



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

November 13, 1995

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

Attention: John Pool

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

Dear Mr. Pool:

Reference is made to SDX Resources, Inc.'s application dated October 20, 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 NE/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;

- (3) 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;
- (5) It is SDX's intent to place its Dunn "B" Federal Well No. 39 (API No. 30-015-28245) at a previously approved unorthodox oil well location (see Division Administrative Order NSL-3465, dated January 17, 1995) 1319 feet from the North line and 60 feet from the East line (Unit A) of said Section 10, drill vertically to an approximate depth of 2940 feet, kick-off in a northwesterly 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 NE/4 NE/4 (Unit A) of said Section 10;
- (7) The subject pool within the proposed project area is currently being developed by the Dunn "B" Federal Well No. 13 (API No. 30-015-01809), located 660 feet from the North and East lines of said Section 10, a water injection well authorized by Division Order No. R-2869, dated February 11, 1965;
- (8) 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 NE/4 NE/4 of said Section 10 that is no closer than 10 feet from the southern, eastern, and western boundaries of the subject quarter-quarter section nor closer than 330 feet to its northern boundary; 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:

(1) SDX Resources, Inc. ("SDX") is hereby authorized to initiate a high angle/horizontal directional drilling project in an existing standard 40-acre oil spacing and proration unit comprising the NE/4 NE/4 (Unit A) 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. 39 at a previously approved unorthodox surface oil well location (see Division Administrative Order NSL-3465, dated January 17, 1995) 1319 feet from the North line and 60 feet from the East line (Unit A) of said Section 10, drill vertically to an approximate depth of 2940 feet, kick-off in a northwesterly 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.

PROVIDED HOWEVER THAT 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.

PROVIDED FURTHER THAT 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 NE/4 NE/4 (Unit A) of said Section 10.

(4) The "producing area" for said horizontal wellbore shall include that area within the NE/4 NE/4 of said Section 10 that is no closer than 10 feet from the southern, eastern, and western boundaries of the subject quarter-quarter section nor closer than 330 feet to its northern boundary.

(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.

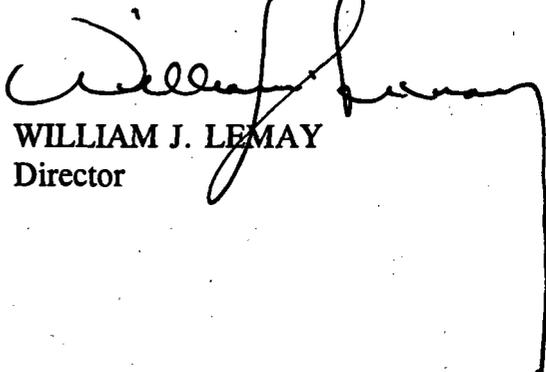
Administrative Order DD-109-A(H)
SDX Resources, Inc.
November 13, 1995
Page 4

(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

S E A L

cc: Oil Conservation Division - Artesia
U.S. BLM - Carlsbad
File: NSL-3465
Case 11,274
DD-109(H) ✓



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;
- (3) 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;
- (5) 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;
- (7) 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;
- (8) 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:

(1) 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.

PROVIDED HOWEVER THAT 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.

PROVIDED FURTHER THAT 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;

Administrative Order DD-109(H)

August 18, 1995

Page No. 3

(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.

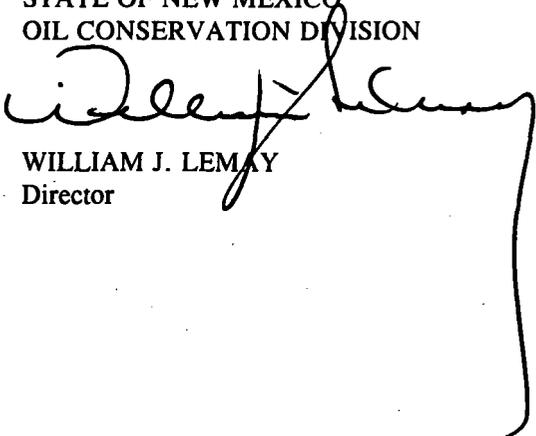
(5) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(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

DD-HOR

Rec: 6/13/95
Susp Date: 7/3/95
Released: 8/18/95

OIL CONSERVATION DIVISION

August 18, 1995

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

Attention: John Pool

109
Administrative Order DD*(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;
- (3) 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;
- (5) 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;
- (7) 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;
- (8) 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:

(1) 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.

PROVIDED HOWEVER THAT 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.

PROVIDED FURTHER THAT 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

*Administrative Order DD-*****(H)*

*August ******

Page No. 3

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;

(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

S E A L

cc: Oil Conservation Division - Artesia
U.S. BLM - Carlsbad
File: NSL-3465
Case 11,274

SDX RESOURCES, INC.

P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761

OIL CONSERVATION DIVISION
RECEIVED

'95 JUL 31 AM 8 52

July 25, 1995

Mr. Mike Stogner
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504

RE: Dunn B Federal #38
Horizontal Completion

Dear Mr. Stogner:

As per your instructions to comply with Order No. R-10388 issued by NMOCD, we are submitting a Type Log with top of Artesia Pool (Queen) marked. We cannot mark the bottom of the subject pool as it was not penetrated in this well (bottom of San Andres).

Please find the following enclosures:

- 1) Type Log - Dunn B Federal #38
- 2) Log Heading - Dunn B Federal #38
- 3) Plat showing surface/BHL Dunn B Federal #38.

Thank you for your assistance in this endeavor and please call with any questions or comments.

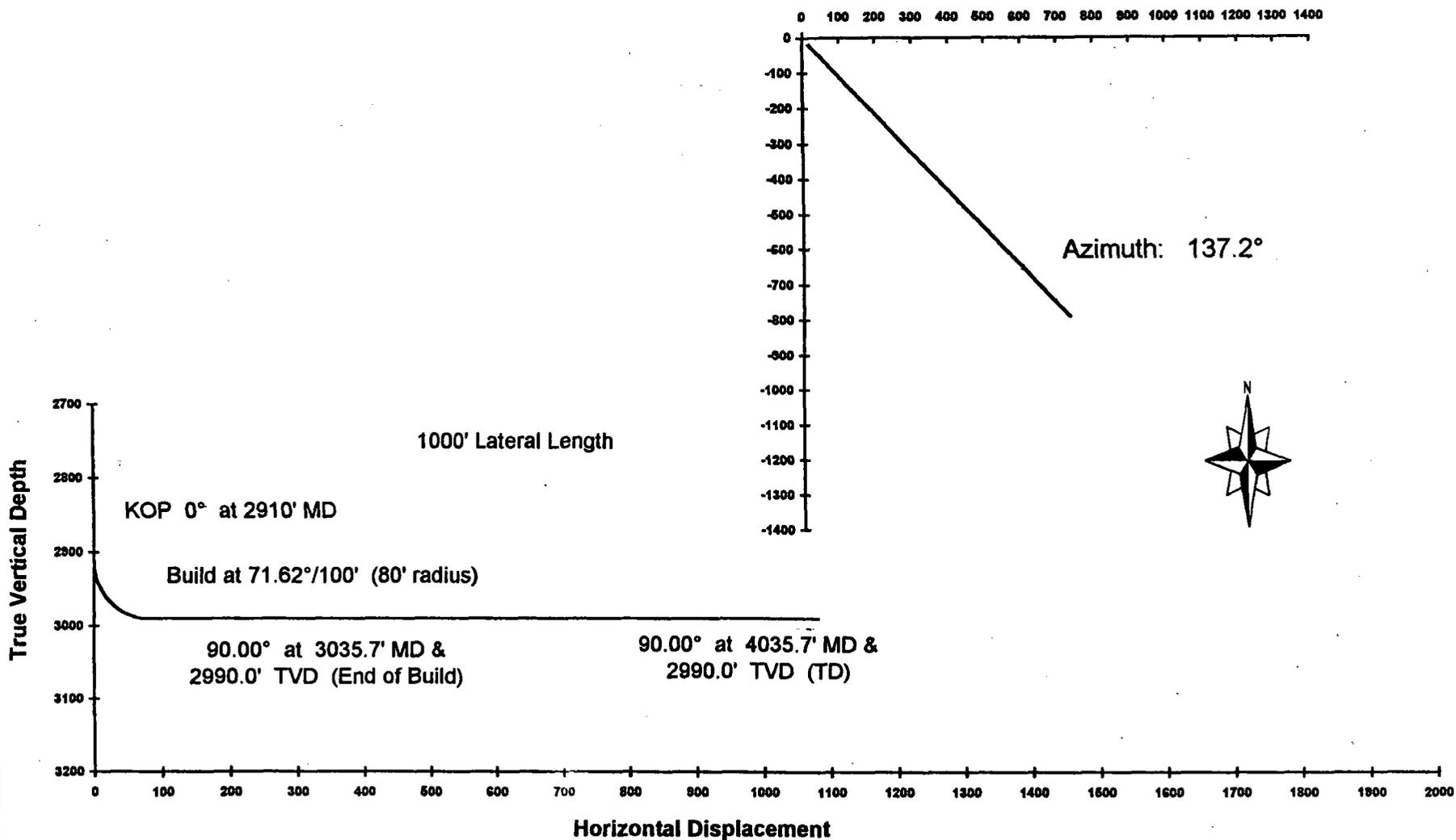
Best regards,


John Pool

JP:an
Enclosures

VOGEL HORIZONTAL AND DIRECTIONAL DRILLING
415 WEST WALL ST. MIDLAND TX 79707
915-570-4719

SDX RESOURCES
DUNN B 38
EDDY COUNTY, NM



VOGEL HORIZONTAL & DIRECTIONAL DRILLING

SDX RESOURCES
DUNN B 38

Directional Well Plan

Measured Depth (Ft)	Incl. Angle (Deg)	Drift Direction (Deg)	Course Length (Ft)	True Vertical Depth	Total Rectangular Coordinates (Ft)		Vertical Section	Dogleg Severity (Deg/100')
2910.0	0.00		0.0	2910.00	0.00 N	0.00 E	0.00	0
2914.3	3.10	137.2	4.3	2914.33	0.09 S	0.08 E	0.12	71.61972
2918.7	6.21	137.2	4.3	2918.65	0.34 S	0.32 E	0.47	71.61972
2923.0	9.31	137.2	4.3	2922.94	0.77 S	0.72 E	1.05	71.61972
2927.3	12.41	137.2	4.3	2927.20	1.37 S	1.27 E	1.87	71.61972
2931.7	15.52	137.2	4.3	2931.40	2.14 S	1.98 E	2.92	71.61972
2936.0	18.62	137.2	4.3	2935.54	3.07 S	2.85 E	4.19	71.61972
2940.3	21.72	137.2	4.3	2939.61	4.17 S	3.86 E	5.68	71.61972
2944.7	24.83	137.2	4.3	2943.59	5.42 S	5.03 E	7.39	71.61972
2949.0	27.93	137.2	4.3	2947.47	6.83 S	6.34 E	9.32	71.61972
2953.3	31.03	137.2	4.3	2951.24	8.40 S	7.79 E	11.45	71.61972
2957.7	34.14	137.2	4.3	2954.89	10.11 S	9.37 E	13.78	71.61972
2962.0	37.24	137.2	4.3	2958.41	11.98 S	11.09 E	16.31	71.61972
2966.3	40.34	137.2	4.3	2961.79	13.95 S	12.94 E	19.03	71.61972
2970.7	43.45	137.2	4.3	2965.02	16.07 S	14.91 E	21.92	71.61972
2975.0	46.55	137.2	4.3	2968.08	18.32 S	16.99 E	24.98	71.61972
2979.3	49.66	137.2	4.3	2970.97	20.68 S	19.18 E	28.21	71.61972
2983.7	52.76	137.2	4.3	2973.69	23.16 S	21.48 E	31.59	71.61972
2988.0	55.86	137.2	4.3	2976.22	25.74 S	23.87 E	35.11	71.61972
2992.3	58.97	137.2	4.3	2978.55	28.41 S	26.36 E	38.76	71.61972
2996.7	62.07	137.2	4.3	2980.68	31.18 S	28.92 E	42.53	71.61972
3001.0	65.17	137.2	4.3	2982.61	34.02 S	31.58 E	46.41	71.61972
3005.3	68.28	137.2	4.3	2984.32	36.94 S	34.27 E	50.39	71.61972
3009.7	71.38	137.2	4.3	2985.81	39.92 S	37.03 E	54.46	71.61972
3014.0	74.48	137.2	4.3	2987.08	42.96 S	39.85 E	58.60	71.61972
3018.3	77.59	137.2	4.3	2988.13	46.04 S	42.71 E	62.80	71.61972
3022.7	80.69	137.2	4.3	2988.95	49.16 S	45.60 E	67.06	71.61972
3027.0	83.79	137.2	4.3	2989.53	52.31 S	48.52 E	71.35	71.61972
3031.3	86.90	137.2	4.3	2989.88	55.48 S	51.46 E	75.67	71.61972
EOB: Target:	3035.7 4035.7	90.00 90.00	137.2 137.2	2990.00 1000.0	58.65 S 791.79 S	54.41 E 734.49 E	80.00 1080.00	71.61972 0

TRANSACTION REPORT

JUL-18-95 TUE 8:46 AM

FOR: OIL CONSERVATION DIV. SIO 5058278177

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE
JUL-18	8:41 AM	919156850533	4' 49"	7	SEND	OK

OIL CONSERVATION DIVISION

FAXED MEMORANDUM

Date: July 18, 1995

To: Steve Sell and John Pool

From: Michael E. Stogner, Chief Hearing Officer/Engineer 

Subject: Administrative application for high angle/horizontal directional drilling: Dunn "B" Federal Well No. 38; Surface location 1330' FNL & 2583' FEL (Unit G) Section 10, Township 18 South, Range 28 East, NMPM, Artesia-Queen-Grayburg-San Andres Pool, Eddy County, New Mexico

Message: The newly adopted rules (see copy of Order no. R-10388 issued by the New Mexico Oil Conservation Commission on June 13, 1995) for horizontal drilling requires the applicant to submit a copy of, *"a type log section on which is identified the top and bottom of the subject pool"*.

Further, please verify that the adjoining acreage to the north comprising the S/2 of Section 3, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico, is SDX operated property. Thank you for your cooperation in this matter, should you have any questions please contact me in Santa Fe at (505) 827-8185.

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 11274
Order No. R-10388**

**APPLICATION OF MERIDIAN OIL INC. TO
ESTABLISH A STATEWIDE ADMINISTRATIVE
PROCEDURE FOR APPROVAL OF DIRECTIONAL
DRILLING PROJECTS IN THE STATE OF
NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 27, 1995, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 13th day of June, 1995, the Commission, a quorum being present, having considered the record and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) There was a consensus among industry and government that there is a need for revision of Rule 111 to provide for administrative approval for directionally drilled wells under certain circumstances, in particular intentionally deviated directional wells which have been approved only after notice and hearing or in certain pools with special provision contained therein.

(3) Although Meridian Oil Inc. was the applicant and all present agreed to the concept of administrative approval for directionally drilled wells, additional testimony was provided by Amoco Production Company, Marathon Oil Company, Mobil Exploration and Production, Phillips Petroleum Company, Permian Basin Petroleum Association, New Mexico Oil and Gas Association, and New Mexico Oil Conservation Division. Differences of opinion centered around an expanded version of the proposed rule change incorporating more definitions and greater reporting requirements for applicants and a shorter version with condensed definitions and reduced reporting requirements.

(4) The more condensed rule changes provide for greater efficiencies without sacrificing clarity or important documentation.

(5) Meridian Oil Inc. recommended rule provisions which would address correlative rights within affected proration units. Marathon Oil Company and Amoco Production Company supported a simplified rule which allows for operator decisions concerning the need for additional wells.

(6) Operational decisions and equity issues should be addressed under provisions of the operating agreement that deal with "operations by less than all parties" and not by regulations.

(7) The rule changes incorporated in Exhibit "A", attached hereto and made a part hereof, will not affect wells deviated intentionally for mechanical and/or operational reasons and will make the process for application and approval of directionally drilled wells more efficient and less costly without causing waste or impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Division Rule 111 be amended to read as shown on Exhibit "A" attached to and made part of this Order.

(2) Revised Rule 111 shall be effective on the date of this Order.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinafter designated.

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**

Bill Weiss

WILLIAM R. WEISS, Member

G Carlson

GARY CARLSON, Member

William J. Lemay
WILLIAM J. LEMAY, Chairman

S E A L

EXHIBIT "A"
CASE NO. 11274
ORDER NO. R-10388

RULE 111-Deviation Tests/Deviated Wells and Directional Wells:

A. Definitions: The following definitions shall apply to this Rule:

(1) Deviated Well - means any wellbore which is intentionally deviated from vertical but not with an intentional azimuth. Any deviated well is subject to Rule 111-B and C.

(2) Directional Well - means a wellbore which is intentionally deviated from vertical with an intentional azimuth. Any directional well is subject to Rule 111-D.

(3) Vertical Well - means a well that does not have an intentional departure or course deviation from the vertical.

(4) Drilling Unit - means the surface acreage assigned to a vertical wellbore in accordance with NMOCD Rule 104. Included in this definition is a "unit of proration for oil or gas" as defined by the Division and all non-standard such units previously approved by the Division.

(5) Wellbore - means the interior surface of a cased or open hole through which drilling, production, or injection operations are conducted.

(6) Project Well - means any well drilled, completed, produced or injected into as either a deviated well or as a directional well.

(7) Project Area - means one or more drilling units which are to be dedicated to the project well.

(8) Producing Area - means all points that lie along a rectangular or square window formed by plotting the measured distance from the North, South, East and West boundaries of a project area inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing and proration unit for the applicable pool(s).

(9) Penetration Point - means the point where the wellbore penetrates the top of the pool from which it is intended to produce.

(10) Azimuth - means the deviation in the horizontal plane of a wellbore expressed in terms of compass degrees.

(11) Kick-off Point - means the point at which the wellbore is intentionally deviated from vertical.

(12) **Terminus** - means the farthest point attained along the wellbore.

(13) **Producing Interval** - means that portion of the wellbore drilled inside the vertical limits of a pool, between its penetration point and its terminus and within the producing area.

(14) **Lateral** - means any portion of a wellbore past the point where the wellbore has been intentionally departed from the vertical.

B. Deviation Tests:

Any well which is drilled or deepened shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole and the Division Director may require that a directional survey be run to establish the location of the producing interval(s). Upon request from the Division Director, any well which was deviated in an indeterminate direction or toward the vertical shall be directionally surveyed.

C. Deviated Wellbores:

(1) The Supervisor of the appropriate Division District may approve the written request of an operator to drill a deviated wellbore or to deviate an existing wellbore to:

- (a) straighten a crooked hole by deviating towards the vertical;
- (b) side track junk in the hole by deviating in an indeterminate direction (no intentional azimuth);
- (c) side track an existing wellbore by deviating in an indeterminate direction (no intentional azimuth) for the purpose of recompleting into an existing producing formation or plugging the originally completed formation and recompleting into a different formation.

