



NSL-5316(BHL)

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**June 15, 2006****Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

**Southwestern Energy Production Company**  
2350 N. Sam Houston Parkway East – Suite 300  
Houston, Texas 77032

**Attention: J. Alan Grimsley**  
*Alan\_Grimsley@SWN.COM*

***Administrative Order NSL-5399 (BHL)***  
***(Non-Standard Subsurface Location/Producing Area)***

Dear Mr. Grimsley:

Reference is made to the following: (i) your application submitted to the New Mexico Oil Conservation Division (“Division”) in Santa Fe, New Mexico on May 17 2006 (*administrative application reference No. pTDS0-613831266*); (ii) your e-mail message to Mr. Michael E. Stogner, Engineer with the Division in Santa Fe, of Wednesday morning, June 14, 2006, checking on the status of this application; and (iii) the Division’s records in Santa Fe, including the files on Division Administrative Orders NSL-5275 (BHL), NSL-5303 (BHL), and NSL-5316 (BHL): all concerning Southwestern Energy Production Company’s (“SwEPC”) proposed development of the Cherry Canyon “4” Sand formation within a portion of its Karlsbad Corral “11” state lease (*New Mexico State Land Office Lease No. V-03633-0002*) underlying the W/2 NW/4 of Section 11, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico, utilizing horizontal drainhole drilling techniques.

**The Division Director Finds That:**

- (1) The subject application has been duly filed under the provisions of Division Rules 104.F, 111.A (13), 111.C (2), and 1210.A (2) [formerly Division Rule 1207.A (2), see Division Order No. R-12327-A, issued by the New Mexico Oil Conservation Commission in Case No. 13482 on September 15, 2005].
- (2) By Order No. R-10591, issued in Case No. 11530 on May 8, 1996 and made effective on June 1, 1996, the Division created and defined the Northwest Corral Canyon-Delaware Pool (96464) for the production of oil from the Delaware formation; the horizontal limits for this pool comprises the following described lands in Eddy County, New Mexico (see Division Cases No. 11530 and 13540:

**TOWNSHIP 25 SOUTH, RANGE 29 EAST, NMPM**

Section 2: E/2  
Section 11: N/2 and SW/4;

- (3) Currently, the Northwest Corral Canyon-Delaware Pool is governed under the statewide rules and regulations, as promulgated by Division Rules 104.B (1), 505, and 506, 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 a single 40-acre oil spacing and proration unit; each standard 40-acre is assigned a top unit depth bracket allowable of 107 barrels of oil per day and a limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil which results in a casinghead gas allowable of 214 MCF per day; this depth bracket allowable was established and set by said Order No. R-10591 to correspond with the top most perforation in the discovery well for the pool, being 5,341 feet in the Santa Fe Energy Resources, Inc. Corral Fly Unit Well No. 1 (API No. 30-015-28576), located 1980 feet from the North and East lines (Unit G) of Section 2, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico;
- (4) SWEPC intends to drill its Karlsbad Corral "11" (State) Well No. 2-H from a surface location 65 feet from the North line and 660 feet from the West line (Unit D) of Section 11, vertically to an approximate measured depth (MD) of 6,200 feet where wireline logs will be run and evaluated; a cement plug will be set to isolate the Brushy Canyon sands and the well will be sidetracked to the south at a kick-off point at 4,838 feet MD/TVD; the sidetracked hole will be directionally drilled at a build-rate of 12 degrees per 100 feet until a 87 degree, more or less, deviation off of vertical is achieved at an approximate measured depth of 5,608 feet (MD), or 5,317 feet (TVD); and continue to drill horizontally for an approximate distance of 2,000 feet to a bottomhole location, or end-point, within the Cherry Canyon "4" Sand unit of the Delaware Mountain Group at a targeted subsurface location approximately 2563 feet from the North line and 660 feet from the West line (Unit E) of Section 11 at an approximate total depth (TD) of 7,608 feet (MD), or 5,317 feet (TVD); a 5-1/2 inch production casing string will be set to TD;
- (5) The top of the Northwest Corral Canyon-Delaware Pool should be intercepted by this well at an approximate depth of 3,200 feet;
- (6) The proposed 80-acre Project Area (W/2 NW/4 of Section 11), pursuant to Division Rules 111.A (9) and C (3), will be established by combining two standard 40-acre oil spacing and proration units within the Northwest Corral Canyon-Delaware Pool comprising the NW/4 NW/4 (Unit D) and the SW/4 NW/4 (Unit E) of Section 11;
- (7) The path way of the proposed wellbore vertically from the entry point into the Delaware formation to the kick-off depth, the curved portion, and portions at both ends of the drainhole will be unorthodox pursuant to Division Rules 104.B (1) and 111.A (13);
- (8) It appearing the applicant has satisfied all of the appropriate requirements prescribed in Rules 111.C (2) and 104.F (2), the subject application based on SwEPC's proposed directional drilling plan, further the proposed 80-acre Project Area should be governed by the provisions contained within this order and all other applicable provisions of Division Rules 111, 505, and 506.

**It Is Therefore Ordered That:**

(1) Southwestern Energy Production Company ("SwEPC") is hereby authorized to directionally drill its Karlsbad Corral "11" (State) Well No. 2-H from a surface location 65 feet from the North line and 660 feet from the West line (Unit D) of Section 11, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico, vertically to an approximate measured depth (MD) of 6,200 feet where wireline logs will be run and evaluated; a cement plug will be set to isolate the Brushy Canyon sands and the well will be sidetracked to the south at a kick-off point at 4,838 feet MD/TVD; the sidetracked hole will be directionally drilled at a build-rate of 12 degrees per 100 feet until a 87 degree, more or less, deviation off of vertical is achieved at an approximate measured depth of 5,608 feet (MD), or 5,317 feet (TVD); and continue to drill horizontally for an approximate distance of 2,000 feet to a bottomhole location, or end-point, within the Cherry Canyon "4" Sand unit of the Delaware Mountain Group at a targeted subsurface location approximately 2563 feet from the North line and 660 feet from the West line (Unit E) of Section 11 at an approximate total depth (TD) of 7,608 feet (MD), or 5,317 feet (TVD); a 5-1/2 inch production casing string will be set to TD.

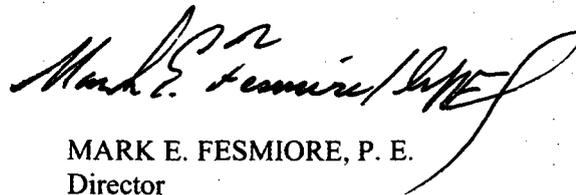
(2) Pursuant to Division Rules 111.A (9) and C (3) an 80-acre Project Area shall will be established by combining two standard 40-acre oil spacing and proration units within the Northwest Corral Canyon-Delaware Pool (96464) comprising the W/2 NW/4 (Units D and E) of Section 11.

(3) The operator of this 80-acre Project Area shall comply with all applicable requirements and conditions for the Northeast Harroun Ranch-Delaware Pool set forth in Division Rules 111, 505, and 506.

(4) 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



MARK E. FESMIORE, P. E.  
Director

MEF/ms

cc: New Mexico Oil Conservation Division – Artesia  
New Mexico State Land Office – Santa Fe  
File: NSL-5275 (BHL)  
NSL-5303 (BHL)  
NSL-5316 (BHL)