

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. 11966  
ORDER NO. R-11162

**APPLICATION OF DEVON ENERGY CORPORATION (NEVADA) FOR 23  
UNORTHODOX OIL WELL LOCATIONS, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 16, 1998 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 13th day of April, 1999, 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) The applicant, Devon Energy Corporation (Nevada) ["Devon"], seeks authority to drill and produce the following wells at unorthodox oil well locations in Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico:

| <u>Well Name and Number</u> | <u>API Number</u> | <u>Section</u> | <u>Footage Location</u> | <u>Unit</u> |
|-----------------------------|-------------------|----------------|-------------------------|-------------|
| Eagle "27-H" Federal No. 15 | 30-015-29942      | 27             | 1450' FNL & 990' FEL    | H           |
| Evarts "31" Federal No. 3   | 30-015-30171      | 31             | 1330' FSL & 1630' FEL   | J           |
| Eagle "33-G" Federal No. 6  | 30-015-29595      | 33             | 2460' FNL & 1350' FEL   | G           |
| Eagle "33-H" Federal No. 8  | 30-015-29596      | 33             | 2435' FNL & 531' FEL    | H           |
| Eagle "33-N" Federal No. 10 | 30-015-29598      | 33             | 230' FSL & 2140' FWL    | N           |
| Eagle "34-E" Federal No. 10 | 30-015-29632      | 34             | 2310' FNL & 1240' FWL   | E           |
| Eagle "34-F" Federal No. 12 | 30-015-29635      | 34             | 2310' FNL & 2420' FWL   | F           |
| Eagle "34-G" Federal No. 14 | 30-015-29636      | 34             | 2310' FNL & 1600' FEL   | G           |
| Eagle "34-I" Federal No. 18 | 30-015-29655      | 34             | 1740' FSL & 280' FEL    | I           |
| Eagle "34-L" Federal No. 24 | 30-015-29643      | 34             | 1740' FSL & 1065' FWL   | L           |

In addition, Devon seeks authority to drill and produce the following wells at unorthodox oil well locations in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

| <u>Well Name and Number</u>      | <u>API Number</u> | <u>Section</u> | <u>Footage Location</u> | <u>Unit</u> |
|----------------------------------|-------------------|----------------|-------------------------|-------------|
| Falcon "3-N" Federal No. 18      | 30-015-29575      | 3              | 680' FSL & 1350' FWL    | N           |
| Carter Collier "5" Federal No. 9 | 30-015-29995      | 5              | 330' FNL & 2360' FEL    | B           |
| Evarts "6" Federal No. 4         | 30-015-30109      | 6              | 330' FNL & 1190' FEL    | A           |
| Fred "6" Federal. No. 5          | 30-015-30155      | 6              | 1260' FNL & 990' FWL    | D           |
| Patton "6" Federal No. 6         | 30-015-30085      | 6              | 2460' FNL & 2310' FWL   | F           |
| Patton "6" Federal No. 3         | 30-015-30079      | 6              | 1593' FSL & 1469' FWL   | K           |
| Patton "6" Federal No. 3         | 30-015-29980      | 6              | 930' FSL & 1450' FWL    | N           |
| Hawk "9-B" Federal No. 4         | 30-015-29480      | 9              | 990' FNL & 1360' FEL    | B           |
| Hawk "9-J" Federal No. 16        | 30-015-29483      | 9              | 1630' FSL & 1650' FEL   | J           |
| Hawk "9-O" Federal No. 17        | 30-015-29484      | 9              | 1170' FSL & 2310' FEL   | O           |
| Hawk "17-C" Federal No. 1        | 30-015-29515      | 17             | 380' FNL & 1450' FWL    | C           |
| Hawk "17-C" Federal No. 2        | 30-015-29726      | 17             | 890' FNL & 2585' FWL    | C           |
| Kaiser No. 1                     | NA →              | 18             | 330' FNL & 1110' FEL    | A           |

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(3) Prior to the hearing the Division issued the following Administrative Orders for four of the above-described wells:

- (a) NSL-3969 (SD), dated March 11, 1998, granted Devon approval to drill its Hawk "17-C" Federal Wells No. 1 and 2 at the above-described unorthodox oil well locations;
- (b) NSL-3982, dated March 23, 1998, granted Devon approval to drill its Carter Collier "5" Federal Well No. 9 at the above-described unorthodox oil well location; and
- (c) NSL-3983, dated March 23, 1998, granted Devon approval to drill its Evarts "6" Federal Well No. 4 at the above-described unorthodox oil well location.