(2) The Supervisor of the appropriate Division District may require any request for a deviated well to be submitted for administrative approval by the Division Director.

(3) Applications for administrative approval for a deviated well shall:

- (a) be filed in duplicate and shall be accompanied by plats showing both the surface location of the subject well, its spacing unit and all adjoining spacing units;
- (b) state the reason(s) for deviating the subject well; and
- (c) shall include a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

(4) The bottomhole location of any deviated well shall be at an orthodox well location or an unorthodox location previously approved pursuant to Rule 104 and shall be considered acceptable if the actual subsurface location in the formation to be produced is orthodox or is no more than 50 feet from the approved subsurface location.

(5) The Division Director may approve the application for a deviated well upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.

D. Directional Wellbore:

(1) The Division Director, shall have the authority without notice and hearing to administratively approve a directional wellbore project when:

- (a) the surface location of the proposed or existing project well is within the boundaries of the project area, consisting of a single or multiple drilling unit(s), substantially in the form of either a square or a rectangle, as applicable, being a legal subdivision of the U.S. Public Land Survey;
- (b) the producing interval of the wellbore(s) is totally confined to a producing area. The wellbore(s) may be re-oriented to any azimuth based upon a change in conditions either geologic or mechanical, which is encountered either before or after the commencement of a project, but only insofar as the producing interval(s) remains totally confined to the producing area;
- (c) the project area includes either a single drilling unit or multiple contiguous drilling units; and,

- (d) the project well includes either a single lateral or multiple laterals which conform to conditions (a) and (b) above.

(2) To obtain administrative approval to drill a directional well, the applicant shall file a written application in duplicate with the Division Director, copy to the appropriate OCD District Supervisor, which shall include:

- (a) a statement addressing the reason(s) for directionally drilling the subject well;
- (b) a plat indicating the section, township and range in which the well is to be drilled, the project area, the proposed surface location, the producing area for the project well, any existing wells in the applicable pool(s) in the proposed project area, all offsetting drilling units in the applicable pool(s) and their associated operator, and any wells in those units;
- (c) a vertically oriented plan view (cross-sectional view) for the subject well including the true vertical depth of the top and bottom of the subject pool, degree of angle to be built in the project wellbore(s), the true vertical and the measured depth of the estimated kickoff point, the estimated penetration point and the lateral length;
- (d) a horizontal plan view for the subject well and its spacing unit showing the drilling unit and drilling-producing window, including the estimated azimuth and maximum length of the lateral(s) to be drilled;
- (e) a type log section on which is identified the top and bottom of the subject pool; and,
- (f) a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in the applicable pool(s) in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

(3) The maximum allowable assigned to the project area when dealing with prorated pools shall be based upon of the number of standard proration units (or approved non-standard proration and spacing units) for that pool any portion of which is within a distance of the producing lateral of the directional wellbore not greater than the footage setback distance for locating a vertical well from the outer boundary of a spacing unit for that pool.

E. Requirements/Conditions of Administrative Approval:

(1) The Division Director may approve the application upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.

(2) Any order issued by the Director approving an application for a directional wellbore shall require that:

- (a) the applicant shall conduct a directional survey on the wellbore after directional drilling operations in order that the direction, extent and terminus of said wellbore may be determined to be in compliance with the provision of any order with copies submitted to the Santa Fe NMOCD and to the NMOCD-district office in which the well is located; and,
- (b) the Supervisor of the appropriate Division District shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to a well until the operator has submitted an affidavit that all such directional surveys have been filed.

F. Additional Matters:

(1) The Division Director, at the request of an offset operator, may require any operator to make a directional survey of any well. The directional survey and all associated costs shall be at the expense of the requesting party and shall be secured in advance by a \$5,000 indemnity bond posted with and approved by the Division. The requesting party may designate the well survey company and the survey may be witnessed by the Division and the operator.

(2) The Division Director, may, at his discretion, set any application for administrative approval for public hearing.

(3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in this rule shall be granted only after notice and hearing.

SDX RESOURCES, INC.

P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761

OIL CONSERVATION DIVISION
RECEIVED

'95 JUL 24 AM 8 52

July 17, 1995

FAX: 505/827-8177

Mr. Mike Stogner
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87505

RE: Dunn B #38
1330' FNL, 2583 FEL
Sec. 10, T18S R28E
Eddy County, New Mexico

Dear Mr. Stogner:

Thank you for your call this afternoon (to Steve Sell) regarding the referenced well.

I did want to advise you of our upcoming scheduled completion operation (drill 1000' lateral in San Andres). We plan to move a reverse rig in and commence operations on or after July 26, 1995. Your conversation with Steve indicated the state would not have a problem with our plans, so we do plan to proceed.

Thanks again for your cooperation.

Best regards,



John Pool

JP:an

SDX RESOURCES, INC.

P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761



July 17, 1995

FAX: 505/827-8177

Mr. Mike Stogner
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87505

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Best regards,

John Pool

JP:an

SDX RESOURCES, INC.

P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761

Fax 915 685-0533

TO: OIL CONSERVATION DIVISION **DATE:** JULY 17, 1995

ATTENTION: MR. MIKE STOGNER

FROM: JOHN POOL

TOTAL PAGES INCLUDING THIS PAGE 2

**IF YOU HAVE ANY PROBLEMS OR QUESTIONS, PLEASE CALL US AT
(915) 685-1761.**

- | | |
|----------------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> PER YOUR REQUEST | <input type="checkbox"/> PER OUR PHONE CONVERSATION |
| <input checked="" type="checkbox"/> FOR YOUR INFORMATION | <input type="checkbox"/> PLEASE PHONE ME TO DISCUSS |
| <input type="checkbox"/> PLEASE REVIEW & ADVISE | <input type="checkbox"/> PLEASE ADVISE WHEN RECEIVED |

COMMENTS: HARD COPY TO FOLLOW.

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 11274
Order No. R-10388**

**APPLICATION OF MERIDIAN OIL INC. TO
ESTABLISH A STATEWIDE ADMINISTRATIVE
PROCEDURE FOR APPROVAL OF DIRECTIONAL
DRILLING PROJECTS IN THE STATE OF
NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 27, 1995, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 13th day of June, 1995, the Commission, a quorum being present, having considered the record and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) There was a consensus among industry and government that there is a need for revision of Rule 111 to provide for administrative approval for directionally drilled wells under certain circumstances, in particular intentionally deviated directional wells which have been approved only after notice and hearing or in certain pools with special provision contained therein.

(3) Although Meridian Oil Inc. was the applicant and all present agreed to the concept of administrative approval for directionally drilled wells, additional testimony was provided by Amoco Production Company, Marathon Oil Company, Mobil Exploration and Production, Phillips Petroleum Company, Permian Basin Petroleum Association, New Mexico Oil and Gas Association, and New Mexico Oil Conservation Division. Differences of opinion centered around an expanded version of the proposed rule change incorporating more definitions and greater reporting requirements for applicants and a shorter version with condensed definitions and reduced reporting requirements.

(4) The more condensed rule changes provide for greater efficiencies without sacrificing clarity or important documentation.

(5) Meridian Oil Inc. recommended rule provisions which would address correlative rights within affected proration units. Marathon Oil Company and Amoco Production Company supported a simplified rule which allows for operator decisions concerning the need for additional wells.

(6) Operational decisions and equity issues should be addressed under provisions of the operating agreement that deal with "operations by less than all parties" and not by regulations.

(7) The rule changes incorporated in Exhibit "A", attached hereto and made a part hereof, will not affect wells deviated intentionally for mechanical and/or operational reasons and will make the process for application and approval of directionally drilled wells more efficient and less costly without causing waste or impairing correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Division Rule 111 be amended to read as shown on Exhibit "A" attached to and made part of this Order.

(2) Revised Rule 111 shall be effective on the date of this Order.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinafter designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Bill Weiss

WILLIAM R. WEISS, Member

G Carlson

GARY CARLSON, Member

William J. Lemay
WILLIAM J. LEMAY, Chairman

S E A L

EXHIBIT "A"
CASE NO. 11274
ORDER NO. R-10388

RULE 111-Deviation Tests/Deviated Wells and Directional Wells:

A. Definitions: The following definitions shall apply to this Rule:

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(8) Producing Area - means all points that lie along a rectangular or square window formed by plotting the measured distance from the North, South, East and West boundaries of a project area inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing and proration unit for the applicable pool(s).

(9) Penetration Point - means the point where the wellbore penetrates the top of the pool from which it is intended to produce.

(10) Azimuth - means the deviation in the horizontal plane of a wellbore expressed in terms of compass degrees.

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(12) **Terminus** - means the farthest point attained along the wellbore.

(13) **Producing Interval** - means that portion of the wellbore drilled inside the vertical limits of a pool, between its penetration point and its terminus and within the producing area.

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B. Deviation Tests:

Any well which is drilled or deepened shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole and the Division Director may require that a directional survey be run to establish the location of the producing interval(s). Upon request from the Division Director, any well which was deviated in an indeterminate direction or toward the vertical shall be directionally surveyed.

C. Deviated Wellbores:

(1) The Supervisor of the appropriate Division District may approve the written request of an operator to drill a deviated wellbore or to deviate an existing wellbore to:

- (a) straighten a crooked hole by deviating towards the vertical;
- (b) side track junk in the hole by deviating in an indeterminate direction (no intentional azimuth);
- (c) side track an existing wellbore by deviating in an indeterminate direction (no intentional azimuth) for the purpose of recompleting into an existing producing formation or plugging the originally completed formation and recompleting into a different formation.

(2) The Supervisor of the appropriate Division District may require any request for a deviated well to be submitted for administrative approval by the Division Director.

(3) Applications for administrative approval for a deviated well shall:

- (a) be filed in duplicate and shall be accompanied by plats showing both the surface location of the subject well, its spacing unit and all adjoining spacing units;
- (b) state the reason(s) for deviating the subject well; and
- (c) shall include a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

(4) The bottomhole location of any deviated well shall be at an orthodox well location or an unorthodox location previously approved pursuant to Rule 104 and shall be considered acceptable if the actual subsurface location in the formation to be produced is orthodox or is no more than 50 feet from the approved subsurface location.

(5) The Division Director may approve the application for a deviated well upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.

D. Directional Wellbore:

(1) The Division Director, shall have the authority without notice and hearing to administratively approve a directional wellbore project when:

- (a) the surface location of the proposed or existing project well is within the boundaries of the project area, consisting of a single or multiple drilling unit(s), substantially in the form of either a square or a rectangle, as applicable, being a legal subdivision of the U.S. Public Land Survey;
- (b) the producing interval of the wellbore(s) is totally confined to a producing area. The wellbore(s) may be re-oriented to any azimuth based upon a change in conditions either geologic or mechanical, which is encountered either before or after the commencement of a project, but only insofar as the producing interval(s) remains totally confined to the producing area;
- (c) the project area includes either a single drilling unit or multiple contiguous drilling units; and,

- (d) the project well includes either a single lateral or multiple laterals which conform to conditions (a) and (b) above.

(2) To obtain administrative approval to drill a directional well, the applicant shall file a written application in duplicate with the Division Director, copy to the appropriate OCD District Supervisor, which shall include:

- (a) a statement addressing the reason(s) for directionally drilling the subject well;
- (b) a plat indicating the section, township and range in which the well is to be drilled, the project area, the proposed surface location, the producing area for the project well, any existing wells in the applicable pool(s) in the proposed project area, all offsetting drilling units in the applicable pool(s) and their associated operator, and any wells in those units;
- (c) a vertically oriented plan view (cross-sectional view) for the subject well including the true vertical depth of the top and bottom of the subject pool, degree of angle to be built in the project wellbore(s), the true vertical and the measured depth of the estimated kickoff point, the estimated penetration point and the lateral length;
- (d) a horizontal plan view for the subject well and its spacing unit showing the drilling unit and drilling-producing window, including the estimated azimuth and maximum length of the lateral(s) to be drilled;
- (e) a type log section on which is identified the top and bottom of the subject pool; and,
- (f) a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in the applicable pool(s) in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.

(3) The maximum allowable assigned to the project area when dealing with prorated pools shall be based upon of the number of standard proration units (or approved non-standard proration and spacing units) for that pool any portion of which is within a distance of the producing lateral of the directional wellbore not greater than the footage setback distance for locating a vertical well from the outer boundary of a spacing unit for that pool.

E. Requirements/Conditions of Administrative Approval:

(1) The Division Director may approve the application upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.

(2) Any order issued by the Director approving an application for a directional wellbore shall require that:

- (a) the applicant shall conduct a directional survey on the wellbore after directional drilling operations in order that the direction, extent and terminus of said wellbore may be determined to be in compliance with the provision of any order with copies submitted to the Santa Fe NMOCD and to the NMOCD-district office in which the well is located; and,
- (b) the Supervisor of the appropriate Division District shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to a well until the operator has submitted an affidavit that all such directional surveys have been filed.

F. Additional Matters:

(1) The Division Director, at the request of an offset operator, may require any operator to make a directional survey of any well. The directional survey and all associated costs shall be at the expense of the requesting party and shall be secured in advance by a \$5,000 indemnity bond posted with and approved by the Division. The requesting party may designate the well survey company and the survey may be witnessed by the Division and the operator.

(2) The Division Director, may, at his discretion, set any application for administrative approval for public hearing.

(3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in this rule shall be granted only after notice and hearing.

SDX RESOURCES, INC.

P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761

OIL CONSERVATION DIVISION
RECEIVED

'95 JUN 5 AM 8 52

June 2, 1995

Mr. Shannon Shaw
BLM
P. O. Box 1778
Carlsbad, New Mexico 88221

Dunn "B"
Federal #38

RE: Dunn B Federal #38
Sundry Notice - Horizontal Drainhole

Dear Mr. Shaw:

Please find enclosed Sundry Notice for the referenced well.

As you see, we are proposing to drill a horizontal drainhole in the San Andres formation in an attempt to contact more permeability in the vertical fracture systems of the formation.

We are requesting your approval of this change to our original drilling/completion plans.

Thank you for your consideration in this matter and please call with any questions or comments.

Best regards,



John Pool
Vice President

JP/jdc
Enclosures

cc: Mr. Mike Stogner, OCD/Santa Fe, NM ✓

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.
NM 54184

6. If Indian, Allottee or Tribe Name
N.A.

7. If Unit or CA, Agreement Designation
N.A.

8. Well Name and No.
Dunn B Federal #38

9. API Well No.

10. Field and Pool, or Exploratory Area
Artesia-QN-GR-SA

11. County or Parish, State
Eddy Co., NM

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
SDX Resources, Inc.

3. Address and Telephone No.
P. O. Box 5061, Midland, TX. 79704 915/685-1761

4. Location of Well (Footage, Sec., T., R., M., or Survey Description).
1330' FNL & 2583' FEL, Unit G, Sec. 10

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

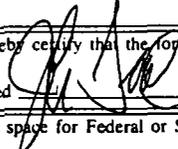
TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other <u>Supplement to original</u>
	APD, approved 12/07/94
	<input checked="" type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Plan to drill well to original proposed TVD of 4,000'. Run open hole logs. Run 5-1/2" casing/packer shoe, 15.50#/ft., 5-1/2" casing to \pm 2,850'. Set open hole plug at kick-off point (KOP) -2980'. Follow attached procedure.

14. I hereby certify that the foregoing is true and correct

Signed  (John Pool) Title Vice President Date 6/02/95

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any: _____

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

WELL PROCEDURE
DUNN B 38 HORIZONTAL COMPLETION
SDX RESOURCES

Date: June 02, 1995

Purpose: Complete as horizontal drainhole.

Elevation: GL -3627'; KB. - N/A

Drillers TD: 4000'

PBTD: 2950'

Production casing: 5 1/2" 15.50# @2850' - TOC @Surf (Should be set to 50 - 150' above KOP)

Intermediate casing:

Target Information:

Kickoff Point (KOP): 2980' - 3000'
Build Rate: (BUR) 71.62°/100' (80' radius)
Target Depth (TVD): 2,990' TVD
End of Curve (EOC): 4035' MD (2990' TVD)
Lateral Length: 1000'
Closure Direction: N137.2° E (45° Azimuth)
Declination: _____
Operations Target: 10' Vertical Window

BOTTOM HOLE ASSEMBLY/DRILL STRING

4 3/4" Rock Bit
3 3/8" _____ Mudmotor: 2 7/8" Reg Box X 2 3/8" Reg Box (Top)
Float Sub not required
3 1/2" Orienting Sub
3 1/2" Monel Drill Collars: 2 7/8" PH-6 Box X Pin (FLEX REQUIRED ? _____)
_____ 2 7/8" PH-6 drill pipe (P-110)
Crossover to Drill Collars
4 1/16" - 4 3/4" Drill Collars
3 1/2" drill pipe
Estimated Max. WOB: 25,000
Estimated Max. Pump Rate: 125 GPM at 1,900 psi
2" minimum ID on all drill string components

PROCEDURE

1. MIRUPU. TIH with bit. Drill out casing shoe and drill to KOP. TOH with workstring standing back.
2. RU wireline and gyro company. TIH with GYRO. Obtain surveys every 100' from TD to surface. RD wireline and gyro company
3. RU directional & wireline company. Test steering tool and confirm toolface reading.
4. PU angle build assembly and surface test motor.

5. TIH to KOP with bit, angle build motor, orienting (and float sub), monel drill collars, PH-6 drill pipe, drillpipe and drill collars.
6. TIH with steering tool. Sting into orienting sub. RU wet-connect and test. Drill build section to EOC, obtaining surveys every joint. TOH to KOP. RD wet-connect and TOH with steering tool. TOH with drillstring (standing back) and lay down angle build motor.
7. PU angle hold motor and test at surface.
8. TIH with bit, angle hold motors, orienting sub, and monel drill collars to KOP. TIH with steering tool and sting into orienting sub. TIH to bottom and drill lateral at Target TVD to TD, obtaining surveys every joint. TOH. RD directional Co.
9. Perform completion operations.

