiation of a Resource Management Plan (RMP) revision, based on the evaluation of monitoring data generated under the mitigation monitoring and reporting plan (MMRP) in the PRB-FEIS Record of Decision
2. Establishment of sage-grouse "focus" areas, encompassing approximately 1 million acres of sage-grouse habitat. These areas are managed under strict guidelines designed to preserve sage-grouse habitat for development of alternatives during the RMP process (Appendix 1).
3. Initiation of a population viability analysis in the Powder River Basin. This is a 24-month project involving the USGS, BLM Miles City Field Office, BLM Buffalo Field Office, and the University of Montana.
4. Development of alternatives that modify the proposed action to reflect the best available science in sage-grouse management.

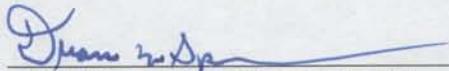
5. Development of conditions of approval, specific to sage-grouse management, that incorporate some recommendations from recent research, the NE Local Sage-grouse Working Group, and the Petroleum Association of Wyoming.

Wyoming Game & Fish Department has verbally commented to the BLM that the security habitat threshold proposed in the RMP amendment should not necessarily apply to the entire yearlong range. Population viability of the Fortification Creek elk herd will not be threatened by the projected impacts of the Augusta Unit Zeta POD.

The implementation of the selected alternative best meets the stated purpose and need for the proposed action. With the application of mitigating measures selected from alternatives C, sage-grouse population viability in the Powder River Basin will not be compromised.

**ADMINISTRATIVE REVIEW AND APPEAL:** Under BLM regulations, this decision is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this decision must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, P.O. Box 1828, Cheyenne, Wyoming 82003, no later than 20 business days after this Decision Record is received or considered to have been received.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

  
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Field Manager, Buffalo Field Office

7/22/2009  
\_\_\_\_\_  
Date