

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION COMMISSION**

**IN THE MATTER OF THE HEARING CALLED BY THE OIL  
CONSERVATION COMMISSION FOR THE PURPOSE OF  
CONSIDERING:**

**DE NOVO  
CASE NO. 13368**

**APPLICATION OF DEVON ENERGY  
PRODUCTION COMPANY, L.P. FOR AN  
ORDER AUTHORIZING THE DRILLING OF  
A WELL IN THE POTASH AREA, EDDY  
COUNTY, NEW MEXICO.**

**DE NOVO  
CASE NO. 13372**

**APPLICATION OF DEVON ENERGY  
PRODUCTION COMPANY, L.P. FOR AN  
UNORTHODOX WELL LOCATION AND  
AUTHORIZATION TO DRILL A WELL IN  
THE POTASH AREA, EDDY COUNTY, NEW  
MEXICO.**

**ORDER NO. R-12403-A**

**ORDER OF THE OIL CONSERVATION COMMISSION**

**BY THE COMMISSION:**

THIS MATTER, having come before the Oil Conservation Commission ("the Commission") on June 5, 2006 at Santa Fe, New Mexico, on the application of Devon Energy Production Company, L.P. ("Devon") for an order authorizing the drilling of two wells in the potash area, Eddy County, New Mexico, and the Commission, having carefully considered the evidence, the pleadings and other materials the parties submitted, now, on this 13th day of July, 2006,

**FINDS:**

1. Notice has been given of the application and the hearing on this matter, and the Commission has jurisdiction of the parties and the subject matter.
2. The New Mexico Oil and Gas Act, NMSA 1978, Section 70-2-12(B)(17) authorizes the Division "to regulate and, where necessary, prohibit drilling or producing

operations for oil and gas within any area containing commercial deposits of potash where the operations would have the effect unduly to reduce the total quantity of the commercial deposits of potash which may reasonably be recovered in commercial quantities or where the operations would interfere unduly with the orderly commercial development of the potash deposits".

3. This matter concerns: a) Devon's application for an order authorizing the drilling of the proposed Apache 24 Fee Well No. 6 at a location 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 24, Township 22 South, Range 30 East, NMPM; and b) Devon's application for an order authorizing the drilling of the proposed Apache 24 Fee Well No. 7-A at a location 1460 feet from the North line and 1150 feet from the West line (Unit E) of Section 24, Township 22 South, Range 30 East, NMPM. Both locations are in the potash area of Eddy County.

4. The potash area is the area where potash-mining operations are in progress or in which core tests indicate commercial potash reserves. The area is co-terminus with the Known Potash Leasing Area as determined by the United States Department of the Interior, Bureau of Land Management ("BLM").

5. Commission Order R-111-P provides that potash lessees shall file each year with the BLM and the New Mexico State Land Office a designation of the potash deposits the potash lessee considers to be its life-of-mine reserves.

6. Life-of-mine reserves are those potash deposits on state or federal lands that the potash lessee reasonably believes to contain potash ore in sufficient thickness and grade to be mineable using current mining methods, technology and equipment.

7. Order R-111-P's effect is to permit the drilling of oil and gas wells in lower grade marginal or uneconomic potash ore deposits in the potash area while preventing the waste of potash and more fully protecting the higher-grade ore deposits.

8. The SW/4 NW/4, Section 24, Township 22 South, Range 30 East, NMPM, where the Apache Fee Wells No. 6 and No. 7-A are proposed to be located, is within an area designated as measured potash ore (the higher grade ore deposits) and less than one-half mile from life-of-mine reserves Mosaic Potash (Mosaic) has designated pursuant to Order R-111-P.

9. Methane releases from oil and gas wells into potash mine workings can endanger the lives of potash miners and make further mining activities cost prohibitive because of the more expensive safety requirements that the United States Department of Labor, Mine Safety and Health Administration ("MSHA") imposes on mines that contain gas.

10. As a result of the danger of methane releases, Order R-111-P provides that oil and gas wells shall not be drilled within "buffer zones" defined as within one-quarter

mile of the life-of-mine reserves for shallow wells and within one-half mile of the life-of-mine reserves for deep wells.

11. Order R-111-P defines deep wells as wells in those formations below the base of the Delaware Mountain Group or those below a depth of 5,000 feet, whichever is less.

12. Drilling for oil and gas after potash mining has occurred is difficult if not impossible because of the caverns created during the potash ore's extraction.