VOGEL HORIZONTAL & DIRECTIONAL DRILLING

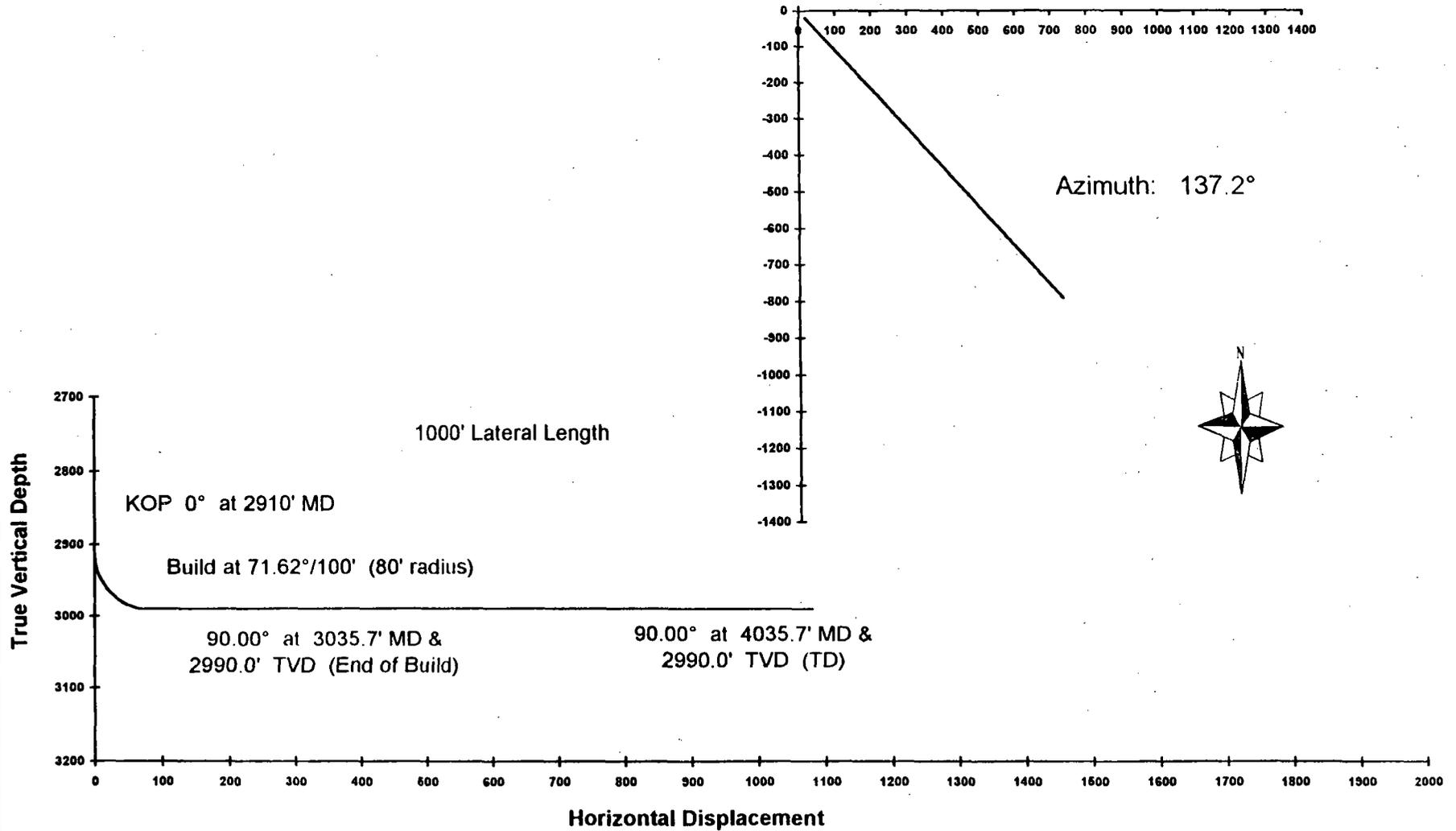
SDX RESOURCES
DUNN B 38

Directional Well Plan

Measured Depth (Ft)	Incl. Angle (Deg)	Drift Direction (Deg)	Course Length (Ft)	True Vertical Depth	Total Rectangular Coordinates (Ft)		Vertical Section	
2910.0	0.00		0.0	2910.00	0.00 N	0.00 E	0.00	
2914.3	3.10	137.2	4.3	2914.33	0.09 S	0.08 E	0.12	
2918.7	6.21	137.2	4.3	2918.65	0.34 S	0.32 E	0.47	
2923.0	9.31	137.2	4.3	2922.94	0.77 S	0.72 E	1.05	
2927.3	12.41	137.2	4.3	2927.20	1.37 S	1.27 E	1.87	
2931.7	15.52	137.2	4.3	2931.40	2.14 S	1.98 E	2.92	
2936.0	18.62	137.2	4.3	2935.54	3.07 S	2.85 E	4.19	
2940.3	21.72	137.2	4.3	2939.61	4.17 S	3.86 E	5.68	
2944.7	24.83	137.2	4.3	2943.59	5.42 S	5.03 E	7.39	
2949.0	27.93	137.2	4.3	2947.47	6.83 S	6.34 E	9.32	
2953.3	31.03	137.2	4.3	2951.24	8.40 S	7.79 E	11.45	
2957.7	34.14	137.2	4.3	2954.89	10.11 S	9.37 E	13.78	
2962.0	37.24	137.2	4.3	2958.41	11.96 S	11.09 E	16.31	
2966.3	40.34	137.2	4.3	2961.79	13.95 S	12.94 E	19.03	
2970.7	43.45	137.2	4.3	2965.02	16.07 S	14.91 E	21.92	
2975.0	46.55	137.2	4.3	2968.08	18.32 S	16.99 E	24.98	
2979.3	49.66	137.2	4.3	2970.97	20.68 S	19.18 E	28.21	
2983.7	52.76	137.2	4.3	2973.69	23.16 S	21.48 E	31.59	
2988.0	55.86	137.2	4.3	2976.22	25.74 S	23.87 E	35.11	
2992.3	58.97	137.2	4.3	2978.55	28.41 S	26.36 E	38.76	
2996.7	62.07	137.2	4.3	2980.68	31.18 S	28.92 E	42.53	
3001.0	65.17	137.2	4.3	2982.61	34.02 S	31.56 E	46.41	
3005.3	68.28	137.2	4.3	2984.32	36.94 S	34.27 E	50.39	
3009.7	71.38	137.2	4.3	2985.81	39.92 S	37.03 E	54.46	
3014.0	74.48	137.2	4.3	2987.08	42.96 S	39.85 E	58.60	
3018.3	77.59	137.2	4.3	2988.13	46.04 S	42.71 E	62.80	
3022.7	80.69	137.2	4.3	2988.95	49.16 S	45.60 E	67.06	
3027.0	83.79	137.2	4.3	2989.53	52.31 S	48.52 E	71.35	
3031.3	86.90	137.2	4.3	2989.88	55.48 S	51.46 E	75.67	
EOB: Target:	3035.7 4035.7	90.00 90.00	137.2 137.2	4.3 1000.0	2990.00 2990.00	58.65 S 791.79 S	54.41 E 734.49 E	80.00 1080.00

VOGEL HORIZONTAL AND DIRECTIONAL DRILLING
415 WEST WALL ST. MIDLAND TX 79707
915-570-4719

SDX RESOURCES
DUNN B 38
EDDY COUNTY, NM



SDX RESOURCES, INC.

P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761

Fax 915 685-0533

TO: NMOC A DATE: 6-12-95

ATTENTION: Mike Stegner

FROM: Steve Sell

TOTAL PAGES INCLUDING THIS PAGE 38

IF YOU HAVE ANY PROBLEMS OR QUESTIONS, PLEASE CALL US AT
(915) 685-1761.

- PER YOUR REQUEST
- FOR YOUR INFORMATION
- PLEASE REVIEW & ADVISE
- PER OUR PHONE CONVERSATION
- PLEASE PHONE ME TO DISCUSS
- PLEASE ADVISE WHEN RECEIVED

COMMENTS: Re: Meyers B Fed #1 and
Hummer B Fed #38

SDX RESOURCES, INC.
P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761

June 12, 1995

8177
FAX # 505-827-5741

Mr. Mike Stogner
State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504

Re: Unorthodox Location
SDX - Meyers B Federal #1
2310' FSL & 1250' FEL
Sec. 22, T24S - R36E
Lea County, New Mexico

Dear Mr. Stogner:

The above location was selected as a 5 spot infill location to existing P&A wells to optimize the drainage pattern. SDX currently owns the North and West offset leases.

Should you have any questions or comments, please advise. Thank you for your attention to this matter.

Sincerely,


Steve Sell

SS:bw

OPERATOR'S COPY
SPECIAL DRILLING STIPULATIONS

RECEIVED
12 8 90

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATOR'S NAME SDX RESOURCES, INC. WELL NO. & NAME NO. 38-DUNN B FEDERAL
 LOCATION 1330' F N L 62583' F E L SEC. 10, T. 18S., R. 28E.
 LEASE NO. NM-54184 COUNTY EDDY STATE NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- Lesser Prairie Chicken (Stips attached)
- Floodplain (Stips attached)
- San Simon Swale (Stips attached)
- Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

The BLM will monitor construction of this drill site. Notify the Carlsbad Resource Area Office at (505) 887-6544 Hobbs Office at (505) 393-3612, at least 3 working days prior to commencing construction.

Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.

Other

III. WELL COMPLETION REQUIREMENTS

A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><input type="checkbox"/> A. Seed Mixture 1 (Loamy Sites)</p> <ul style="list-style-type: none"> Lehmanns Lovegrass (<u>Eragrostis lehmanniana</u>) 1.0 Side Oats Grass (<u>Bouteloua curtipendula</u>) 5.0 Sand Dropseed (<u>Sporobolus cryptandrus</u>) 1.0 | <p><input type="checkbox"/> B. Seed Mixture 2 (Sandy Sites)</p> <ul style="list-style-type: none"> Sand Dropseed (<u>Sporobolus cryptandrus</u>) 1.0 Sand Lovegrass (<u>Eragrostis trichodea</u>) 1.0 Plains Bristlegrass (<u>Setaria macrostachya</u>) 2.0 |
| <p><input type="checkbox"/> C. Seed Mixture 3 (Shallow Sites)</p> <ul style="list-style-type: none"> Sideoats Grama (<u>Bouteloua curtipendula</u>) 1.0 Lehmanns Lovegrass (<u>Eragrostis lehmanniana</u>) 1.0 or Boar Lovegrass (<u>E. chloromelas</u>) | <p><input checked="" type="checkbox"/> D. Seed Mixture 4 ("Gyp" Sites)</p> <ul style="list-style-type: none"> Alkali Sacaton (<u>Sporobolus airoides</u>) 1.0 Four-Wing Saltbush (<u>Atriplex canescens</u>) 5.0 |

Seeding should be done either late in the fall (September 15 - November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material, if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

OPERATOR NAME SDX RESOURCES, INC. WELL NO. & NAME NO. 38-DUNN B FEDERAL
LOCATION 1330' N L & 2583' E L SEC. 10, T. 18S., R. 28E.
LEASE NO. NM-54184 EDDY COUNTY NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3163.J and 3163.A.

DRILLING OPERATIONS REQUIREMENTS

No Water Basin

The Bureau of Land Management office is to be notified at (505) 887-6544, in sufficient time for a representative to witness:

- 1. Spilling
- 2. Cement casing 8 5/8" inch 5 1/2" inch ___ inch
- 3. BOP tests
- Other Whenever a casing string is cemented in the A-III-P potash area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

CASING

8 5/8" surface casing should be set AT ± 350' (BELOW POTASH WATER) and cement circulated to the surface. If cement does not circulate to the surface, this BLM office will be notified and a temperature survey or cement bond log will be run to verify the top of the cement. Remedial cementing will be done prior to drilling out of that string.

Minimum required fill of cement behind the N/A intermediate casing is to

Minimum required fill of cement behind the 5 1/2" production casing is to TIE BACK TO ± 200' INTO THE SURFACE CASING.

PRESSURE CONTROL

Before drilling below the 8 5/8" casing, the blowout preventer assembly will consist of a minimum of:
 One Annular Preventer OR Two RAM-Type Preventers Other KELLY COCK / STABBING VALVE.

After setting the 8 5/8" casing string, and before drilling into the QUEEN Formation, the blowout preventers and related control equipment shall be pressure-tested as described in General Requirements. Any equipment failing to test satisfactorily will be repaired or replaced.

- The test will be conducted by an independent service company.
- The results of the test will be reported to the appropriate BLM office.
- The Bureau of Land Management office is to be notified in sufficient time for a representative to witness the test.

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, will be installed and operating before drilling into the ___ Formation, and will be used until production casing is run and cemented. Monitoring equipment will consist of the following:

- 1. A recording pit level indicator to determine pit volume gains and losses.
- 2. A mud-volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
- 3. A flow-sensor on the flow-line to warn of any abnormal mud returns from the well.

A Hydrogen Sulfide Contingency Plan ~~will~~ HAS BEEN approved by this BLM office before drilling below the ___ Formation. A copy of the plan will be posted at the drilling site.

Other Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface: cable does not to exceed 75 feet

EXHIBIT A

BLM Serial Number: NM-54184
Company Reference: SDX RESOURCES, INC.
NO. 38-DUNN B. FEDERAL

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS
THE ROSWELL DISTRICT, BLM

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES	
Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

- 400 foot intervals.
- ___ foot intervals.
- locations staked in the field as per spacing intervals above.
- locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

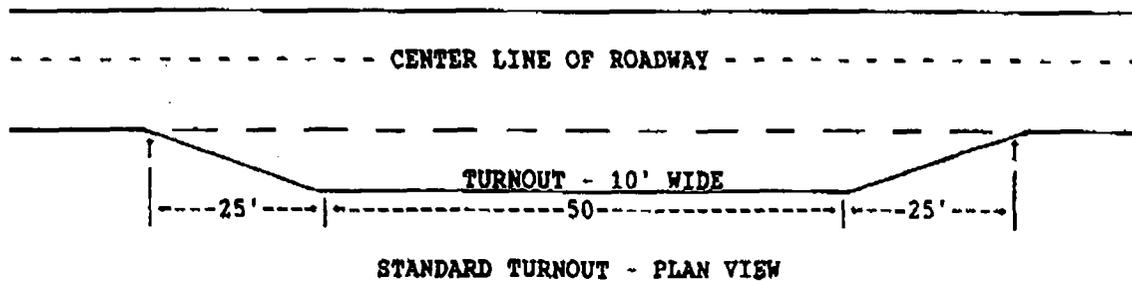
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Example: 4% slope: spacing interval = $\frac{400}{4} + 100 = 200$ feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

Page 4 of 4

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

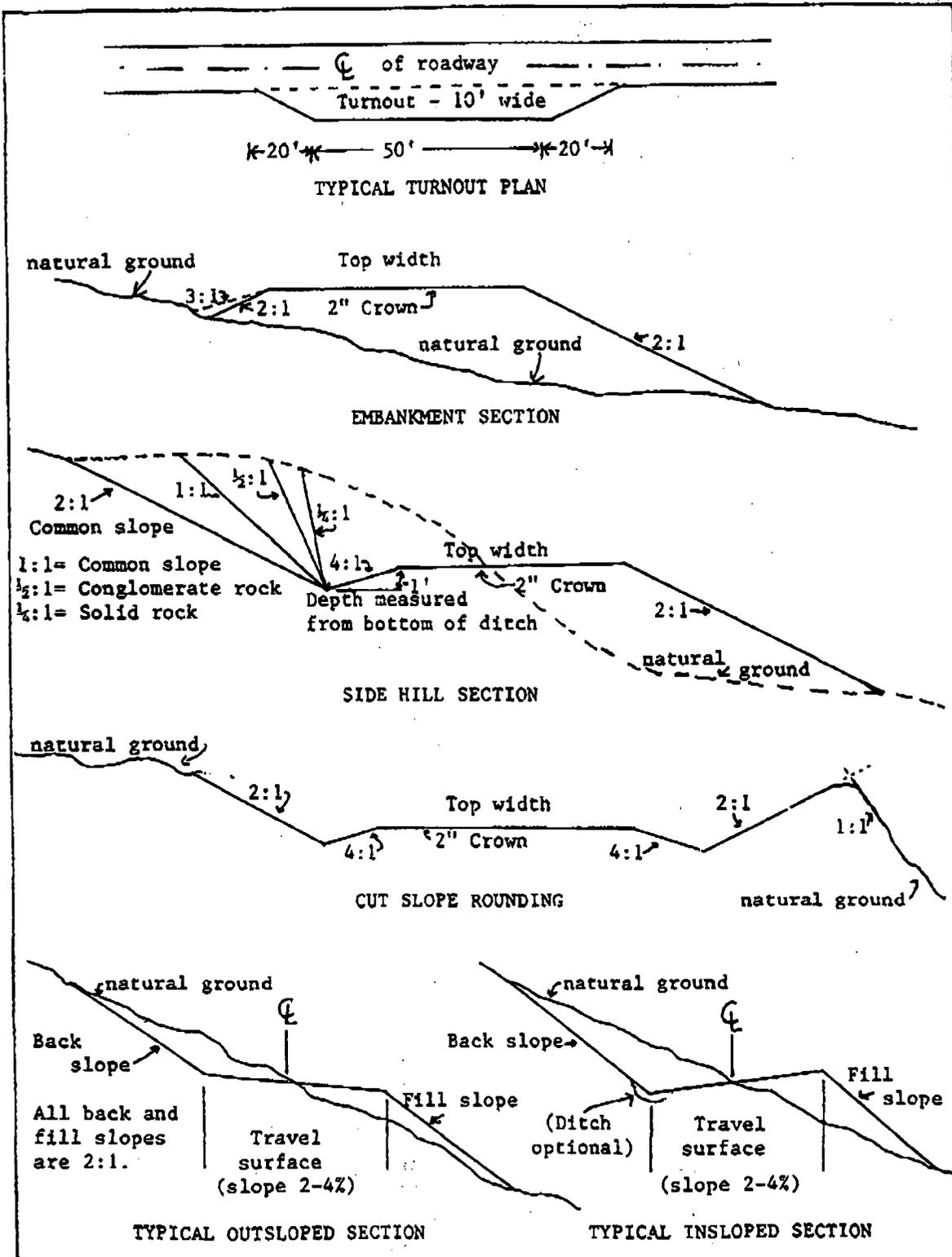
9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS: *None.*

FIGURE 1: CROSS-SECTIONS AND PLANS FOR TYPICAL ROAD CONSTRUCTION REPRESENTATIVE OF BLM RESOURCE, AND HIGHER CLASS, ROADS.

(Travel way, top width, driving surface, and travel surface are synonymous.)



BLM Serial Number NM-54184
Company Reference SDX RESOURCES, INC.
NO. 38-DUNN B FEDERAL

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES
IN THE ROSWELL DISTRICT, BLM

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

(over)

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations: *None*.

