



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

September 8, 2005

Mark Fesmire
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-5275 (BHL)
(Non-Standard Subsurface Location/Producing Area)

Dear Mr. Grimsley:

Reference is made to the following: (i) your initial application submitted to the New Mexico Oil Conservation Division ("Division") in Santa Fe, New Mexico on September 2, 2005 (*administrative application reference No. pSEM0-524542031*); (ii) your telephone conversation with Mr. Michael E. Stogner, Engineer with the Division in Santa Fe, on Wednesday afternoon, September 7, 2005; (iii) your subsequent e-mail to Mr. Stogner requesting preferential treatment for your application; and (iv) the Division's records in Santa Fe: all concerning Southwestern Energy Production Company's ("SwEPC") proposed development of the Cherry Canyon "4" Sand formation within a portion of the Karlsbad Corral "2" State Lease (*New Mexico State Land Office Lease No. VO-3361*) underlying the E/2 SW/4 of Section 2, 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), and 111.C (2);
- (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 and that area within one-mile of the pool boundaries [*see Division Rule 104.A (2) (a)*] are subject to the statewide rules and regulations, as promulgated by Rule 104.B (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 a single 40-acre oil spacing and proration unit;

- (4) It is the Division's understanding that SwEPC intends to drill its Karlsbad Corral "2" Well No. 4-H from a surface location 10 feet from the South line and 1980 feet from the West line (Unit N) of Section 2, vertically to an approximate measured depth (MD) of 4,803 feet; kick-off to the north and build angle at a rate of 12 degrees per 100 feet until a 90 degree deviation off of vertical is achieved at an approximate measured depth of 5,552 feet (MD); 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 2487 feet from the South line and 1980 feet from the West line (Unit K) of Section 2;
- (5) The top of the Undesignated Northwest Corral Canyon-Delaware Pool should be intercepted at an approximate depth of 3,200 feet;
- (6) The proposed 80-acre "Project Area", pursuant to Division Rules 111.A (9) and C (3), will be established by combining two standard 40-acre oil spacing and proration units in the Undesignated Northwest Corral Canyon-Delaware Pool comprising the NE/4 SW/4 (Unit K) and the SE/4 SW/4 (Unit N) of Section 2;
- (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, the subject application should be approved, further, the aforementioned horizontal drainhole and 80-acre project area should continue operating under the provisions contained within this order and all other applicable provisions of Division Rule 111;
- (9) The applicant has satisfied all of the appropriate requirements prescribed in Rules 111.C (2) and 104.F; therefore the subject application based on SwEPC's proposed directional drilling plan should be approved; and
- (10) The subject 80-acre oil spacing and proration unit/project area is to be governed by the provisions contained within this order and all other applicable provisions of Division Rules 111 and 505.

It Is Therefore Ordered That:

(1) Southwestern Energy Production Company ("SwEPC") is hereby authorized to directionally drill its Karlsbad Corral "2" Well No. 4-H from a surface location 10 feet from the South line and 1980 feet from the West line (Unit N) of Section 2, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico, vertically to an approximate measured depth (MD) of 4,803 feet; kick-off to the north and build angle at a rate of 12 degrees per 100 feet until a 90 degree deviation off of vertical is achieved at an approximate measured depth of 5,552 feet (MD); 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 [Undesignated Northwest Corral Canyon-Delaware Pool (96464)] at a targeted subsurface location approximately 2487 feet from the South line and 1980 feet from the West line (Unit K) of Section 2.

- (2) Further, an 80-acre Project Area comprising the E/2 SW/4 of Section 2 shall be established by combining the NE/4 SW/4 (Unit K) and the SE/4 SW/4 (Unit N) of Section 2.
- (3) The operator shall comply with all applicable requirements and conditions set forth in Division Rules 111 and 505.
- (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. FESMIORÉ, P. E.
Director

MEF/ms

cc: New Mexico Oil Conservation Division – Artesia
New Mexico State Land Office – Santa Fe



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

November 22, 2005

Mark Fesmire
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-5303 (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 October 28 2005 (*administrative application reference No. pMES0-532630593*); (ii) your voice mail message for Mr. Michael E. Stogner, Engineer with the Division in Santa Fe, on Monday afternoon, November 21, 2005 checking on the status of this application; (iii) Mr. Stogner’s e-mail on Tuesday morning, November 22, 2005 asking for verification on mineral interest ownership between the subject lease and the affected offsetting lease; (iv) your quick e-mail response with the necessary information to complete your application; and (v) the Division’s records in Santa Fe, including the file on Division Administrative Order NSL-5275 (BHL): all concerning Southwestern Energy Production Company’s (“SwEPC”) proposed development of the Cherry Canyon “4” Sand formation within a portion of the Karlsbad Corral “11” State Lease (*New Mexico State Land Office Lease No. VO-3633-0002*) underlying the W/2 NE/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 subject to the statewide rules and regulations, as promulgated by Rule 104.B (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 a single 40-acre oil spacing and proration unit;
- (4) It is the Division's understanding that SwEPC intends to drill its Karlsbad Corral "11" State Well No. 3-H from a surface location 10 feet from the North line and 1980 feet from the East line (Unit B) of Section 11, vertically to an approximate measured depth (MD) of 4,840 feet; kick-off to the south and build angle at a rate of 12 degrees per 100 feet until a 90 degree deviation off of vertical is achieved at an approximate measured depth of 5,590 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 2485 feet from the North line and 1980 feet from the East line (Unit G) of Section 11;
- (5) The top of the Undesignated Northwest Corral Canyon-Delaware Pool should be intercepted at an approximate depth of 3,200 feet;
- (6) The proposed 80-acre "Project Area", 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 NE/4 (Unit B) and the SW/4 NE/4 (Unit G) of Section 2;
- (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, the subject application should be approved, further, the aforementioned horizontal drainhole and 80-acre project area should continue operating under the provisions contained within this order and all other applicable provisions of Division Rule 111;
- (9) The applicant has satisfied all of the appropriate requirements prescribed in Rules 111.C (2) and 104.F; therefore the subject application based on SwEPC's proposed directional drilling plan should be approved; and
- (10) The subject 80-acre oil spacing and proration unit/project area is to be governed by the provisions contained within this order and all other applicable provisions of Division Rules 111 and 505.