13. As such the development of either oil or gas or potash has the potential to make the development of the other much more difficult.

14. Devon is the lessee of the oil and gas mineral rights under the SW/4 NW/4 of Section 24, Township 22 North, Range 30 East, NMPM in Eddy County, New Mexico. The SW/4 NW/4, Section 24, Township 22 North, Range 30 East, NMPM is in fee ownership for both the surface and minerals.

15. On December 13, 2003, Devon filed an Application for Permit to Drill ("APD") with the Oil Conservation Division's ("Division's") Artesia district office for the proposed Apache 24 Fee Well No. 6.

16. The proposed Apache 24 Fee Well No. 6 would be drilled to an approximate depth of 7,900 feet to test all formations from the surface to the base of the Delaware formation, Southeast Quahada Ridge-Delaware Pool and would be at a standard location in all formations.

17. Pursuant to Division Rule 104.B(1), the SW/4 NW/4 of Section 24, Township 22 South, Range 30 East, NMPM would be dedicated to the proposed Apache 24 Fee Well No. 6 to form a standard 40-acre oil spacing and proration unit for the Undesignated Southeast Quahada Ridge-Delaware pool.

18. On January 23, 2004, Devon provided notice to all potash lessees within one mile of the proposed well location.

19. Mosaic holds federal potash leases covering all of the adjoining Section 23 and the SW/4, Section 24, Township 22 South, Range 30 East, NMPM.

20. Currently, there is no potash lease with the fee mineral owners underlying the 40 acres comprising the SW/4 NW/4 of Section 24, Township 22 South, Range 30 East, NMPM.

21. Mosaic's current MSHA classification for its type of mine is a Category 4 gassy mine.

22. This means that Mosaic has not had methane gas in its mine in a concentration capable of sustaining combustion and does not have to maintain its belt lines separate from its ventilation system.

23. If an oil and gas well caused methane gas to be introduced into Mosaic's potash mine and increased methane to a concentration capable of sustaining combustion Mosaic would have to change technology, which is estimated to cost \$200 million.

24. On February 19, 2004, the Division's Artesia district office approved Devon's APD for the proposed Apache 24 Fee Well No. 6.

25. On April 12, 2004, IMC (now Mosaic) wrote the Division's Artesia district office and objected to the proposed well because its location falls in an area designated as measured ore.

26. On September 16, 2004, Devon filed an APD for the proposed Apache 24 Fee Well No. 7-A with the Division's Artesia district office.

27. The proposed Apache 24 Fee Well No. 7-A would be drilled to an approximate depth of 15,500 feet at a standard deep Devonian gas well location.

28. Pursuant to Division Rule 104.C(2) the N/2 of Section 24, Township 22 South, Range 30 East, NMPM would be dedicated to this well to form a standard 320-acre lay-down gas spacing unit for deep wildcat Devonian gas production.

29. Devon provided notice to all potash lessees within one mile of proposed Apache 24 Fee Well No. 7-A.

30. On August 30, 2004, Mosaic objected to the drilling of the proposed Apache 24 Fee Well No. 7-A.

31. On September 20, 2004, the Division's Artesia district office rescinded Devon's APD for the Apache 24 Fee Well No. 6 and rejected Devon's APD for the Apache 24 Fee Well No. 7-A.

32. On October 12, 2004, Devon applied to the Division for an order approving the drilling of the proposed Apache 24 Fee Wells No. 6 and No. 7-A.

33. On December 2, 2004, a Division examiner conducted a hearing on Devon's applications.

34. On August 8, 2005, the Division issued an order granting Devon authority to drill the proposed Apache 24 Fee Wells No. 6 and No. 7-A.

35. On September 7, 2005, Mosaic applied for a hearing de novo before the Commission asking that the Commission deny Devon's APD for the proposed Apache 24 Fee Wells No. 6 and No. 7-A.

36. The BLM has created a "drilling island" along the eastern edge of Section 24, Township 22 South, Range 30 East, NMPM that allows wells to be directionally drilled to bottomhole locations under the section.

37. There are numerous horizontal wells that have been drilled from surface locations on the drilling island to bottomhole locations within Section 24 and adjacent sections including four horizontal wells that were drilled from the drilling island in Section 24 to bottomhole locations at distances from three-quarters of a mile to a mile.