BLM Serial Number NM-54184
Company Reference SDX RESOURCES, INC.
NO. 38-DUNN B FEDERAL

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES
IN THE ROSWELL DISTRICT, BLM

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
 - a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

(over)

b. Activities of other parties including, but not limited to:

- (1) Land clearing.
- (2) Earth-disturbing and earth-moving work.
- (3) Blasting.
- (4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
12. Excluding the pipe, all above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" - Carlsbad Canyon, Munsell Soil Color No. 2.5Y 6/2 (formerly Sandstone Brown); designated by the Rocky Mountain Five State Interagency Committee.
13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
16. Special Stipulations: *None*

(March 1989)

OPERATOR'S COPY

CONTACT RECEIVING OFFICE FOR NUMBER OF COPIES REQUIRED (Other instructions on reverse side)

BLM Rowell District Modified Form No. NM60-3160-2

Form 3160-3 (July 1989) (formerly 3-331C)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK: DRILL [X], DEEPEN [], PLUG BACK []
b. TYPE OF WELL: OIL WELL [X], GAS WELL [], OTHER []
2. NAME OF OPERATOR: SDX Resources, Inc.
3. ADDRESS OF OPERATOR: P.O. Box 5061, Midland, TX, 79704

5. LEASE DESIGNATION AND SERIAL NO.: NM54184
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N.A.
7. UNIT AGREEMENT NAME: N.A.
8. FARM OR LEASE NAME: Dunn-B Fed.
9. WELL NO.: 38
10. FIELD AND POOL, OR WILDCAT: Art-Qn-Gb-Sa
11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA: Sec. 10 T18S R28E
12. COUNTY OR PARISH: Eddy
13. STATE: N.M.
22. APPROX. DATE WORK WILL START: 12/1/94

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.): 1330' FNL, 2583' FEL, unit G, Sec. 10
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 15 miles S.E. of Artesia, N.M.
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.: 1330'
16. NO. OF ACRES IN LEASE: 1240
17. NO. OF ACRES ASSIGNED TO THIS WELL: 40
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED OR APPLIED FOR, ON THIS LEASE, FT.: 886'
19. PROPOSED DEPTH: 4000'
20. ROTARY OR CABLE TOOLS: rot.
21. ELEVATIONS (Show whether DF, RT, GR, etc.): GR

PROPOSED CASING AND CEMENTING PROGRAM

Table with 8 columns: HOLE SIZE, CASING SIZE, WEIGHT/FOOT, GRADE, THREAD TYPE, SETTING DEPTH, QUANTITY OF CEMENT. Includes rows for 12-1/4" and 7-7/8" hole sizes.

Plan to drill a 12-1/4" hole to approx. 350'; set 8-5/8" surface casing. Circulate "C" cement. Drill 7-7/8" hole to TD. Run open hole logs. Run 5-1/2" casing and circulate cement. Perforate the San Andres-Grayburg-Queen and stimulate as necessary for optimum production.

- Drilling Program:
Surface Use and Operating Plan
Exhibit #1 Blowout Preventer Equipment
#2 Location and Elevation Plat
#3 Planned Access Roads
#4 One Mile Radius Map
#5 Planned Production Facilities and Access

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED: [Signature] TITLE: Engr. DATE: 10/27/94

PERMIT NO. APPROVAL DATE:
APPROVED BY: [Signature] TITLE: AREA MANAGER DATE: 12/7/94

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the

District I
PO Box 1960, Hobbs, NM 88340-1960
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name <i>Artesia - Qn - Gb - Sa.</i>	
4 Property Code DUNN B FEDERAL		5 Property Name			6 Well Number 38
7 OGRID No.		8 Operator Name SDX RESOURCES, INC.			9 Elevation 3627.

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
G	10	18S	28E		1330	NORTH	2583	EAST	EDDY

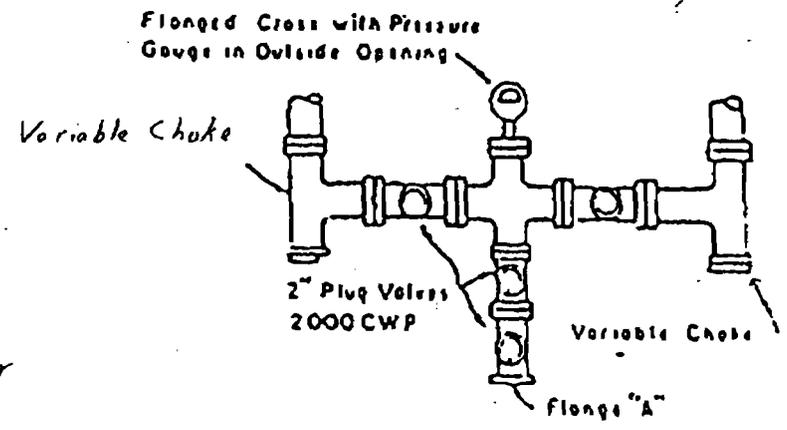
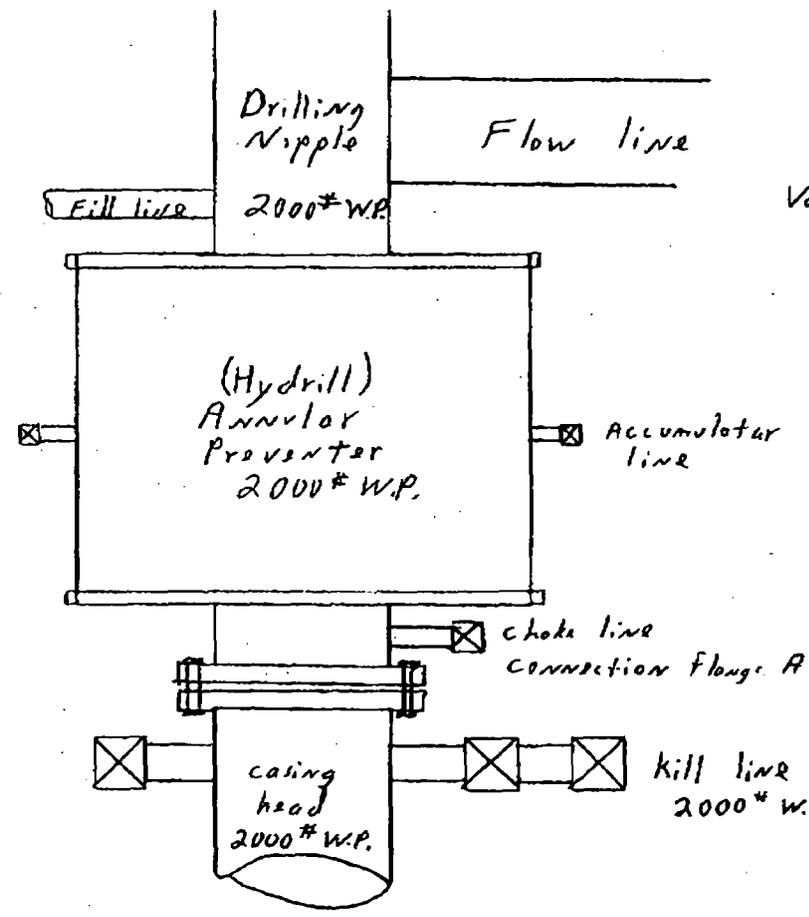
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres 40	13 Joint or InGB	14 Consolidation Code	15 Order No.
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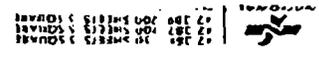
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	1330'			17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Chuck Morgan</i> Signature Chuck Morgan Printed Name Engr. Title 10/28/94 Date
	2583'			
	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. OCTOBER 21, 1994 Date of Survey B. R. REDD Signatory, and Seal of Professional Surveyor. NEW MEXICO 5412 REGISTERED LAND SURVEYOR Certificate Number NM REGFB-NONLOCAL 5412			



PLAN VIEW-CHOKE MANIFOLD

Exhibit #1



DRILLING PROGRAM

SDX RESOURCES, INC.
 Dunn B Federal #38
 1330' FNL & 2583' FEL
 Unit G Sec. 10, T18S, R28E
 Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Top of Salt	550'
Base of Salt	675'
7-Rivers	1050'
Queen	1690'
Grayburg	2225'
S. A.	2580'

3. Estimated Depth of Anticipated Fresh Water, Oil or Gas:

Water Sands	200'-250'	Fresh H2O
7-Rivers	1200'	Oil & Gas
Queen	1800'	Oil & Gas
Grayburg	2300'	Oil & Gas
S. A.	2700'+	Oil & Gas

Fresh water sands are protected by running 8 5/8" casing to a minimum depth of 350' and circulating cement. All other zones will be isolated by running 5 1/2" production casing and circulating cement.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csg</u>	<u>Weight Grade Jt Cond Type</u>
12 1/4"	0-350'	8 5/8"	24#, J-55, New
7 7/8"	0-TD	5 1/2"	14#-15.50#, J-55, Used

DUNN B #38 DRILLING PROGRAM
PAGE 2

Cement Program:

8 5/8" surface casing: Cemented to surface with 250 sx of Class C with 2% CaCl and 1/4 #/sx Flocele and 100 sx of Class "C" with 2% CaCl.

5 1/2" production casing: Cemented with 300 sx of 50/50 Class "C" POZ with 6# salt/sx and 6% Halad 322 and 400 sx of Lite "C" with 3# salt/sx and 1/4 #/sx flocele. This should circulate cement to the surface.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a bag-type (hydril) preventer (2000 psi WP). Unit will be hydraulically operated. BOP will be nipped up on the 8 5/8" surface casing and used continuously until TD is reached. BOP and accessory equipment will be tested to 1000 psi before drilling out of surface casing. A 2" kill line and a 2" choke line will be included in the drilling spool. Other accessories to the BOP equipment will include a kelly cock.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of fresh water and brine water mud system. The applicable depth and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Waterloss (cc)</u>
0-350'	Fresh water (spud)	8.5	40 - 45	N/C
350-TD	Brine water SWG, Starch	10.0	30	24

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

DUNN B #38 DRILLING PROGRAM
PAGE 3

7. Auxiliary Well Control and Monitoring Equipment:

- A. A kelly cock will be kept in the drill string at all times.
- B. A mud logging unit complete with H₂S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 1000' to TD.

8. Logging, Testing and Coring Program:

- A. Drillstem tests will be run on the basis of drilling shows.
- B. The electric logging program will consist of GR-Dual Laterolog and GR-Compensated Neutron-Density from TD to surface casing.
- C. Conventional coring may be performed in select intervals in the Queen-Grayburg and/or San Andres.
- D. Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressure or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 94 F and estimated maximum bottom-hole pressure (BHP) is 1200 psig. No abnormal concentrations or hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. All H₂S operation precautions will be followed (see attached H₂S drilling operations plans). No major loss circulation zones have been reported in offsetting wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is December 1, 1994. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

SDX Resources, Inc.
Dunn B Federal #38
1330' FNL & 2583' FEL
Unit G Sec. 10, T18S, R28E
Eddy County, New Mexico

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support system.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

DUNN B FEDERAL #38 - H2S PLAN
PAGE 2

There will be an initial safety session just prior to commencing operations on the well. The initial session shall include a review of the site's specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet.

1. Well Control Equipment:
 - A. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - B. Auxiliary equipment to include: annular preventer.
2. Protective equipment for essential personnel:
 - A. Mark II Surviveair 30-minute units located in the dog house.
3. H2S detection and monitoring equipment:
 - A. 1 - portable H2S monitor positioned on location for best coverage and response.
 - B. Mud logging trailer shall have H2S monitoring equipment.
4. Visual warning systems:
 - A. Guy lines will be flagged and a wind sock will be positioned on location.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location.

DUNN B FEDERAL #38 - H2S PLAN
PAGE 3

5. Mud program:

The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service as necessary.

7. Communication:

Radio communications in company vehicles including cellular telephone and 2-way radio.

8. Well Testing:

No DST's are planned.

SURFACE USE AND OPERATING PLAN

SDX RESOURCES, INC.
Dunn B Federal #38
1330' FNL & 2583' FEL
Unit G Sec. 10, T18S R28E
Eddy County, New Mexico

1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #2. It was staked by Dan Reddy, Carlsbad, New Mexico.
- B. All roads to the location are shown in Exhibit #3. The existing roads are labeled and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the on-site inspection.
- C. Directions to location: Go east 14 miles from Artesia, New Mexico on Hwy 62/180, turn south on Hwy 360, go to MP22 1/4 and turn west at SDX DUNN B sign. Take right fork and go approximately 1/4 mile. Take a right again and follow road 1-1/2 mile, turn left and follow road to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

Exhibit #3 shows the existing road.

Exhibit #5 shows the new access road to be constructed. The road will be constructed as follows:

- A. The maximum width of the running surface will be 15'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the on-site inspection.

DUNN B #38 SURFACE USE AND OPERATING PLAN
PAGE 2

- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguards, gates, low-water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.
- F. The proposed access road as shown in Exhibit #3 has been center-line flagged by Dan Reddy, Carlsbad, New Mexico.

3. Location of Existing Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well.

4. Location of Existing and/or Proposed Facilities:

- A. SDX Resources, Inc. operates two separate production facilities on this lease. They are as follows:

Dunn B Fed. - Tank Battery - NW/4 NW/4 of Sec. 11
Dunn B Fed. - Satellite Tank Battery - Unit Letter
O, Sec. 12.

- B. If the well is productive, contemplated facilities will be as follows:
 - 1. 2" SDR - 11 plastic flow line will be laid to an existing flowline shown in Exhibit #5.
 - 2. Any additional construction materials will be purchased from contractors.
 - 3. Power will be required if the well is productive. Proposed power line right of way is shown in Exhibit #5.
- C. If the well is productive, rehabilitation plans are as follows:
 - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after the well is complete).

DUNN B #38 SURFACE USE AND OPERATING PLAN
PAGE 3

2. Topsoil removed from the drill site will be used to re-contour the pit area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

D. In the event that production is established flow line right of way has been staked where necessary by Dan Reddy and is shown in Exhibit #5.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud systems as outlined in the drilling program. The brine water will be obtained from commercial water stations in the area and hauled to the location by transport truck over the existing and proposed access roads shown in Exhibit #3. A commercial fresh water source is nearby and facile will be laid along existing roads and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and any new access road will be obtained from the drilling pits and/or on site when possible. Any additional caliche will be obtained from approved caliche pits. All roads and pads will be constructed of 6" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

B. Drilling fluids will be contained in plastic lined pits. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit, approximately 80' x 55' x 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be plastic lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water.

DUNN B #38 SURFACE USE AND OPERATING PLAN
PAGE 4

- C. Water produced from the well during completion may be disposed into the reserve pit after the well is permanently placed on production.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash trailer by a contractor. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 90 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill, and as weather permits, the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use.

8. Ancillary Facilities:

None

9. Well Site Layout:

- A. The drill pad layout is shown in Exhibit #6. Dimensions of the pad and pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Because the pad is almost level no major cuts will be required.
- B. Exhibit #6 shows the planned orientation for the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around, parking areas and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with high-quality plastic sheeting (5-7 mil thickness).

DUNN B #38 SURFACE USE AND OPERATING PLAN
PAGE 5

10. Plan for Restoration of the Surface:

- A. Upon completion of the proposed operation, if the well is to be abandoned, the pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible.

Pit lining will be buried. All trash and garbage will be hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from any area of the original drill site not needed for production operations or facilities will be removed and used for construction of thicker pads. Any additional caliche required for facilities will be obtained from an approved caliche pit. Topsoil removed from the drill site will be used to re-contour the pit area and any unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The wellsite and lease is located entirely on Federal surface.

DUNN B #38 SURFACE USE AND OPERATING PLAN
PAGE 6

12. Other Information:

- A. The area around the well site is grassland. The vegetation is native scrub grasses with abundant catclaw and mesquite.
- B. There is no permanent or live water in the immediate area.
- C. An Archaeological Survey has been requested and will be forwarded to your office in the near future.

13. Lessee's and Operator's Representative:

The SDX Resources, Inc. representative for assuring compliance with the surface use plan is as follows:

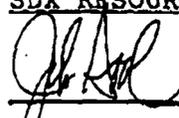
Chuck Morgan
 SDX Resources, Inc.
 P. O. Box 1302
 Artesia, NM 88210
 505-748-9724 Office
 505-748-9814 Home

Certification:

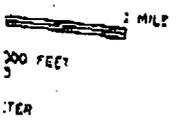
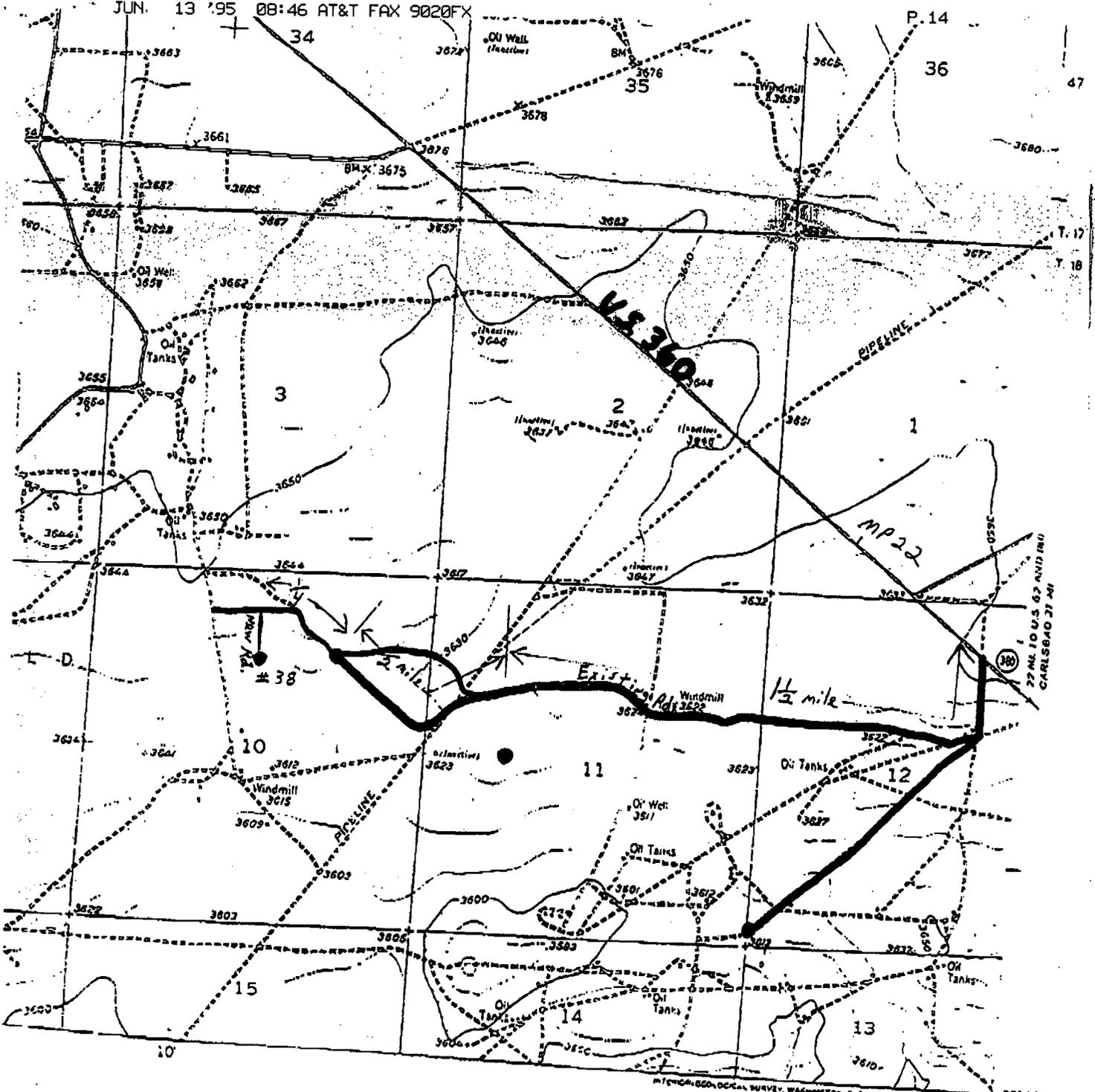
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by SDX Resources, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved.