It Is Therefore Ordered That:

(1) Southwestern Energy Production Company ("SwEPC") is hereby authorized to directionally drill its Karlsbad Corral "11" State Well No. 3-H from a surface location 10 feet from the North line and 1980 feet from the East line (Unit B) of Section 11, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico, vertically to an approximate measured depth (MD) of 4,840 feet; kick-off to the south and build angle at a rate of 12 degrees per 100 feet until a 90 degree deviation off of vertical is achieved at an approximate measured depth of 5,590 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 2485 feet from the North line and 1980 feet from the East line (Unit G) of Section 11;

(2) Further, an 80-acre Project Area comprising the W/2 NE/4 of Section 11 shall be established by combining the NW/4 NE/4 (Unit B) and the SW/4 NE/4 (Unit G) of Section 11.

(3) The operator shall comply with all applicable requirements and conditions set forth in Division Rules 111 and 505.

(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. FESMIOR, P. E.
Director

MEF/ms

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



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

December 20, 2005

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-5316 (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 December 7 2005 (*administrative application reference No. pMES0-535442924*); and (ii) the Division's records in Santa Fe, including the file on Division Administrative Orders NSL-5275 (BHL) and NSL-5303 (BHL): all concerning Southwestern Energy Production Company's ("SwEPC") proposed development of the Cherry Canyon "4" Sand formation within a portion of the Karlsbad Corral "2" State Lease (*New Mexico State Land Office Lease No. V-03361-0001*) underlying the W/2 SW/4 of Section 2, 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 and that area within one-mile of the pool boundaries [see *Division Rule 104.A (2) (a)*] are subject to the statewide rules and regulations, as promulgated by Rule 104.B (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 a single 40-acre oil spacing and proration unit;

- (4) It is the Division's understanding that SwEPC intends to drill its Karlsbad Corral "2" (State) Well No. 5-H from a surface location 65 feet from the South line and 660 feet from the West line (Unit M) of Section 2, vertically to an approximate measured depth (MD) of 4,838 feet; kick-off to the north and build angle at a rate of 12 degrees per 100 feet until a 90 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 South line and 660 feet from the West line (Unit L) of Section 2;
- (5) The top of the Undesignated Northwest Corral Canyon-Delaware Pool should be intercepted at an approximate depth of 3,200 feet;
- (6) The proposed 80-acre "Project Area", 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 Undesignated Northwest Corral Canyon-Delaware Pool comprising the NW/4 SW/4 (Unit L) and the SW/4 SW/4 (Unit M) of Section 2;
- (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, the subject application should be approved, further, the aforementioned horizontal drainhole and 80-acre project area should continue operating under the provisions contained within this order and all other applicable provisions of Division Rule 111;
- (9) The applicant has satisfied all of the appropriate requirements prescribed in Rules 111.C (2) and 104.F; therefore the subject application based on SwEPC's proposed directional drilling plan should be approved; and
- (10) The subject 80-acre oil spacing and proration unit/project area is to be governed by the provisions contained within this order and all other applicable provisions of Division Rules 111 and 505.

It Is Therefore Ordered That:

(1) Southwestern Energy Production Company ("SwEPC") is hereby authorized to directionally drill its Karlsbad Corral "2" (State) Well No. 5-H from a surface location 65 feet from the South line and 660 feet from the West line (Unit M) of Section 2, Township 25 South, Range 29 East, NMPM, Eddy County, New Mexico, vertically to an approximate measured depth (MD) of 4,838 feet; kick-off to the north and build angle at a rate of 12 degrees per 100 feet until a 90 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 South line and 660 feet from the West line (Unit L) of Section 2.

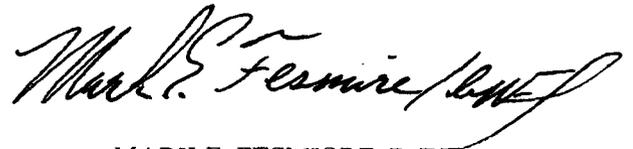
(2) Further, an 80-acre Project Area comprising the W/2 SW/4 of Section 2 shall be established by combining the NW/4 SW/4 (Unit L) and the SW/4 SW4 (Unit M) of Section 2.

(3) The operator shall comply with all applicable requirements and conditions set forth in Division Rules 111 and 505.

(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)