## STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

> **CASE NO. 13400** ORDER NO. R-638-F

APPLICATION OF PLATINUM EXPLORATION, INC. TO ABOLISH THE SPECIAL RULES AND REGULATIONS FOR THE SOUTH KNOWLES-DEVONIAN POOL, LEA COUNTY, NEW MEXICO.

### **ORDER OF THE DIVISION**

# **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on January 6 and March 17, 2005, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this  $5^{\text{th}}$  day of April, 2005, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

### **FINDS THAT**:

- Due public notice has been given, and the Division has jurisdiction of this (1) case and its subject matter.
- Division Cases No. 13400 and 13401 were consolidated at the hearing for (2) the purpose of testimony.
- The South Knowles-Devonian Pool (Oil-36480) currently comprises the following-described area in Lea County, New Mexico:

Township 17 South. Range 38 East. NMPM

Sections 12 & 13:

All

Section 24:

N/2, SW/4

Township 17 South, Range 39 East, NMPM Section 7: All

Section 7: Section 18:

Section 19:

All NW/4

(4) The South Knowles-Devonian Pool is currently governed by special pool rules established by Division Order No. R-638-B, as amended, dated September 15, 1955. These pool rules require that:

- (a) wells be located on a standard unit containing 80 acres, more or less, comprising the N/2, S/2, W/2 or E/2 of a standard governmental quarter section; and
- (b) wells may be located on either quarter-quarter section within the proration unit provided that the well shall be located within 150 feet of the center of the quarter-quarter section on which the well is located.
- (5) The applicant, Platinum Exploration, Inc. ("Platinum" or "applicant"), seeks an order abolishing the special pool rules for the South Knowles-Devonian Pool, and instituting statewide 40-acre oil spacing and statewide well location requirements (19.15.3.104.B(1) NMAC) within this pool.
- (6) The Warren K. Williams Foundation entered an appearance in this case through legal counsel, but presented no evidence.
- (7) The South Knowles-Devonian Pool was discovered in 1954. Initially, the pool was developed on 80-acre spacing with one well per 80 acres. During the 1970's, infill wells were drilled on many of the 80-acre units within the pool.
- (8) Platinum testified that the infill well drilling program within the South Knowles-Devonian Pool was successful. Ultimately, these infill wells recovered as much as 80% of the ultimate recovery of the parent well on the spacing unit.

- (9) Platinum presented geologic evidence that demonstrates that:
  - the productive area within the South Knowles-Devonian Pool appears to be limited to the S/2 of Section 12, all of Section 13 and the N/2 of Section 24, Township 17 South, Range 38 East, and the SW/4 of Section 7, all of Section 18 and the NW/4 of Section 19, Township 17 South, Range 39 East, NMPM;
  - (b) the South Knowles-Devonian Pool is a water-drive dolomite reservoir that has an oil column approximately 230 feet thick;
  - (c) this reservoir is characterized by numerous faults, and the dolomite section is interspersed with shale lenses that effectively reduce the permeability in the reservoir; and
  - (d) due to the heterogeneity of this dolomite reservoir, there are opportunities to drill additional wells, deepen existing wells, and/or drill horizontal wells to encounter dolomite sections within the reservoir that have not been effectively exploited.
- (10) According to Platinum's evidence and Division records, there are currently nine active wells in the South Knowles-Devonian Pool. Of the nine wells, Platinum currently operates eight wells, and **Avra** Oil Company operates one well, the Amerada Hardin Well No. 1 (API No. 30-025-07312) located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 24, Township 17 South, Range 38 East, NMPM.
- (11) Of the eight wells that Platinum operates, six wells are either existing or planned horizontal wells, and two are vertical wells.
- (12) Platinum owns or controls approximately 46% of the acreage in the South Knowles-Devonian Pool.

- (13) The applicant presented engineering evidence that demonstrates that:
  - (a) based upon its research of existing Devonian pools in Lea County, New Mexico, it has determined that the typical oil recovery for pools of this type is approximately 100 barrels per acre-foot;
  - (b) the cumulative oil recovery from the South Knowles-Devonian Pool is approximately 9.997 million barrels of oil, or 34 barrels per acre-foot;
  - (c) the estimated minimum remaining oil reserves within the South Knowles-Devonian Pool are approximately 19.161 million barrels of oil; and
  - (d) through additional drilling and development, Platinum estimates that a field-wide recovery of 68 barrels per acre-foot can be achieved within the South Knowles-Devonian Pool. This would result in the recovery of an additional 10 million barrels of oil.
- (14) The horizontal wells that Platinum has drilled thus far within the pool typically produce at an initial rate of approximately 130-160 barrels of oil and 2,400 barrels of water per day.
- (15) The geologic and engineering evidence presented by Platinum demonstrates that a well within the South Knowles-Devonian Pool will not drain an area of 80 acres.
- (16) Platinum testified that even if the well spacing in the South Knowles-Devonian Pool is changed to 40 acres, at least 80 acres will be dedicated to each of its horizontal wells pursuant to the "project area" provisions of Division Rule No. 19.15.3.111 NMAC.

- (17) Platinum further testified that reducing the spacing from 80 acres to 40 acres within the South Knowles-Devonian Pool will not adversely affect any interest owner in any well it operates.
- (18) Platinum further testified that the Avra Oil Company Amerada Hardin Well No. 1 is located on a single lease comprising 80 acres, and that reducing the spacing within the South Knowles-Devonian Pool will not adversely affect any interest owner in that particular well.
- (19) The applicant provided notice of its application to all operators of Devonian wells in the South Knowles-Devonian Pool, and to all operators of Devonian wells within one-mile of the South Knowles-Devonian Pool. These operators are Avra Oil Company, Triumph Exploration and Fagadau Energy.
- (20) In accordance with a directive by Division counsel, Platinum also provided notice of its application to all interest owners in existing spacing units within the South Knowles-Devonian Pool.
- (21) No operator or interest owner appeared at the hearing in opposition to the application.
- (22) Approval of the subject application will provide Platinum greater flexibility to locate and drill additional wells within the South Knowles-Devonian Pool, will increase the recovery of oil, thereby preventing waste, and will not violate correlative rights.

### IT IS THEREFORE ORDERED THAT;

- (1) Pursuant to the application of Platinum Exploration, Inc., the special pool rules for the South Knowles-Devonian Pool, Lea County, New Mexico, established by Division Order No. R-638-B, as amended, are hereby abolished.
- (2) The South Knowles-Devonian Pool shall be governed by the provisions of Division Rule No. 19.15.3.104.B(1)NMAC.

- (3) Within 30-days from the entry of this order, all operators of wells within the South Knowles-Devonian Pool shall file a new Form C-102 (Acreage Dedication Plat) with the Hobbs District Office of the Division to reflect the change in acreage dedication for each well that they operate.
- (4) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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

SEAL

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.

Director