Date: 11/2/94

Signed: SDX RESOURCES, INC.



 John D. Pool
 Vice President

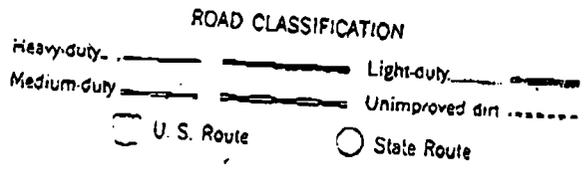


SDX RESOURCES, INC.

Access Road



QUADRANGLE LOCATION

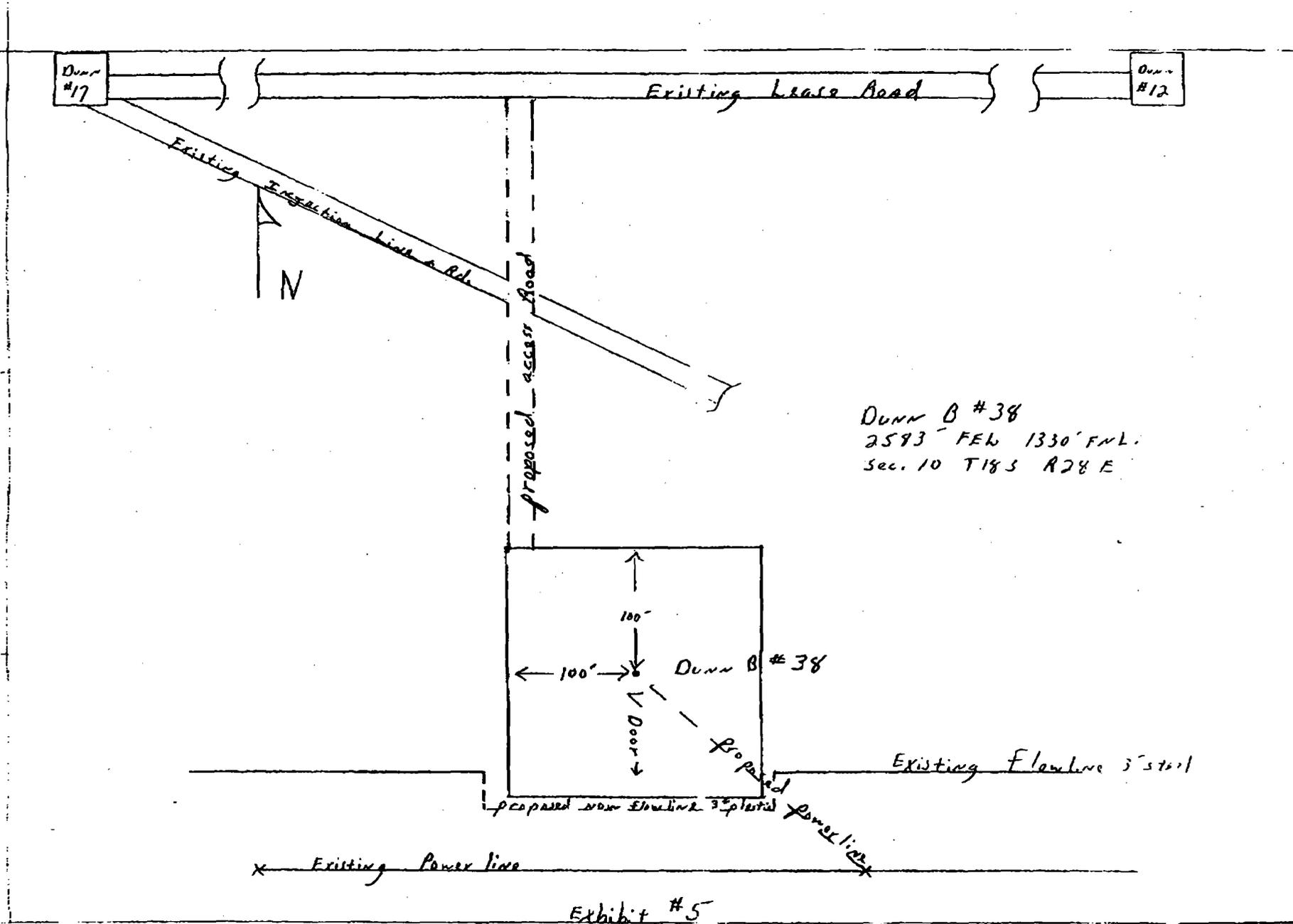


WASHINGTON 25, D.C.

RED LAKE, N. MEX.
N3245-W10407.5/7.5

1955

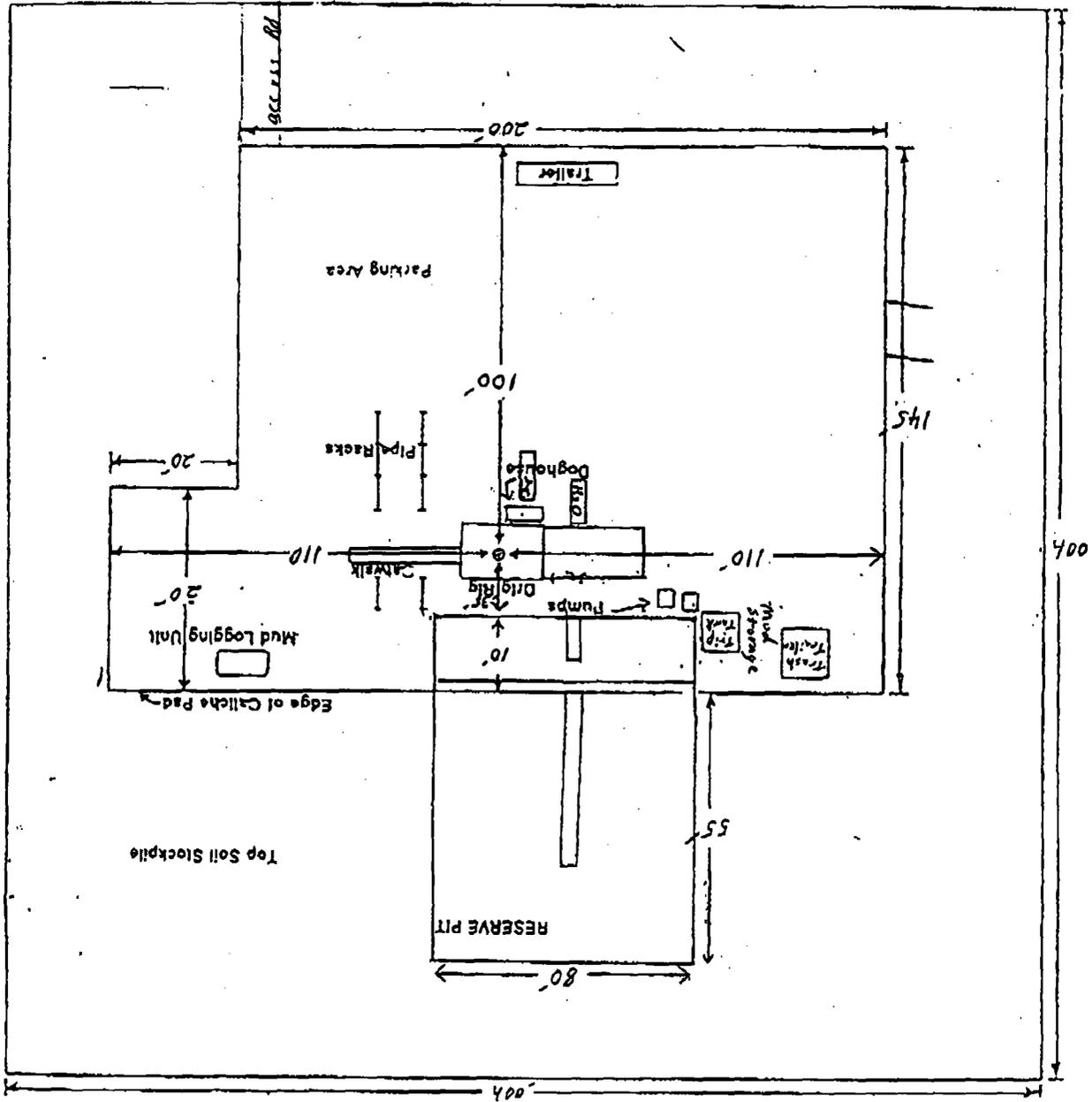
Exhibit #3



Dunn B #38
 2593' FEW 1330' FNL
 Sec. 10 T18S R28E

Exhibit #5

42-241 50 SHEETS 1 SQUARE
 42-242 100 SHEETS 2 SQUARE
 42-243 200 SHEETS 4 SQUARE
 42-244 400 SHEETS 8 SQUARE
 NATIONAL



SDX RESOURCES, INC.

Dunn B # 38

Exhibit #6

NOTICE OF STAKING

(Not to be used in place of Application for Permit to Drill Form 3160-3)

1. Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> (Specify)		6. Lease Number NM-54184	
2. Name of Operator: SDX RESOURCES, INC.		7. If Indian, Allottee or Tribe Name	
3. Name of Specific Contact Person: CHUCK MORGAN		8. Unit Agreement Name	
4. Address & Phone No. of Operator or Agent 511 W. OHIO AVE./SUITE 601 MIDLAND, TEXAS 79701 505 365-7691		9. Farm or Lease Name DUNN B FEDERAL	
5. Surface Location of Well 1330' FNL 2583' FEL Attach: a) Sketch showing road entry into pad, pad dimensions, and reserve pit. b) Topographical or other acceptable map showing location, access road, and lease boundaries.		10. Well No. 38	
		11. Field or Wildcat Name	
		12. Sec., T., R., M., or Bk and Survey or Area SEC. 10, T18S, R28E	
15. Formation Objective(s) QUEEN/GRAYBURG	16. Estimated Well Depth 4000'	13. County, Parish or Borough EDDY	14. State NEW MEXICO

17. Additional Information (as appropriate; must include surface owner's name, address, and telephone number).

BLM-CARLSBAD OFFICE

18. Signed Don R. Reddy Title NM PROFESSIONAL ENGINEER Date 10/28/94
LAND SURVEYOR

Note: Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

Operators must consider the following prior to the onsite:

- a) H2S Potential
- b) Cultural Resources (Archeology)
- c) Federal Right of Way or Special Use Permit

ARCHAEOLOGICAL SURVEY of the SDX RESOURCES, INC.
DUNN "B" FEDERAL WELL NO. 38 and ACCESS ROAD R/W
T18S, R28E, SECTION 10 (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
[1330 FNL, 2583 FEL]. EDDY COUNTY, NEW MEXICO

FEDERAL LAND SURFACE
[U.S.G.S. 7.5 minute series, RED LAKE, NEW MEXICO, 1955]

ASC Report 94-192

and James V. Sciscenti, Project Archaeologist

ARCHAEOLOGICAL SURVEY CONSULTANTS
P.O. Drawer D, Roswell, New Mexico 88202
[505] 623-5012

PERMIT NO.: 18-2920-93-G

November 2, 1994

Prepared for:

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

Attention: Chuck Morgan

Distribution:

SDX Resources, Inc., (1)
BLM - Carlsbad Resource Area (2)
Sciscenti (1)

ARCHAEOLOGICAL SURVEY CONSULTANTS

CULTURAL RESOURCES EXAMINATION

on lands administered by
the Department of the Interior
Bureau of Land Management,
Roswell District, New Mexico

ASC PERMIT NO.: 18-2920-93-G.
ASC Job No.: 94-192. SDX Re-
sources, Inc., Dunn "B" Fed.
Well No. 38 & Access Road R/W

1. **ABSTRACT:** intensive archaeological survey of the SDX Resources, Inc., Dunn "B" Federal Well No. 38; a well pad (400 ft. sq., 3.67 acres) and access road R/W (415 ft. long x 100 ft. wide, with a 150 ft. square delta, 1.12 acres), with a total federal land surface of 4.79 acres, were inspected for cultural remains.

Archaeological survey of the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W did not reveal any cultural resources. Therefore, archaeological CLEARANCE for the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W is RECOMMENDED.

2. **LEGAL LOCATION:** T18S, R28E, Section 10, SW $\frac{1}{4}$ NE $\frac{1}{4}$ (1330 FNL, 2583 FEL). **ACCESS ROAD R/W LOCATION:** T18S, R28E, Section 10 (NE $\frac{1}{4}$ NW $\frac{1}{4}$). Eddy County, New Mexico.

Map Reference: U.S.G.S. 7.5 minute series, RED LAKE, NEW MEXICO, 1955.
Land Status: BIM, Roswell District, Carlsbad Resource Area, New Mexico.

3. **PROJECT DESCRIPTION:** a well pad (400 ft. sq., 3.67 acres) and access road R/W (415 ft. long x 100 ft. wide, with a 150 ft. square delta, 1.12 acres), with a total federal land surface of 4.79 acres, were inspected for cultural remains.

TOPOGRAPHY: situated on the SE slope of a SE projecting ridge midway between 2 SSE trending draws, within an area of shallow loam soils, with high caliche float, particularly in the NW, NE, and parts of the SE quadrant of the well pad, and along the access road R/W. Relief throughout the project area is very low, with the exception of pseudo-coppice and coppice dunes of low height. Surface visibility is very high. Soils: Simona-Bippus complex. Permanent Water: Pecos River, ca. 8.6 miles W/SW. Potential Water: Palmdilla Draw, ca. 1.5 miles SSE. Elevation: 3623 ft. to 3641 ft. Slope: 0.56° to 1.64°. Aspect: 140° to 180°. Lithic Resource Material: not locally available. Vegetation: grassland formation, desert grassland or scrub-grass scrub disclimax community.

4. **EXAMINATION PROCEDURE:** straight & zig-zag transects, spaced no greater than 15 metres apart. Work Hrs. on Ground: 1.0. Area Delineation: staked by client. Visibility: ground, ca. 75% to 90%; weather, sunny.

5. **FINDINGS:** ARMS records indicate the prior recording of LA 35489 & LA 105112 in Section 10 [T18S, R28E]; the sites will not be disturbed by construction activity.

Archaeological survey of the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W did not reveal any cultural resources.

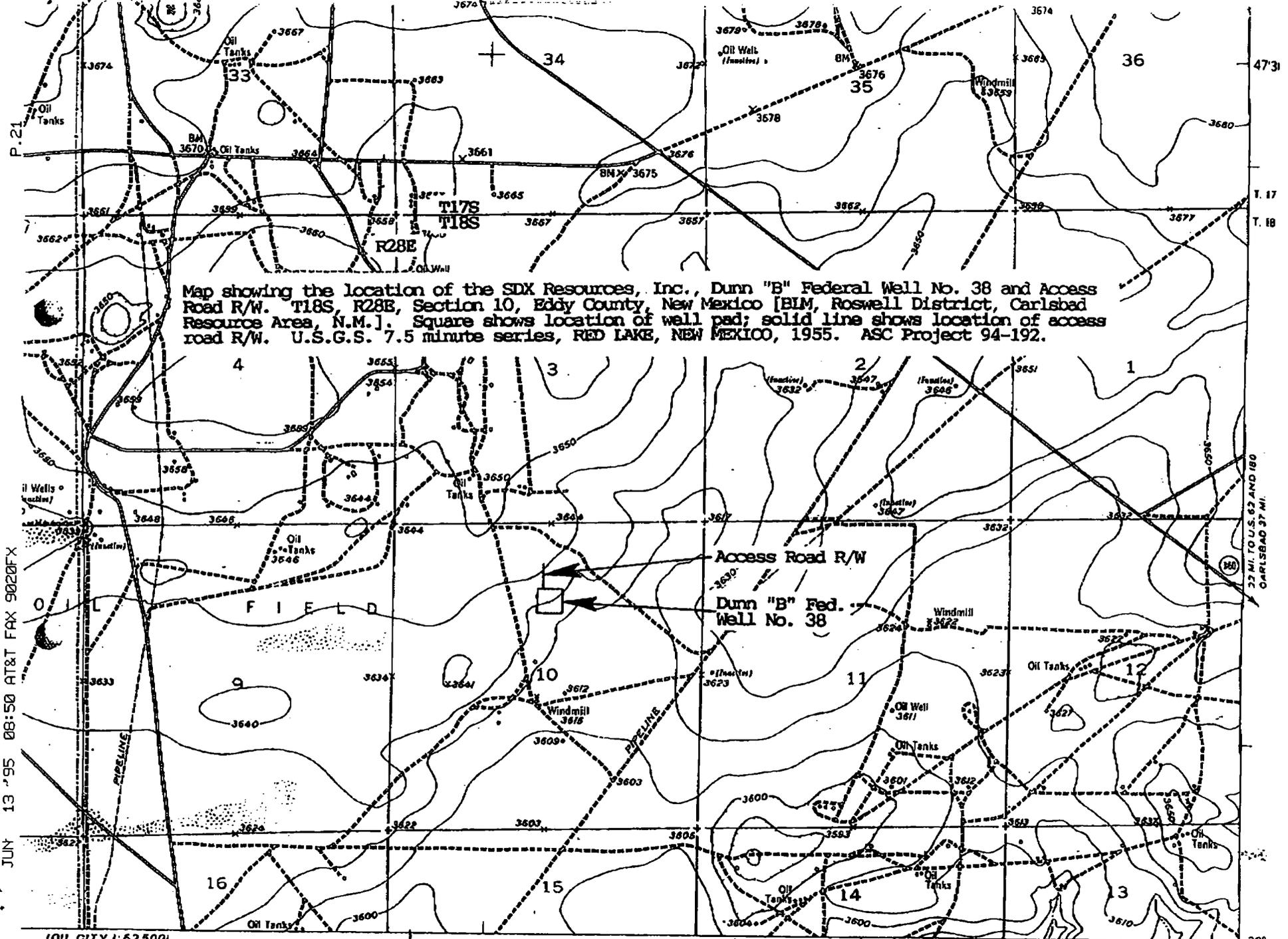
6. **RECOMMENDATIONS:** archaeological CLEARANCE for the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W is RECOMMENDED.

Date of Examination: November 1, 1994

Project Archaeologist: D. M. Griffiths p.p. J.V. Sciscanti.

Principal Investigator: D. M. Griffiths.

Map showing the location of the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W. T18S, R28E, Section 10, Eddy County, New Mexico [BIM, Roswell District, Carlsbad Resource Area, N.M.]. Square shows location of well pad; solid line shows location of access road R/W. U.S.G.S. 7.5 minute series, RED LAKE, NEW MEXICO, 1955. ASC Project 94-192.



JUN 13 '95 08:50 AT&T FAX 9020FX

OIL CITY 1:625001

10'

NATIONAL GEOLOGICAL SURVEY, WASHINGTON, D. C. 20508-ND
11-2-1973

1047030

23 MI. TO U.S. 63 AND 180
CARLSBAD 37 MI.

SDX RESOURCES, INC.