38. Devon's witness, James Blount, testified that Devon already has a horizontal well, the Apache 24 Fee Well No. 10 that accesses the Delaware formation east of the SW/4 NW/4, Section 24, Township 22 South, Range 30 East, NMPM. Devon could have drilled this well to access the SW/4 NW/4, Section 24, Township 22 South, Range 30 East, NMPM had it chosen to do so.

39. Devon has not explored unitizing the 40 acres comprising the SW/4 NW/4, Section 24, Township 22 South, Range 30 East, NMPM.

40. The proposed location at the potash depths of the Apache 24 Fee Wells No. 6 and 7-A are within one-quarter mile of Mosaic's life-of-mine reserves on federal lands on file with the BLM and the New Mexico State Land Office.

41. The total depths for the Apache 24 Fee Wells No. 6 and No. 7-A are for depths below 5,000 feet and are, therefore, deep wells and must be more than one-half mile from Mosaic's life-of-mine reserves.

42. Within one-half mile of the location of the proposed location of the Apache 24 Fee Well No. 7-A, the 10<sup>th</sup> potash ore zone at just under five foot of height contains 11 percent sylvite.

43. Mosaic's witness testified that allowing the proposed Apache 24 Fee Wells No. 7-A and No. 6 would waste \$56 million in potash. Mosaic based its waste calculation on the assumption that the location of the proposed Apache 24 Fee Well No. 7-A would subsume the location of the proposed Apache 24 Fee Well No. 6.

44. Twenty-three million dollars of the potash wasted would be on leases that Mosaic currently holds.

45. Given that the proposed Apache 24 Fee Wells No. 6 and No. 7-A are located in measured potash ore and would prevent the mining of \$56 million worth of commercial potash, Apache 24 Fee Wells No. 6 and No. 7-A would "waste" commercial deposits of potash as defined in NMSA 1978, Section 70-2-3.

46. In addition, the proposed Apache 24 Fee Well No. 6 is at a location 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 24, Township 22 South, Range 30 East, NMPM, and the proposed Apache 24 Fee Well No. 7-A is at a location 1460 feet from the North line and 1150 feet from the West line (Unit E) of Section 24, Township 22 South, Range 30 East, NMPM. Both locations are less than one-half mile from Mosaic's life-of-mine-reserves. While the proposed locations are on fee land, where life-of-mine reserves are not designated, the location is still within one-half mile of Mosaic's life-of-mine reserves located on federal lands. Therefore, Order R-111-P prohibits approval of Devon's APDs.

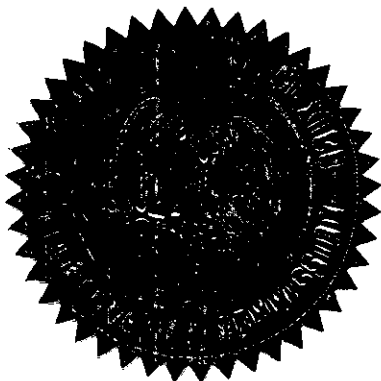
47. Devon has alternative methods to develop the fee oil and gas minerals in the SW/4 NW/4, Section 24, Township 22 South, Range 30 East, NMPM including unitization and directional or horizontal drilling. There are four producing wells that have been horizontally drilled from the "drilling island" and have bottomhole locations under Section 24, Township 22 South, Range 30 East, NMPM, so drilling such wells is technologically feasible. Devon could have drilled the Apache 24 Fee Well No. 10 to access the minerals under the SW/4 NW/4, Section 24, Township 22 South, Range 30 East, NMPM, but chose not to.

**IT IS THEREFORE ORDERED:**

1. That Devon's applications to drill the proposed Apache 24 Fee Well No. 6 and Apache Fee Well No. 7-A at their proposed locations within the potash area, Eddy County, New Mexico are denied.

2. The Commission retains jurisdiction of this matter for entry of such further orders as may be necessary.

**DONE** at Santa Fe, New Mexico, on the day and year hereinabove designated.



**SEAL**

**STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION**

A handwritten signature in cursive script, appearing to read "Jami Bailey".

**JAMI BAILEY, CPG, MEMBER**

A handwritten signature in cursive script, appearing to read "William Olson".

**WILLIAM OLSON, MEMBER**

A handwritten signature in cursive script, appearing to read "Mark E. Fesmire".

**MARK E. FESMIRE, P.E., CHAIR**