Since it is unnecessary at this time to include these four wells in this application, they should be dismissed.

(4) The Red Lake (Queen-Grayburg-San Andres) Pool, as currently designated, includes the following lands in Eddy County, New Mexico:

**TOWNSHIP 16 SOUTH, RANGE 28 EAST,**

**NMPM**

Section 24: SE/4  
Section 25: All  
Section 26: S/2 S/2  
Section 27: SE/4 SE/4  
Section 34: All  
Section 35: All  
Section 36: All

**TOWNSHIP 17 SOUTH, RANGE 27 EAST,**

**NMPM**

Section 12: SE/4  
Section 13: N/2 and SE/4  
Section 22: S/2 NE/4  
Section 23: S/2 NW/4, NE/4 SW/4, and SE/4  
Section 24: NE/4, S/2 NW/4, N/2 SW/4, and SE/4  
Section 25: NE/4 and S/2  
Section 26: S/2 S/2  
Section 27: All  
Section 32: SE/4  
Section 33: NE/4 and S/2  
Section 34: All  
Section 35: All  
Section 36: All

**TOWNSHIP 17 SOUTH, RANGE 28 EAST,**

**NMPM**

Section 7: All  
Section 8: SW/4  
Section 9: NE/4 NE/4, S/2 NE/4, and SE/4  
Section 10: SW/4  
Section 11: S/2  
Section 12: SW/4 SW/4  
Section 14: W/2

**TOWNSHIP 17 SOUTH, RANGE 28 EAST,**

**NMPM**

**(Continued)**

Section 15: All  
Section 16: NE/4 and S/2  
Section 18: W/2  
Section 19: S/2  
Section 20: All  
Section 22: All  
Section 23: S/2 NW/4 and S/2  
Section 25: N/2  
Section 26: N/2  
Section 27: N/2 N/2 and SW/4  
Section 28: All  
Section 29: N/2, SW/4, and N/2 SE/4  
Section 30: All  
Section 31: NE/4 NE/4, W/2 E/2, and W/2

**TOWNSHIP 18 SOUTH, RANGE 26 EAST,**

**NMPM**

Section 1: E/2

**TOWNSHIP 18 SOUTH, RANGE 27 EAST,**

**NMPM**

Section 1: S/2  
Section 2: S/2  
Section 3: All  
Section 4: All  
Section 5: All  
Section 6: All  
Section 7: All  
Section 8: All  
Section 9: All  
Section 17: N/2  
Section 18: NE/4, N/2 NW/4, and SE/4 NW/4.

(5) Currently the Red Lake (Queen-Grayburg-San Andres) Pool is governed by the Division's statewide rules, which require development on standard 40-acre spacing and proration units, each having a top unit depth bracket allowable of 80 barrels of oil per day and a limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil, and allow infill drilling on each 40-acre unit.

(6) Within a 1236.85-acre area, more or less, comprising the following described

acreage in Eddy County, New Mexico, Devon is the operator of the West Red Lake Unit Area (approved by Division Order No. R-3453 dated July 12, 1968) in which waterflood operations are being conducted with injection into the Red Lake (Queen-Grayburg-San Andres) Pool (approved by Division Order No. R-3469, issued in Case No. 3824, dated August 13, 1968, and designated the West Red Lake Waterflood Project).

(7) The remaining 19 wells listed in Paragraph No. (2) above are either completed in or proposed to be completed in the Red Lake (Queen-Grayburg-San Andres) Pool, and each well will have a standard 40-acre, more or less, unit dedicated thereto. Eleven wells will be infill wells within existing 40-acre oil proration units while the remaining eight wells will be considered new designations.