P.O. BOX 5061
MIDLAND, TEXAS 79704
(915) 685-1761

OIL CONSERVATION DIVISION
RECEIVED

95 JUN 23 AM 8 52

June 12, 1995

FAX # 505-827-5741

Mr. Mike Stogner
State of New Mexico
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87504

Re: Unorthodox Location
SDX - Meyers B Federal #1
2310' FSL & 1250' FEL
Sec. 22, T24S - R36E
Lea County, New Mexico

Dear Mr. Stogner:

The above location was selected as a 5 spot infill location to existing P&A wells to optimize the drainage pattern. SDX currently owns the North and West offset leases.

Should you have any questions or comments, please advise. Thank you for your attention to this matter.

Sincerely,


Steve Sell

SS:bw

*This cover sheet appears to have
mistakenly been placed
used for the Denver B Federal application.*

OPERATOR'S COPY

SPECIAL DRILLING STIPULATIONS

RECEIVED
12-8-94

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATOR'S NAME SDX RESOURCES, INC. WELL NO. & NAME NO. 38-DUNN B FEDERAL
 LOCATION 1330' F N L & 2583' F E L SEC. 10, T. 18S., R. 28E.
 LEASE NO. NM-54184 COUNTY EDDY STATE NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. **EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.**

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- Lesser Prairie Chicken (Stips attached)
- Floodplain (Stips attached)
- San Simon Swale (Stips attached)
- Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

The BLM will monitor construction of this drill site. Notify the Carlsbad Resource Area Office at (505) 887-6544 Hobbs Office at (505) 393-3612, at least 3 working days prior to commencing construction.

Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.

Other

III. WELL COMPLETION REQUIREMENTS

A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><input type="checkbox"/> A. Seed Mixture 1 (Loamy Site)</p> <ul style="list-style-type: none"> Lehmans Lovegrass (<u>Eragrostis lehmanniana</u>) 1.0 Side Oats Grass (<u>Bouteloua curtipendula</u>) 5.0 Sand Dropseed (<u>Sporobolus cryptandrus</u>) 1.0 | <p><input type="checkbox"/> B. Seed Mixture 2 (Sandy Sites)</p> <ul style="list-style-type: none"> Sand Dropseed (<u>Sporobolus cryptandrus</u>) 1.0 Sand Lovegrass (<u>Eragrostis trichodes</u>) 1.0 Plains Bristlegrass (<u>Setaria magrostachya</u>) 2.0 |
| <p><input type="checkbox"/> C. Seed Mixture 3 (Shallow Sites)</p> <ul style="list-style-type: none"> Sideoats Grama (<u>Boute curtipendula</u>) 1.0 Lehmans Lovegrass (<u>Eragrostis lehmanniana</u>) 1.0 or Boar Lovegrass (<u>E. chloromalas</u>) | <p><input checked="" type="checkbox"/> D. Seed Mixture 4 ("Gyp" Sites)</p> <ul style="list-style-type: none"> Alkali Sacaton (<u>Sporobolus airoides</u>) 1.0 Four-Wing Saltbush (<u>Atriplex canescens</u>) 5.0 |

Seeding should be done either late in the fall (September 15 - November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN:

OPERATOR'S NAME SDX RESOURCES, INC. WELL NO. & NAME NO. 38-DUNN B FEDERAL
 LOCATION 1330' N L & 2583' P E L SEC. 10 T. 18S., R. 28E.
 LEASE NO. NM-54184 COUNTY NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

DRILLING OPERATIONS REQUIREMENTS

No Water Basin

The Bureau of Land Management office is to be notified at (505) 887-6544, in sufficient time for a representative to witness:

- () 1. Spilling
- () 2. Cement casing 8 5/8 inch 5 1/2 inch ___ inch
- () 3. BOP tests
- () Other Whenever a casing string is cemented in the R-III-P potash area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

CASING

() 8 5/8" surface casing should be set AT ± 350' (BELOW Potable Water) and cement circulated to the surface. If cement does not circulate to the surface, this BLM office will be notified and a temperature survey or cement bond log will be run to verify the top of the cement. Remedial cementing will be done prior to drilling out of that string.

() Minimum required fill of cement behind the N/A intermediate casing is to

() Minimum required fill of cement behind the 5 1/2" production casing is to TIE BACK TO ± 200' INTO THE SURFACE CASING.

PRESSURE CONTROL

- () Before drilling below the 8 5/8" casing, the blowout preventer assembly will consist of a minimum of:
 - () One Annular Preventer OR () Two RAM-Type Preventers
 - () Other KELLY COCK/ STABBING VALVE.

() After setting the 8 5/8" casing string, and before drilling into the QUEEN Formation, the blowout preventers and related control equipment shall be pressure-tested as described in General Requirements. Any equipment failing to test satisfactorily will be repaired or replaced.

- () The test will be conducted by an independent service company.
- () The results of the test will be reported to the appropriate BLM office.
- () The Bureau of Land Management office is to be notified in sufficient time for a representative to witness the test.

() Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, will be installed and operating before drilling into the ___ Formation, and will be used until production casing is run and cemented. Monitoring equipment will consist of the following:

- () 1. A receding pit level indicator to determine pit volume gains and losses.
- () 2. A mud-volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
- () 3. A flow-sensor on the flow-line to warn of any abnormal mud returns from the well.

() A Hydrogen Sulfide Contingency Plan HAS BEEN approved by this BLM office before drilling below the ___ Formation. A copy of the plan will be posted at the drilling site.

() Other Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface: cable speed not to exceed 30 feet per minute.

EXHIBIT A

BLM Serial Number: NM-54184
Company Reference: SDX RESOURCES, INC.
NO. 38-DIINN B FEDERAL

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS
THE ROSWELL DISTRICT, BLM

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES	
Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

- 400 foot intervals.
- _____ foot intervals.
- locations staked in the field as per spacing intervals above.
- locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

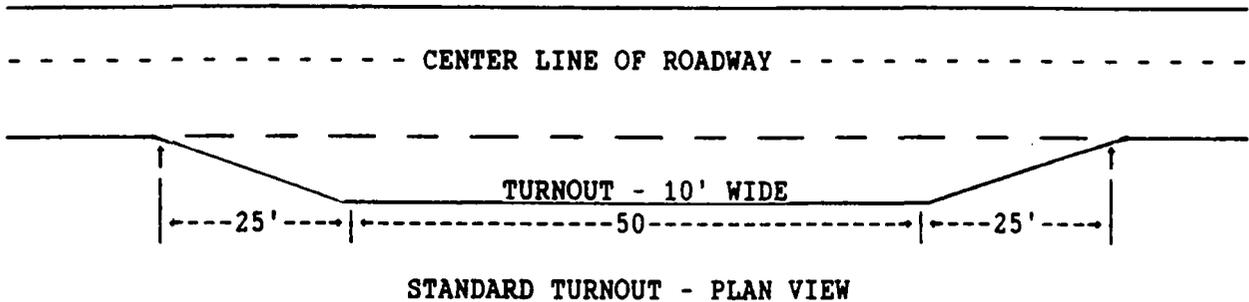
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Example: 4% slope: spacing interval = $\frac{400}{4} + 100 = 200$ feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

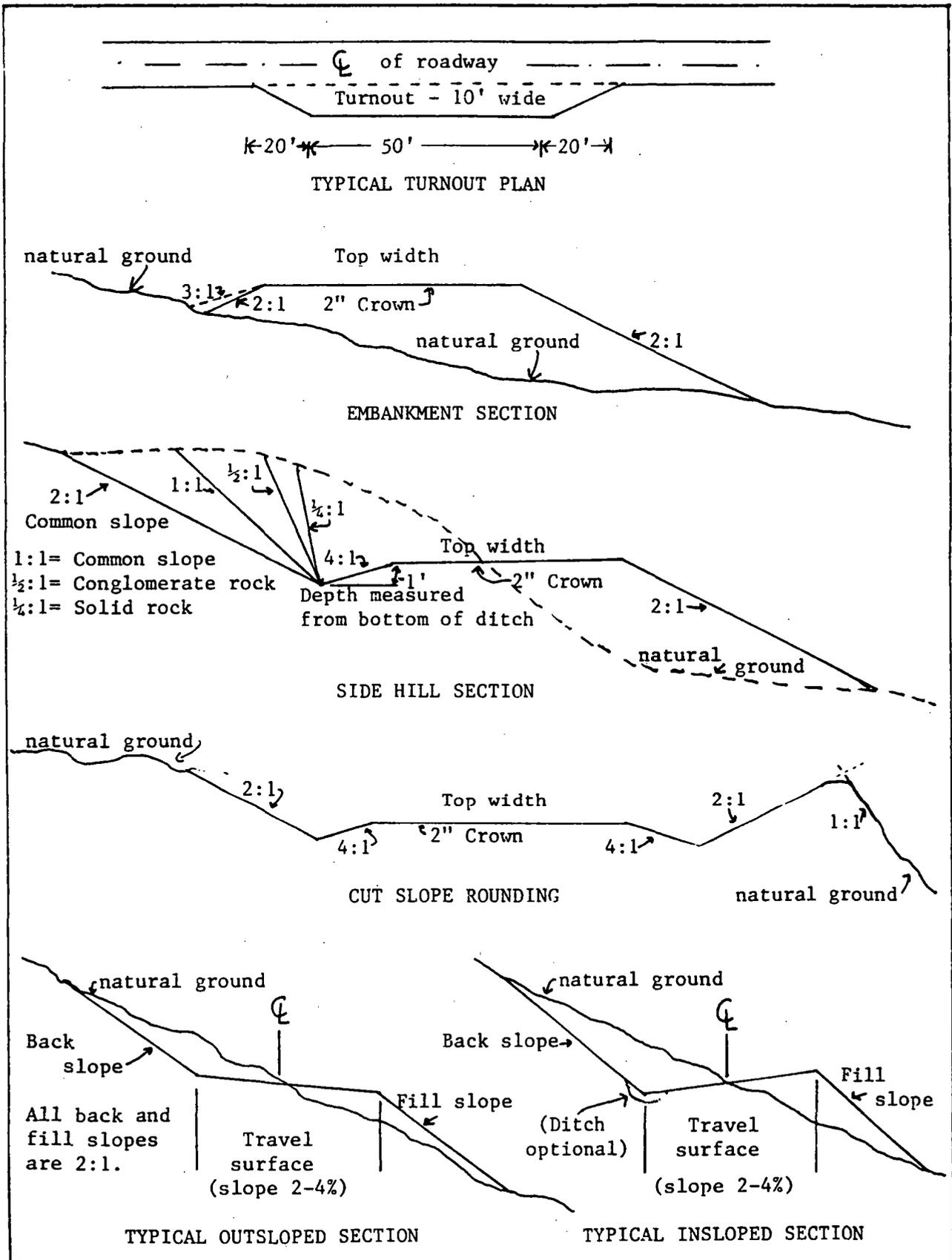
9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS: *None.*

FIGURE 1: CROSS-SECTIONS AND PLANS FOR TYPICAL ROAD CONSTRUCTION REPRESENTATIVE OF BLM RESOURCE, AND HIGHER CLASS, ROADS.

(Travel way, top width, driving surface, and travel surface are synonymous.)



BLM Serial Number NM-54184
Company Reference SDX RESOURCES, INC.
NO. 38-DUNN B FEDERAL

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES
IN THE ROSWELL DISTRICT, BLM

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines," Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

(over)

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations: *None*.

BLM Serial Number NM-54184
Company Reference SDX RESOURCES, INC.
NO. 38-DUNN B FEDERAL

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES
IN THE ROSWELL DISTRICT, BLM

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
 - a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

(over)

b. Activities of other parties including, but not limited to:

- (1) Land clearing.
- (2) Earth-disturbing and earth-moving work.
- (3) Blasting.
- (4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" - Carlsbad Canyon, Munsell Soil Color No. 2.5Y 6/2 (formerly Sandstone Brown); designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. Special Stipulations: *None.*

(March 1989)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X], DEEPEN [], PLUG BACK []
b. TYPE OF WELL: OIL WELL [X], GAS WELL [], OTHER [], SINGLE ZONE [], MULTIPLE ZONE [X]
2. NAME OF OPERATOR: SDX Resources, Inc.
3. ADDRESS OF OPERATOR: P.O. Box 5061, Midland, TX, 79704
4. LOCATION OF WELL: 1330' FNL, 2583' FEL, unit G, Sec. 10
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 15 miles S.E. of Artesia, N.M.
16. NO. OF ACRES IN LEASE: 1240
17. NO. OF ACRES ASSIGNED TO THIS WELL: 40
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 886'
20. ROTARY OR CABLE TOOLS: rot.
22. APPROX. DATE WORK WILL START: 12/1/94

5. LEASE DESIGNATION AND SERIAL NO.: NM54184
6. IF INDIAN, ALLOTTED OR TRIBE NAME: N.A.
7. UNIT AGREEMENT NAME: N.A.
8. FARM OR LEASE NAME: Dunn-B Fed.
9. WELL NO.: 38
10. FIELD AND POOL, OR WILDCAT: Art-Qn-Gb-Sa
11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA: Sec. 10 T18S R28E
12. COUNTY OR PARISH: Eddy
13. STATE: N.M.

PROPOSED CASING AND CEMENTING PROGRAM

Table with 8 columns: HOLE SIZE, CASING SIZE, WEIGHT/FOOT, GRADE, THREAD TYPE, SETTING DEPTH, QUANTITY OF CEMENT. Includes rows for 12-1/4" and 7-7/8" hole sizes.

Plan to drill a 12-1/4" hole to approx. 350'; set 8-5/8" surface casing. Circulate "C" cement. Drill 7-7/8" hole to TD. Run open hole logs. Run 5-1/2" casing and circulate cement. Perforate the San Andres-Grayburg -Queen and stimulate as necessary for optimum production. Specific programs as per Onshore Oil and Gas Order #1 are outlined in the following attachments:

Drilling Program:

Surface Use and Operating Plan

Exhibit #1 Blowout Preventer Equipment

#2 Location and Elevation Plat

#3 Planned Access Roads

#4 One Mile Radius Map

#5 Planned Production Facilities and Access

#6 Drilling Rig Layout

Approval Subject to General Requirements and Special Stipulations Attached

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED: [Signature] TITLE: Engr. DATE: 10/27/94

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY: [Signature] TITLE: AREA MANAGER DATE: 12/7/94

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON

District I
 PO Box 1980, Hobbs, NM 88240-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

Form C-102
 Revised February 10, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name <i>Artesia - Qm - Gb - Sa.</i>	
4 Property Code		5 Property Name DUNN B FEDERAL			6 Well Number 38
7 OGRID No.		8 Operator Name SDX RESOURCES, INC.			9 Elevation 3627.

10 Surface Location

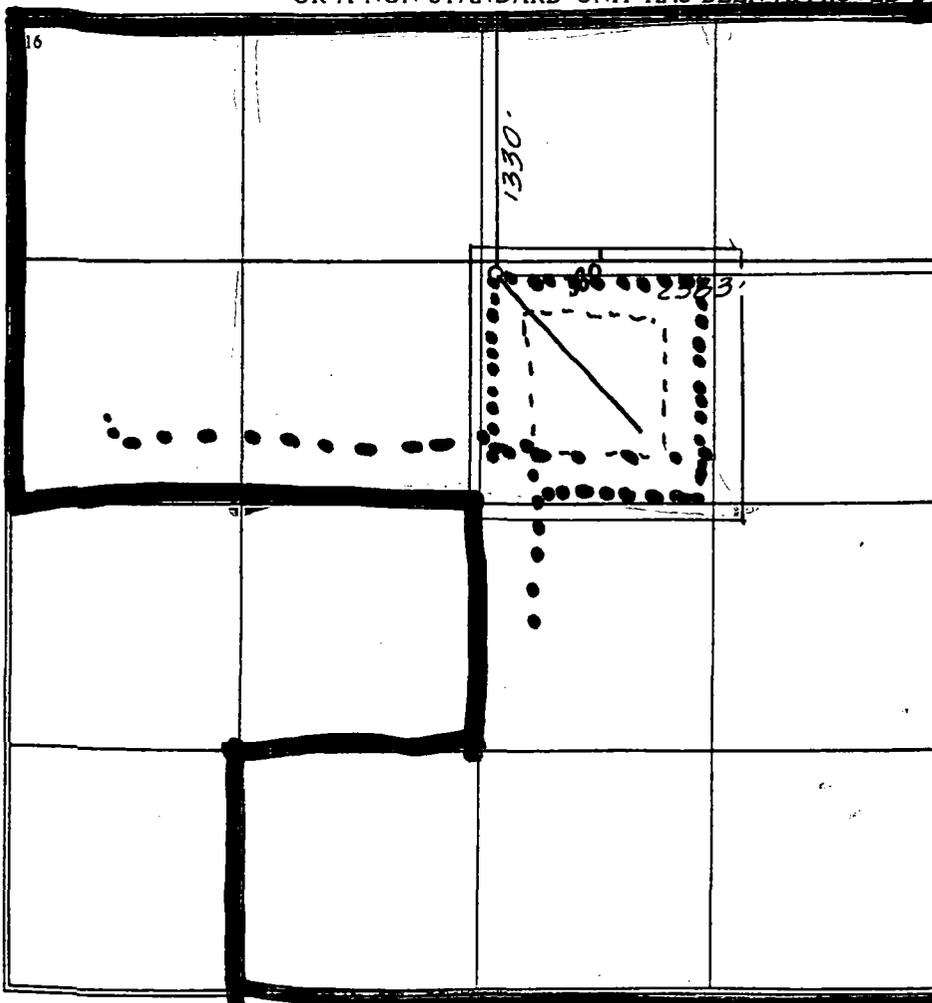
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	18S	28E		1330	NORTH	2583	EAST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres <i>40</i>	13 Joint or Infill	14 Consolidation Code	15 Order No.
---------------------------------	--------------------	-----------------------	--------------

NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Chuck Morgan
 Signature
 Chuck Morgan
 Printed Name
 Engr.
 Title
 10/28/94
 Date

