STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

August 18, 1995

SDX Resources, Inc. P. O. Box 5061 Midland, Texas 79704

Attention: John Pool

Administrative Order DD-109(H) High Angle/Horizontal

Dear Mr. Pool:

Reference is made to SDX Resources, Inc.'s application of June 13, 1995 for authorization to initiate a high angle/horizontal directionally drilling project in the Artesia-Queen-Grayburg-San Andres Pool on a portion of its Dunn "B" Federal lease in the SW/4 NE/4 of Section 10, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

The Division Director Finds That:

- (1) The application by SDX Resources, Inc. ("SDX") has been duly filed under the provisions of Rule 111.D and E of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The proposed high angle/horizontal directionally drilling project is within the applicant's International Oil & Gas Queen-Grayburg-San Andres Waterflood Project Area, established by Division Order No. R-2869, dated February 11, 1965, and as such the Artesia-Queen-Grayburg-San Andres Pool is subject to the statewide rules and regulations for oil wells, as promulgated by Rules 104.C(1) and F(1), which provides for 40-acre oil spacing and proration units, or drilling units, and requires that wells be located no closer than 330 feet to the outer boundary of the lease or unitized area, nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary;
- Those portions of said Section 10 that are within the International Oil & Gas Queen-Grayburg-San Andres Waterflood Project Area include the N/2, SE/4 SW/4, and SE/4;
- (4) SDX is seeking to initiate an high angle/horizontal directional drilling project within the Artesia Pool in an attempt to contact more permeability in the vertical fracture systems of the San Andres formation;
- It is SDX's intent to place its Dunn "B" Federal Well No. 38 at a previously approved unorthodox oil well location (see Division Administrative Order NSL-3465, dated January 17, 1995) 1330 feet from the North line and 2583 feet from the East line (Unit G) of said Section 10, drill vertically to an approximate depth of 2950 feet, kick-off in a southeasterly direction with a short radius wellbore (71.62 degrees/100 feet or 80 foot radius), and drill horizontally a lateral distance of approximately 1,000 feet;

- (6) The "project area" for said horizontal well is to consist of the single 40-acre standard oil spacing and proration unit comprising the SW/4 NE/4 (Unit G) of said Section 10;
- The subject pool within the proposed project area is currently being developed by the Dunn "B" Federal Well No. 19 (API No. 30-015-01813), located 1980 feet from the North and East lines of said Section 10, a water injection well authorized by Division Administrative Order WFX-381, dated October 31, 1972, and the applicant's Dunn "B" Federal Well No. 46 (API No. 30-015-28247), a producing oil well located at a previously approved (also by said Order NSL-3465) unorthodox oil well location 2500 feet from the North line and 1330 feet from the East line of said Section 10;
- As required by Division General Rules 104.F(1) and 111.D(1)(b) and to assure that the correlative rights of off-set operators are adequately protected from any adverse effects caused by the drilling of the subject lateral wellbore, the applicable drilling window or "producing area" for said horizontal well bore should include that area within the SW/4 NE/4 of said Section 10 that is no closer than 10 feet from the quarter-quarter section lines nor within that area being a 330 by 330 foot square in the extreme southwestern corner of the subject quarter-quarter section; and,
- (9) It appears the applicant has satisfied all of the appropriate requirements prescribed in said Rule 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

SDX Resources, Inc. ("SDX") is hereby authorized to initiate a highly deviated directional drilling project in an existing standard 40-acre oil spacing and proration unit comprising the SW/4 NE/4 (Unit G) of Section 10, Township 18 South, Range 28 East, NMPM, Artesia-Queen-Grayburg-San Andres Pool, International Oil & Gas Queen-Grayburg-San Andres Waterflood Project Area, Eddy County, New Mexico, by drilling its Dunn "B" Federal Well No. 38 at a previously approved unorthodox surface oil well location (see Division Administrative Order NSL-3465, dated January 17, 1995) 1330 feet from the North line and 2583 feet from the East line (Unit G) of said Section 10, drill vertically to an approximate depth of 2950 feet, kick-off in a southeasterly direction with a short radius wellbore (71.62 degrees/100 feet or 80 foot radius), and drill horizontally a lateral distance of approximately 1,000 feet through the Artesia-Queen-Grayburg-San Andres Pool.

<u>PROVIDED HOWEVER THAT</u> prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

<u>PROVIDED FURTHER THAT</u> during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

- (2) The applicant shall notify the supervisor of the Artesia District office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Artesia offices of the Division upon completion.
- (3) The "project area" for said horizontal well shall consist of the single 40-acre standard oil spacing and proration unit comprising the SW/4 NE/4 (Unit G) of said Section 10;

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- (4) The "producing area" for said horizontal wellbore shall include that area within the SW/4 NE/4 of said Section 10 that is no closer than 10 feet from the quarter-quarter section lines nor within that area being a 330 by 330 foot square in the extreme southwestern corner of the subject quarter-quarter section.
- (5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.
- (6) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth (TVD) in addition to measured depths (MVD).
- (7) Jurisdiction of this cause 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

SEAL

cc: Oil Conservation Division - Artesia

U.S. BLM - Carlsbad

File: NSL-3465

Case 11.274 V