# 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:

> NOMENCLATURE CASE NO. 12776 ORDER NO. R-11723

APPLICATION OF OXY USA WTP LIMITED PARTNERSHIP FOR POOL CREATION, THE PROMULGATION OF SPECIAL POOL RULES, AND A DISCOVERY ALLOWABLE, EDDY COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

### BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on December 6, 2001, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 6th day of February, 2002, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

### **FINDS THAT:**

- (1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.
- (2) OXY USA WTP Limited Partnership ("OXY") is the owner and operator of the OXY Engelbert Well No. 1 (API No. 30-015-31845), which was drilled in July/August, 2001 to a total depth of 8,900 feet to test the deeper Morrow formation at a standard gas well location 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 15, Township 18 South, Range 25 East, NMPM, Eddy County, New Mexico, within a standard 320-acre lay-down gas spacing unit for the West Atoka-Morrow Gas Pool comprising the S/2 of Section 15.
- (3) OXY subsequently completed this well in the shallower Cisco interval of the Upper-Pennsylvanian formations with perforations from approximately 7174 feet to 7194 feet (less 16 feet to compensate for the kelly-bushing), where it tested at approximately 408 BOPD and 545 Mcf of gas per day.
- (4) OXY seeks a determination that this well constitutes a "new oil discovery," and in accordance with Division Rule 509, seeks assignment of a discovery allowable for

this well.

(5) Based upon this discovery, OXY seeks the creation of a new oil pool for the Upper Pennsylvanian formations (Cisco and Canyon), as identified on the Baker-Hughes CDL-CNL log of the discovery well, the top of which is located at approximately 6665 feet and the bottom of which is located at approximately 7900 feet with an initial pool boundary encompassing the following 160-acre area in Lea County, New Mexico:

# TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM Section 15: SE/4.

- (6) In addition, OXY requests the adoption of special rules and regulations for this new pool including provisions for:
  - (a) 160-acre oil spacing and proration units;
  - (b) well locations not closer than 660 feet to the outer boundary of a spacing and proration unit nor closer than 10 feet to any interior governmental quarter-quarter section line or subdivision inner boundary; and
  - (c) well density of no more than one producing well for each 160-acre spacing and proration unit.
- (7) Based upon data from the well, OXY presented geologic evidence demonstrating that:
  - (a) the producing interval is a carbonate reservoir and is enhanced by natural fracturing;
  - (b) the pool is both horizontally and vertically separated from any other common source of supply;
  - (c) while the discovery well only produces from the Cisco interval, the management of this pool is best served by including both the Cisco and Canyon formations; and
  - (d) the pool has sufficient horizontal continuity to provide the geologic opportunity to space wells on 160-acre units thereby avoiding the drilling of unnecessary wells.

- (8) Based upon data from the well, OXY presented petroleum engineering evidence demonstrating that:
  - (a) the pool is a solution-gas drive reservoir with no water drive, and no primary or secondary gas cap;
  - (b) production step-rate tests on the discovery well demonstrate that wells can be produced at rates up to 408 barrels of oil per day with little effect on the producing GOR, which is consistently below 2,000 cubic feet of gas per barrel of oil;
  - (c) a pressure build-up test demonstrates that the permeability is approximately 8.99-millidarcies, which creates the opportunity for drainage of a single 160-acre spacing unit by one well;
  - (d) the natural fracturing found in this reservoir creates the opportunity for drainage of 160 acres by a single wellbore;
  - (e) there is an estimated 43,215 barrels of oil to be recovered within the SE/4 of Section 15, which will economically support the drilling of only one well per 160-acre spacing unit; and
  - (f) analysis demonstrates that it is not economic to drill wells on less than 160-acre spacing.
- (9) OXY's evidence indicates that 160-acre oil spacing and proration units and the proposed well density limit of no more than one well per unit:
  - (a) will prevent the drilling of unnecessary wells and will protect correlative rights and provide for the orderly development of the reservoir;
  - (b) will expedite the orderly development of the pool by the drilling of the fewest necessary wells to define the probable limits of the pool; and