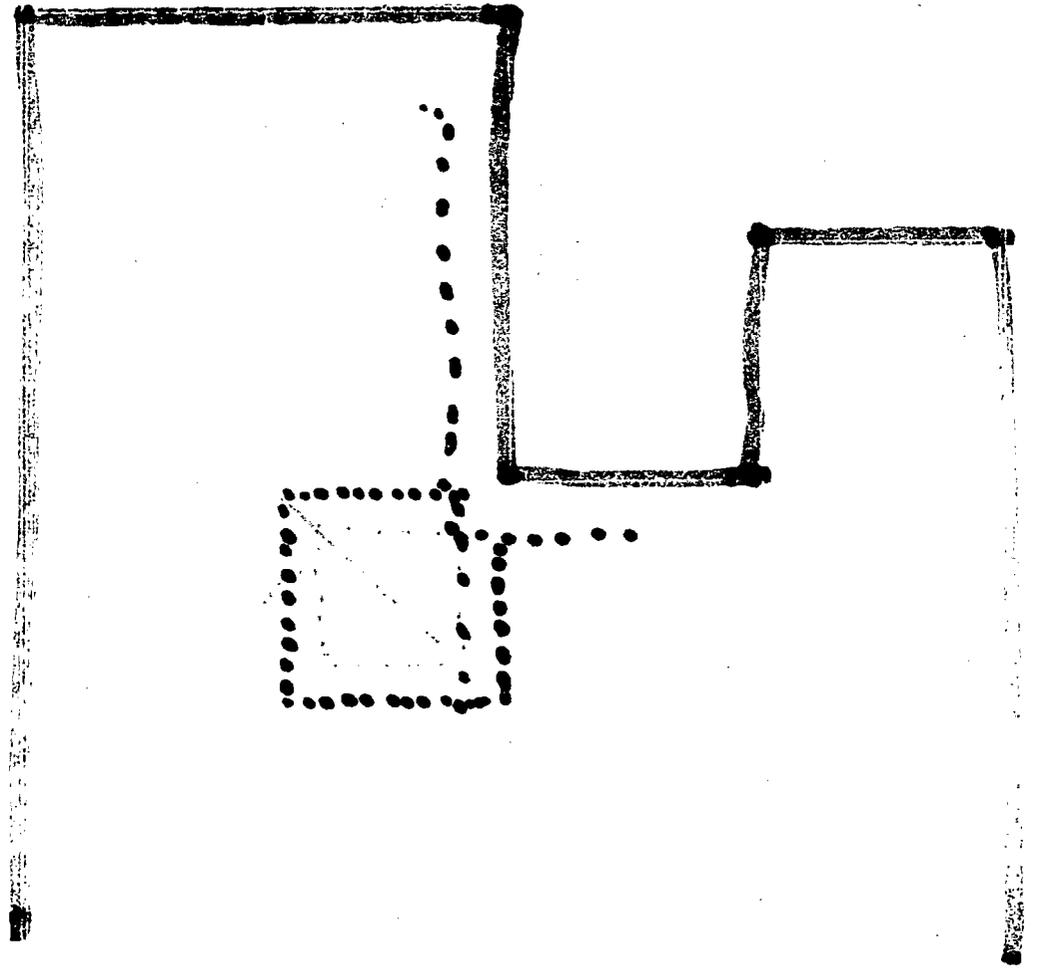
18 SURVEYOR CERTIFICATION

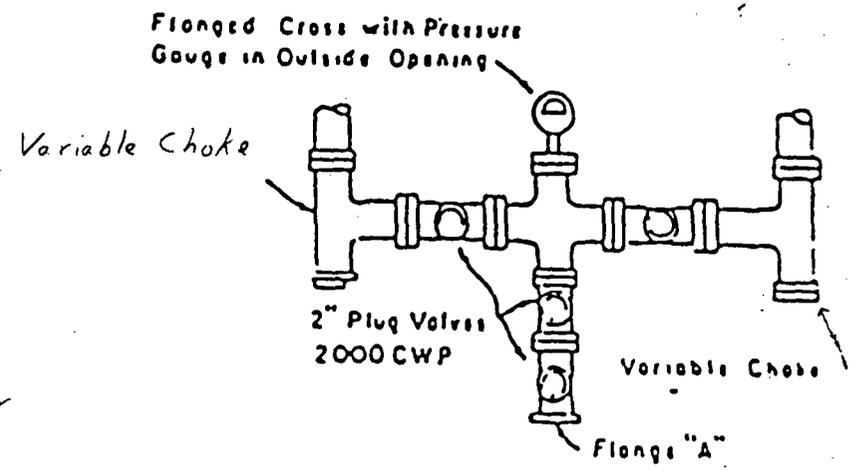
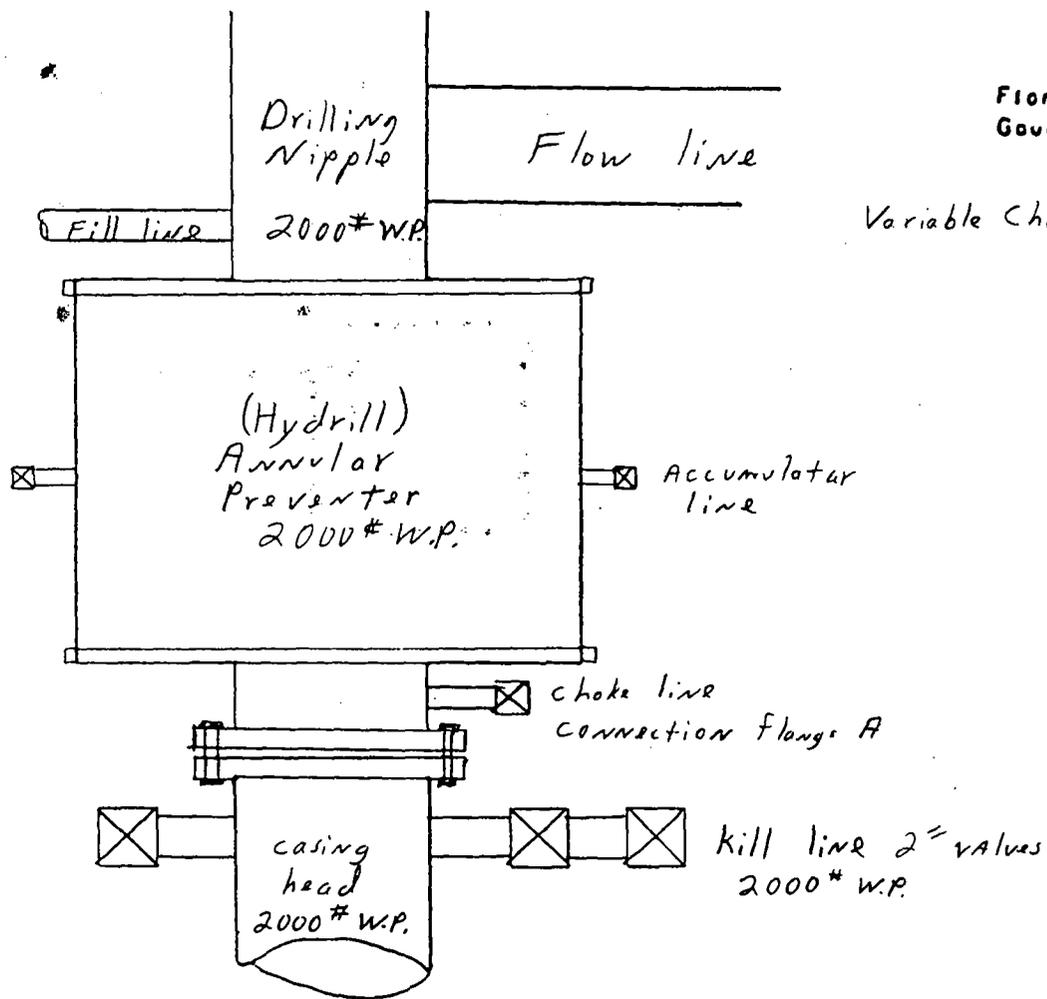
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 21, 1994
 Date of Survey

DAN R. REDD
 Registered Professional Surveyor
 NEW MEXICO
 5412
 REGISTERED PROFESSIONAL SURVEYOR

Certificate Number
 NM REAPS 5412





PLAN VIEW-CHOKE MANIFOLD

Exhibit #1

DRILLING PROGRAM

SDX RESOURCES, INC.
Dunn B Federal #38
1330' FNL & 2583' FEL
Unit G Sec. 10, T18S, R28E
Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Top of Salt	550'
Base of Salt	675'
7-Rivers	1050'
Queen	1690'
Grayburg	2225'
S. A.	2580'

3. Estimated Depth of Anticipated Fresh Water, Oil or Gas:

Water Sands	200'-250'	Fresh H2O
7-Rivers	1200'	Oil & Gas
Queen	1800'	Oil & Gas
Grayburg	2300'	Oil & Gas
S. A.	2700'+	Oil & Gas

Fresh water sands are protected by running 8 5/8" casing to a minimum depth of 350' and circulating cement. All other zones will be isolated by running 5 1/2" production casing and circulating cement.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csq</u>	<u>Weight Grade Jt Cond Type</u>
12 1/4"	0-350'	8 5/8"	24#, J-55, New
7 7/8"	0-TD	5 1/2"	14#-15.50#, J-55, Used

Cement Program:

8 5/8" surface casing: Cemented to surface with 250 sx of Class C with 2% CaCl and 1/4 #/sx Flocele and 100 sx of Class "C" with 2% CaCl.

5 1/2" production casing: Cemented with 300 sx of 50/50 Class "C" POZ with 6# salt/sx and 6% Halad 322 and 400 sx of Lite "C" with 3# salt/sx and 1/4 #/sx flocele. This should circulate cement to the surface.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a bag-type (hydril) preventer (2000 psi WP). Unit will be hydraulically operated. BOP will be nipped up on the 8 5/8" surface casing and used continuously until TD is reached. BOP and accessory equipment will be tested to 1000 psi before drilling out of surface casing. A 2" kill line and a 2" choke line will be included in the drilling spool. Other accessories to the BOP equipment will include a kelly cock.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of fresh water and brine water mud system. The applicable depth and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Waterloss (cc)</u>
0-350'	Fresh water (spud)	8.5	40 - 45	N/C
350-TD	Brine water SWG, Starch	10.0	30	24

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A. A kelly cock will be kept in the drill string at all times.
- B. A mud logging unit complete with H₂S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 1000' to TD.

8. Logging, Testing and Coring Program:

- A. Drillstem tests will be run on the basis of drilling shows.
- B. The electric logging program will consist of GR-Dual Laterolog and GR-Compensated Neutron-Density from TD to surface casing.
- C. Conventional coring may be performed in select intervals in the Queen-Grayburg and/or San Andres.
- D. Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressure or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 94 F and estimated maximum bottom-hole pressure (BHP) is 1200 psig. No abnormal concentrations or hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. All H₂S operation precautions will be followed (see attached H₂S drilling operations plans). No major loss circulation zones have been reported in offsetting wells.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is December 1, 1994. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

SDX Resources, Inc.
Dunn B Federal #38
1330' FNL & 2583' FEL
Unit G Sec. 10, T18S, R28E
Eddy County, New Mexico

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support system.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial safety session just prior to commencing operations on the well. The initial session shall include a review of the site's specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet.

1. Well Control Equipment:
 - A. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - B. Auxiliary equipment to include: annular preventer.
2. Protective equipment for essential personnel:
 - A. Mark II Surviveair 30-minute units located in the dog house.
3. H2S detection and monitoring equipment:
 - A. 1 - portable H2S monitor positioned on location for best coverage and response.
 - B. Mud logging trailer shall have H2S monitoring equipment.
4. Visual warning systems:
 - A. Guy lines will be flagged and a wind sock will be positioned on location.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location.

5. Mud program:

The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices, will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service as necessary.

7. Communication:

Radio communications in company vehicles including cellular telephone and 2-way radio.

8. Well Testing:

No DST's are planned.

SURFACE USE AND OPERATING PLAN

SDX RESOURCES, INC.
Dunn B Federal #38
1330' FNL & 2583' FEL
Unit G Sec. 10, T18S R28E
Eddy County, New Mexico

1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #2. It was staked by Dan Reddy, Carlsbad, New Mexico.
- B. All roads to the location are shown in Exhibit #3. The existing roads are labeled and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the on-site inspection.
- C. Directions to location: Go east 14 miles from Artesia, New Mexico on Hwy 62/180, turn south on Hwy 360, go to MP22 1/4 and turn west at SDX DUNN B sign. Take right fork and go approximately 1/4 mile. Take a right again and follow road 1-1/2 mile, turn left and follow road to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

Exhibit #3 shows the existing road.

Exhibit #5 shows the new access road to be constructed. The road will be constructed as follows:

- A. The maximum width of the running surface will be 15'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the on-site inspection.

- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguards, gates, low-water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.
- F. The proposed access road as shown in Exhibit #3 has been center-line flagged by Dan Reddy, Carlsbad, New Mexico.

3. Location of Existing Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well.

4. Location of Existing and/or Proposed Facilities:

- A. SDX Resources, Inc. operates two separate production facilities on this lease. They are as follows:

Dunn B Fed. - Tank Battery - NW/4 NW/4 of Sec. 11
Dunn B Fed. - Satellite Tank Battery - Unit Letter
O, Sec. 12.

- B. If the well is productive, contemplated facilities will be as follows:
 - 1. 2" SDR - 11 plastic flow line will be laid to an existing flowline shown in Exhibit #5.
 - 2. Any additional construction materials will be purchased from contractors.
 - 3. Power will be required if the well is productive. Proposed power line right of way is shown in Exhibit #5.
- C. If the well is productive, rehabilitation plans are as follows:
 - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after the well is complete).

2. Topsoil removed from the drill site will be used to re-contour the pit area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

D. In the event that production is established flow line right of way has been staked where necessary by Dan Reddy and is shown in Exhibit #5.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud systems as outlined in the drilling program. The brine water will be obtained from commercial water stations in the area and hauled to the location by transport truck over the existing and proposed access roads shown in Exhibit #3. A commercial fresh water source is nearby and facile will be laid along existing roads and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and any new access road will be obtained from the drilling pits and/or on site when possible. Any additional caliche will be obtained from approved caliche pits. All roads and pads will be constructed of 6" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

B. Drilling fluids will be contained in plastic lined pits. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit, approximately 80' x 55' x 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be plastic lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water.

- C. Water produced from the well during completion may be disposed into the reserve pit after the well is permanently placed on production.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash trailer by a contractor. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 90 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill, and as weather permits, the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use.

8. Ancillary Facilities:

None

9. Well Site Layout:

- A. The drill pad layout is shown in Exhibit #6. Dimensions of the pad and pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Because the pad is almost level no major cuts will be required.
- B. Exhibit #6 shows the planned orientation for the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around, parking areas and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with high-quality plastic sheeting (5-7 mil thickness).

10. Plan for Restoration of the Surface:

- A. Upon completion of the proposed operation, if the well is to be abandoned, the pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible.

Pit lining will be buried. All trash and garbage will be hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from any area of the original drill site not needed for production operations or facilities will be removed and used for construction of thicker pads. Any additional caliche required for facilities will be obtained from an approved caliche pit. Topsoil removed from the drill site will be used to re-contour the pit area and any unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The wellsite and lease is located entirely on Federal surface.

12. Other Information:

- A. The area around the well site is grassland. The vegetation is native scrub grasses with abundant catclaw and mesquite.
- B. There is no permanent or live water in the immediate area.
- C. An Archaeological Survey has been requested and will be forwarded to your office in the near future.

13. Lessee's and Operator's Representative:

The SDX Resources, Inc. representative for assuring compliance with the surface use plan is as follows:

Chuck Morgan
SDX Resources, Inc.
P. O. Box 1302
Artesia, NM 88210
505-748-9724 Office
505-748-9814 Home

Certification:

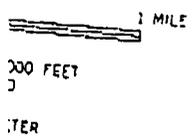
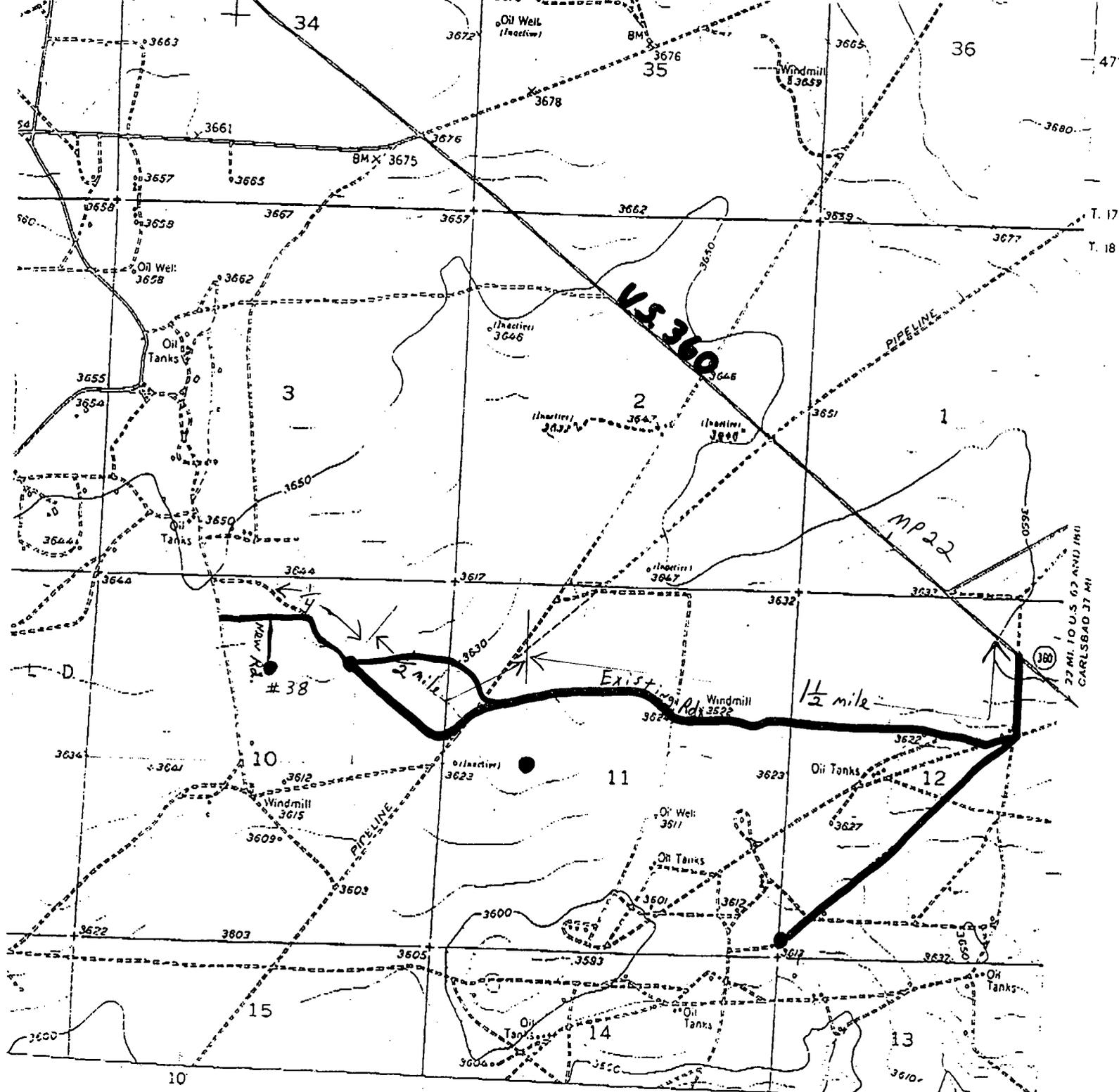
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by SDX Resources, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved.

Date: 11/2/94

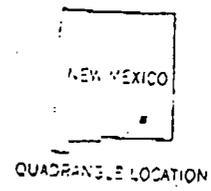
Signed: SDX RESOURCES, INC.



John D. Pool
Vice President



SDX RESOURCES, INC.
Access Road



ROAD CLASSIFICATION

Heavy-duty	—————	Light-duty	—————
Medium-duty	—————	Unimproved dirt
U. S. Route	⊠	State Route	○

WASHINGTON 25, D.C.