(8) The applicant presented evidence that indicates the following:

- (a) All of the wells are located on federal land, except the Kaiser No. 1, which is located on fee land.
- (b) The subject pool is continuous across the area, trending in a northeast-southwest direction.
- (c) The original locations for all of the subject wells were orthodox, but were moved due to topographic and engineering reasons.
- (d) The subject area is near the Pecos River, with numerous draws and elevation changes of 100-200 feet. The Bureau of Land Management requested that numerous well locations be moved to prevent extreme cut and fill of slopes and prevent erosion of the highly erodible soil in this area. In addition, there are numerous gas transmission and gathering pipelines, roads, existing wells, and a gas plant. All of these factors limit well locations.
- (e) Average reserves in wells completed in the subject pool are about 50,000 barrels of oil, which equate to approximately 24 acres of drainage. The drainage radius of such a well is much less than a well that is capable of draining 40 acres. The applicant has drilled wells within 400-450 feet of older, above-average wells in the pool, and has seen no evidence of drainage from those older wells.
- (f) Directional drilling is not feasible because the small reserves in these wells do not justify the additional drilling and operating costs.

- (g) Applicant is drilling two wells per 40-acre unit to: (i) adequately drain each unit, and (ii) prepare for a possible future waterflood project. Injection in the West Red Lake Unit has shown a favorable production response. Drilling two wells per 40-acre unit could allow the Unit's waterflood project to be expanded in the future.

(9) Each of the above-described unorthodox oil well locations should be approved for one or more of the following reasons:

- (a) The location is a move toward the interior of a lease;
- (b) The location encroaches on a lease not owned or operated by the applicant, but notice was given to the offset and the Division received no objection;
- (c) The location will not drain the offset well unit due to the limited drainage areas in the subject pool;
- (d) A well will be drilled offsetting the proposed unorthodox well, or the offsetting well unit has existing wells producing from the same pool; and/or
- (e) There are no overriding royalty interest owners in the tract offsetting the subject well, or the applicant is the only overriding royalty interest owner in the offsetting tract.

(10) Approval of the proposed unorthodox oil well locations will afford the applicant the opportunity to produce its just and equitable share of oil and gas from the subject pool and will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Devon Energy Corporation (Nevada), is hereby authorized to drill the wells described below at unorthodox oil well locations in the Red Lake (Queen-Grayburg-San Andres) Pool in Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico:

| <u>Well Name and Number</u> | <u>API Number</u> | <u>Section</u> | <u>Footage Location</u> | <u>Unit</u> |
|-----------------------------|-------------------|----------------|-------------------------|-------------|
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|-----------------------------|--------------|----|-----------------------|---|
| Eagle "33-G" Federal No. 6  | 30-015-29595 | 33 | 2460' FNL & 1350' FEL | G |
| Eagle "33-H" Federal No. 8  | 30-015-29596 | 33 | 2435' FNL & 531' FEL  | H |
| Eagle "33-N" Federal No. 10 | 30-015-29598 | 33 | 230' FSL & 2140' FWL  | N |
| Eagle "34-E" Federal No. 10 | 30-015-29632 | 34 | 2310' FNL & 1240' FWL | E |
| Eagle "34-F" Federal No. 12 | 30-015-29635 | 34 | 2310' FNL & 2420' FWL | F |
| Eagle "34-G" Federal No. 14 | 30-015-29636 | 34 | 2310' FNL & 1600' FEL | G |
| Eagle "34-I" Federal No. 18 | 30-015-29655 | 34 | 1740' FSL & 280' FEL  | I |
| Eagle "34-L" Federal No. 24 | 30-015-29643 | 34 | 1740' FSL & 1065' FWL | L |

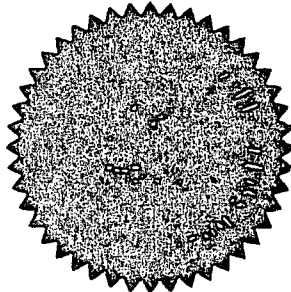
And in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

| <u>Well Name and Number</u> | <u>API Number</u> | <u>Section</u> | <u>Footage Location</u> | <u>Unit</u> |
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| Hawk "9-O" Federal No. 17   | 30-015-29484      | 9              | 1170' FSL & 2310' FEL   | O           |
| Kaiser No. 1                | NA                | 18             | 330' FNL & 1110' FEL    | A           |

(2) Each well shall have a standard 40-acre oil spacing and proration unit dedicated thereto.

(3) Jurisdiction of this case is 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

*Lori Wrotenberg*  
LORI WROTENBERY  
Director