- (c) will establish the most appropriately sized spacing units for the pool.
- (10) In accordance with Division Rule 509, the discovery oil allowable for the OXY Engelbert Well No. 1 should be 35,790 barrels to be produced in addition to the assigned depth bracket allowable for this unit during the applicable 730-day period (49 BOPD).
- (11) OXY presented testimony indicating that the S/2 of Section 15 is included in a single fee lease with common ownership in which OXY is the leasehold operator.
- (12) Oxy provided notice in accordance with Division rules 1207.A (4), and no party appeared in opposition to the granting of this application.
- (13) Approval of this application will not cause the waste of reservoir energy, reduce ultimate recovery or impair correlative rights.
- (14) At the time of the hearing OXY requested that these special rules be made effective retroactive to the date of first production from the discovery well, which was August 23, 2001.
- (15) The applicant proposed as a pool-name designation for the above-described pool the "West Atoka-Upper Pennsylvanian Pool." However, there currently exists a "West Atoka-Upper Pennsylvanian Gas Pool." Such exact pool name duplication is confusing and can lead to the overlapping of pools. Therefore, in keeping with the Division's long-standing practice of referencing nearby geographical place names and/or utilizing existing names of pools in other formations within the immediate area of a new pool, this pool should be designated the East Penasco Draw-Upper Pennsylvanian Pool.
- (16) Further the special pool rules for this newly designated pool should be established for a temporary 18-month period in order to allow the operator(s) in the pool time to gather sufficient reservoir information to determine whether 160-acre spacing is appropriate development for this pool.
- (17) This case should therefore be reopened at an examiner hearing in September, 2003, at which time the operator(s) in the pool should be prepared to appear and show cause why the temporary special pool rules for the East Penasco Draw-Upper Pennsylvanian Pool should not be rescinded.

## IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of OXY USA WTP Limited Partnership ("OXY"), a new pool in Eddy County, New Mexico, classified as an oil pool for Upper Pennsylvanian production, is hereby created and designated the **East Penasco Draw-Upper Pennsylvanian Pool**, with vertical limits comprising both the entire Cisco and Canyon formations and horizontal limits comprising the following described area:

# TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM Section 15: SE/4.

(2) The temporary special rules for the East Penasco Draw-Upper Pennsylvanian Pool are hereby promulgated as follows:

# TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE EAST PENASCO DRAW-UPPER PENNSYLVANIAN POOL

- **RULE 1**: Each well completed or recompleted in the East Penasco Draw-Upper Pennsylvanian Pool or in the Cisco and Canyon formations within one mile thereof, and not nearer to or within the limits of another Upper Pennsylvanian pool, shall be spaced, drilled, operated and produced in accordance with these special rules.
- **RULE 2**: Each well shall be located on a standard unit containing 160 acres, more or less, consisting of a governmental quarter section.
- **RULE 3**: The Division Director may grant an exception to the requirements of Rule 2 above without notice and hearing when an application has been duly filed under the provisions of **Division Rule 104.D (2)**.
- **RULE 4**: Each well shall be located no closer than 660 feet to any quarter section line nor closer than 10 feet to any interior quarter-quarter section line or subdivision inner boundary.
- **RULE 5**: The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been duly filed under the provisions of **Division Rule 104.F**.

**RULE 6**: There shall be no more than one producing oil well for each 160-acre oil spacing and proration unit.

#### IT IS FURTHER ORDERED THAT:

- (3) The location of any well presently drilling to or completed in the East Penasco Draw-Upper Pennsylvanian Pool or in the Cisco/Canyon formations within one mile thereof is hereby approved. The operator of any well having an unorthodox location shall notify the Division's Artesia District Office in writing of the name and location of the well within 20 days from the date of this order.
- (4) Existing oil wells in the East Penasco Draw-Upper Pennsylvanian Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, existing oil wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 160 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable.

- (5) Unless called earlier by the motion of the Division, this case shall be reopened at an examiner hearing in September, 2003, at which time the operator(s) in the subject pool should be prepared to appear and show cause why the temporary special pool rules for the East Penasco Draw-Upper Pennsylvanian Pool should not be rescinded and the pool not be developed on statewide 40-acre spacing.
- (6) The OXY Engelbert Well No. 1 (**API No. 30-015-31845**), located at a standard oil well location 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 15, Township 18 South, Range 25 East, NMPM, Eddy County, New Mexico, is hereby assigned an oil discovery allowable of 35,790 barrels, to be produced within 730 days of the effective date of this order and in accordance with the provisions of Division Rule 509.
- (7) The effective date of this order shall be made retroactive to September 1, 2001.
- (8) 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.



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LORI WROTENBERY

Director