RED LAKE, N. MEX.
N3245—W10407.5/7.5

1955

Exhibit #3

INTERIOR GEOLOGICAL SURVEY, WASHINGTON, D. C. 1956-48
M. A. 3173

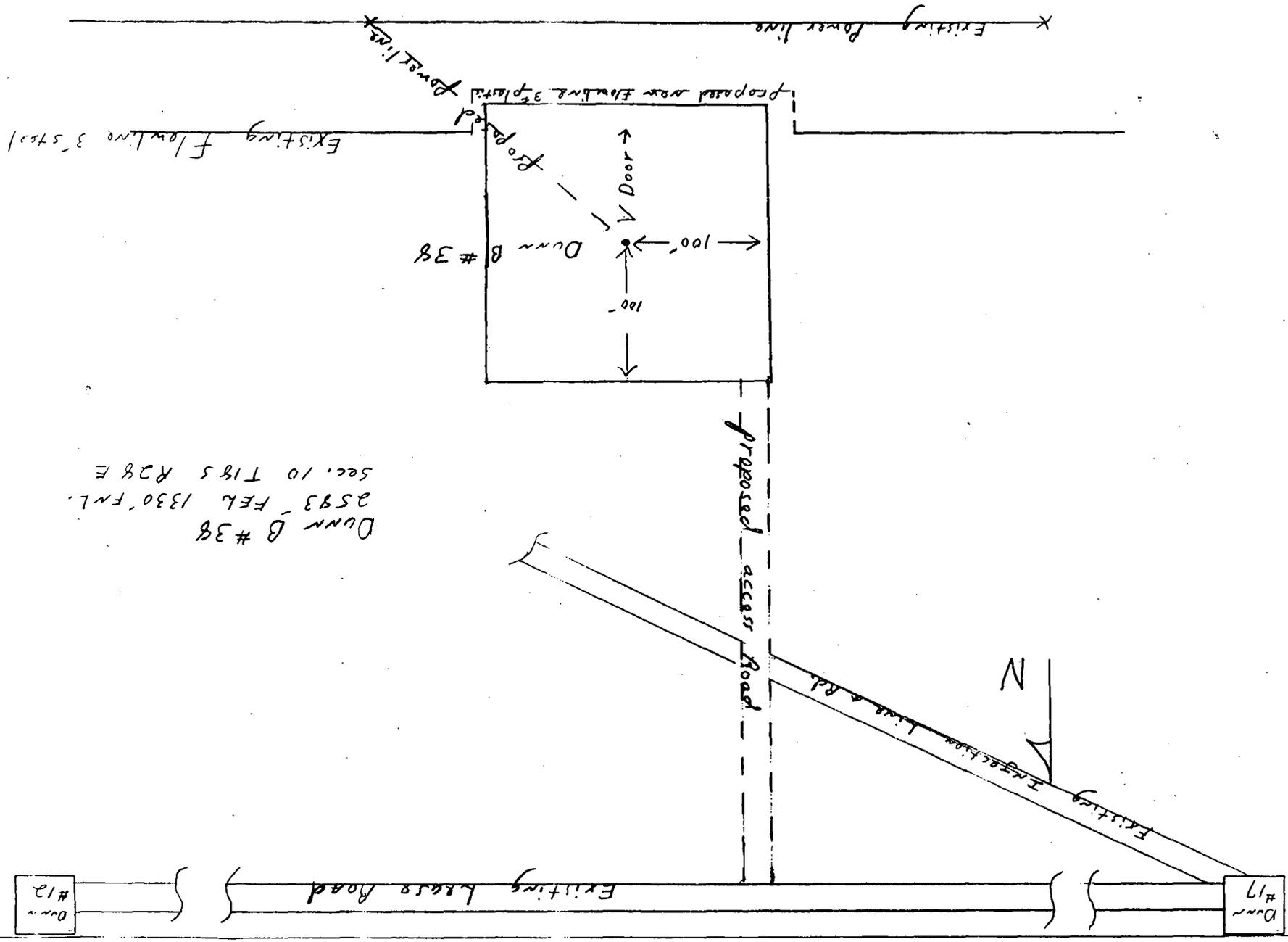
32°45'
104°07'30"

104°07'30"



42-381 50 SHEETS 5 SQUARE
 42-382 100 SHEETS 5 SQUARE
 42-389 200 SHEETS 5 SQUARE
 WWW.NECON.COM

Exh.b.t #5

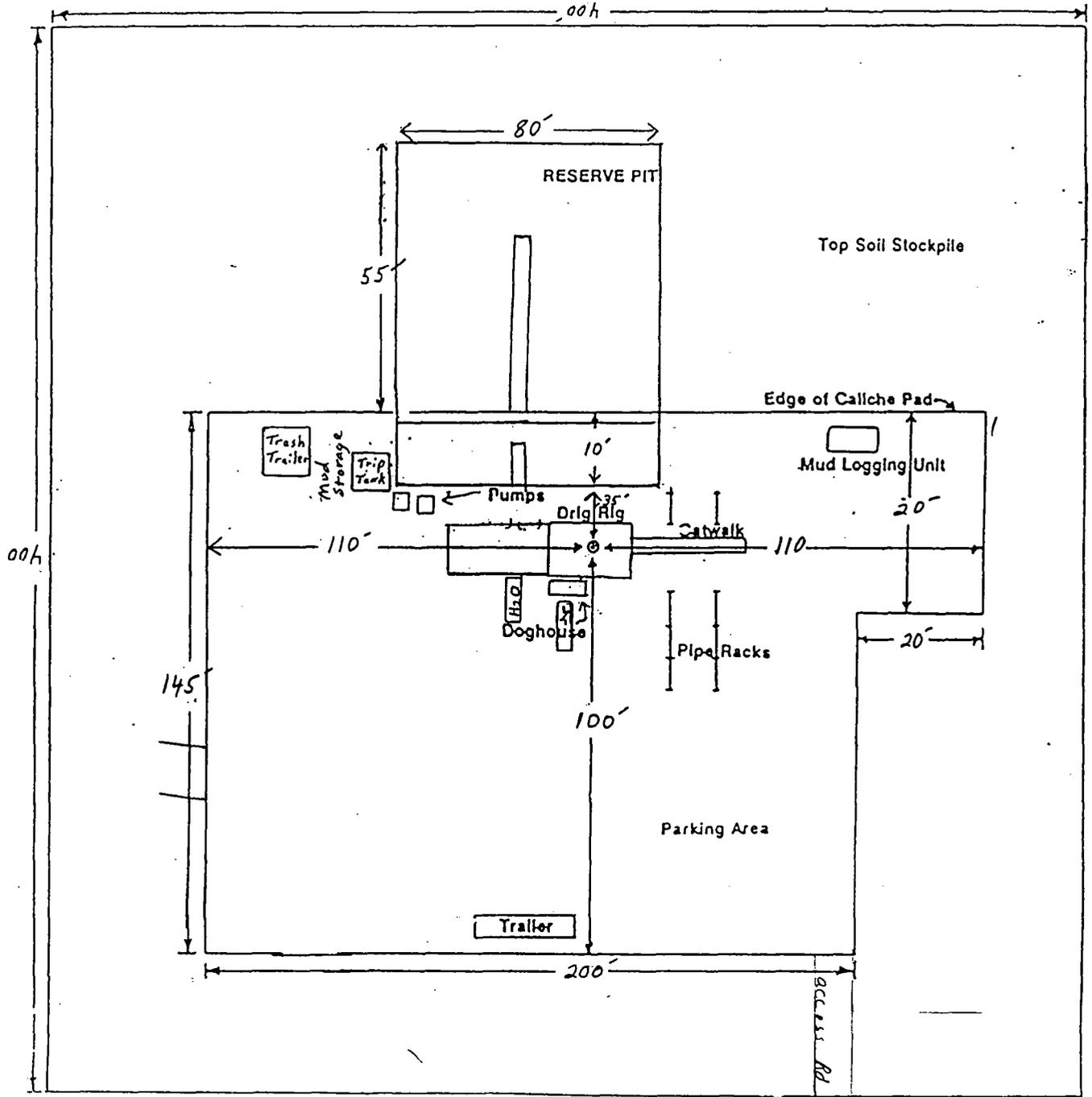


Dunn B #38
 2593 FEL 1330' FNL
 Sec. 10 T185 R28 E

SDX RESOURCES, INC.

Dunn B #38

Exhibit #6



NOTICE OF STAKING

(Not to be used in place of Application for Permit to Drill Form 3160-3)

1. Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> (Specify)		6. Lease Number NM-54184	
2. Name of Operator: SDX RESOURCES, INC.		7. If Indian, Allottee or Tribe Name	
3. Name of Specific Contact Person: CHUCK MORGAN		8. Unit Agreement Name	
4. Address & Phone No. of Operator or Agent 511 W. OHIO AVE./SUITE 601 MIDLAND, TEXAS 79701 505 365-7691		9. Farm or Lease Name DUNN B FEDERAL	
5. Surface Location of Well 1330' FNL 2583' FEL Attach: a) Sketch showing road entry into pad, pad dimensions, and reserve pit. b) Topographical or other acceptable map showing location, access road, and lease boundaries.		10. Well No. 38	
		11. Field or Wildcat Name	
		12. Sec., T., R., M., or Bk and Survey or Area SEC. 10, T18S, R28E	
15. Formation Objective(s) QUEEN/GRAYBURG	16. Estimated Well Depth 4000'	13. County, Parish or Borough EDDY	14. State NEW MEXICO

17. Additional Information (as appropriate; must include surface owner's name, address, and telephone number).

BLM-CARLSBAD OFFICE

18. Signed: Jan R. Kelly Title NM PROFESSIONAL ENGINEER & LAND SURVEYOR Date 10/28/94

Note: Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

Operators must consider the following prior to the onsite:

- a) HZS Potential
- b) Cultural Resources (Archeology)
- c) Federal Right of Way or Special Use Permit

ARCHAEOLOGICAL SURVEY of the SDX RESOURCES, INC.
DUNN "B" FEDERAL WELL NO. 38 and ACCESS ROAD R/W
T18S, R28E, SECTION 10 (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
[1330 FNL, 2583 FEL]. EDDY COUNTY, NEW MEXICO

FEDERAL LAND SURFACE
[U.S.G.S. 7.5 minute series, RED LAKE, NEW MEXICO, 1955]

ASC Report 94-192

and James V. Sciscenti, Project Archaeologist

ARCHAEOLOGICAL SURVEY CONSULTANTS
P.O. Drawer D, Roswell, New Mexico 88202
[505] 623-5012

PERMIT NO.: 18-2920-93-G

November 2, 1994

Prepared for:

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

Attention: Chuck Morgan

Distribution:

SDX Resources, Inc., (1)
BLM - Carlsbad Resource Area (2)
Sciscenti (1)

ARCHAEOLOGICAL SURVEY CONSULTANTS

CULTURAL RESOURCES EXAMINATION

on lands administered by
the Department of the Interior
Bureau of Land Management,
Roswell District, New Mexico

ASC PERMIT NO.: 18-2920-93-G.
ASC Job No.: 94-192. SDX Resources, Inc., Dunn "B" Fed. Well No. 38 & Access Road R/W

1. **ABSTRACT:** intensive archaeological survey of the SDX Resources, Inc., Dunn "B" Federal Well No. 38; a well pad (400 ft. sq., 3.67 acres) and access road R/W (415 ft. long x 100 ft. wide, with a 150 ft. square delta, 1.12 acres), with a total federal land surface of 4.79 acres, were inspected for cultural remains.

Archaeological survey of the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W did not reveal any cultural resources. Therefore, archaeological CLEARANCE for the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W is RECOMMENDED.

2. **LEGAL LOCATION:** T18S, R28E, Section 10, SW $\frac{1}{4}$ NE $\frac{1}{4}$ (1330 FNL, 2583 FEL). **ACCESS ROAD R/W LOCATION:** T18S, R28E, Section 10 (NE $\frac{1}{4}$ NW $\frac{1}{4}$). Eddy County, New Mexico.

Map Reference: U.S.G.S. 7.5 minute series, RED LAKE, NEW MEXICO, 1955.
Land Status: BLM, Roswell District, Carlsbad Resource Area, New Mexico.

3. **PROJECT DESCRIPTION:** a well pad ^{40,000} (400 ft. sq., 3.67 acres) and access road R/W (415 ft. long x 100 ft. wide, with a 150 ft. square delta, 1.12 acres), with a total federal land surface of 4.79 acres, were inspected for cultural remains.

TOPOGRAPHY: situated on the SE slope of a SE projecting ridge midway between 2 SSE trending draws, within an area of shallow loam soils, with high caliche float, particularly in the NW, NE, and parts of the SE quadrant of the well pad, and along the access road R/W. Relief throughout the project area is very low, with the exception of pseudo-coppice and coppice dunes of low height. Surface visibility is very high. **Soils:** Simona-Bippus complex. **Permanent Water:** Pecos River, ca. 8.6 miles W/SW. **Potential Water:** Palmilla Draw, ca. 1.5 miles SSE. **Elevation:** 3623 ft. to 3641 ft. **Slope:** 0.56° to 1.64°. **Aspect:** 140° to 180°. **Lithic Resource Material:** not locally available. **Vegetation:** grassland formation, desert grassland or scrub-grass scrub disclimax community.

4. **EXAMINATION PROCEDURE:** straight & zig-zag transects, spaced no greater than 15 metres apart. **Work Hrs. on Ground:** 1.0. **Area Delineation:** staked by client. **Visibility:** ground, ca. 75% to 90%; weather, sunny.

5. **FINDINGS:** ARMS records indicate the prior recording of LA 35489 & LA 105112 in Section 10 [T18S, R28E]; the sites will not be disturbed by construction activity.

Archaeological survey of the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W did not reveal any cultural resources.

6. **RECOMMENDATIONS:** archaeological CLEARANCE for the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W is RECOMMENDED.

Date of Examination: November 1, 1994

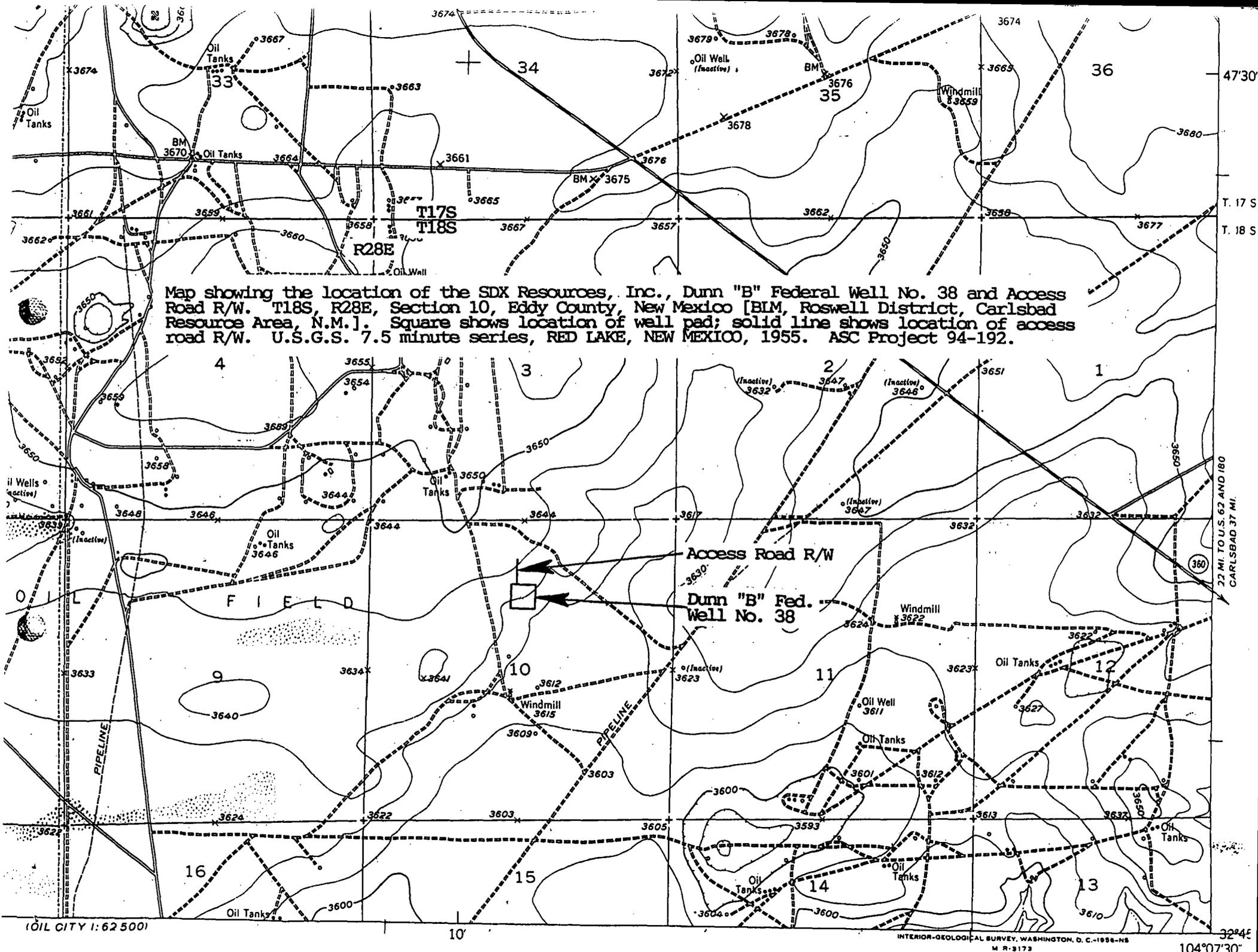
Project Archaeologist:

D. M. Griffiths pp. J.V. Sciscenti.

Principal Investigator:

D. M. Griffiths.

Map showing the location of the SDX Resources, Inc., Dunn "B" Federal Well No. 38 and Access Road R/W. T18S, R28E, Section 10, Eddy County, New Mexico [BLM, Roswell District, Carlsbad Resource Area, N.M.]. Square shows location of well pad; solid line shows location of access road R/W. U.S.G.S. 7.5 minute series, RED LAKE, NEW MEXICO, 1955. ASC Project 94-192.



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3202
Order No. R-2869

APPLICATION OF INTERNATIONAL OIL & GAS
CORPORATION FOR A WATERFLOOD PROJECT,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 27, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 11th day of February, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, International Oil & Gas Corporation, seeks permission to institute a waterflood project in the Artesia Pool by the injection of water into the Queen, Grayburg, and San Andres formations through nine injection wells in Sections 10 and 11, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

CASE No. 3202
Order No. R-2869

IT IS THEREFORE ORDERED:

(1) That the applicant, International Oil & Gas Corporation, is hereby authorized to institute a waterflood project in the Artesia Pool by the injection of water into the Queen, Grayburg, and San Andres formations through nine wells at the following-described locations in Eddy County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

WELLS	LOCATION	SECTION
International-Yates-Dunn "B" Federal		
Well No. 13	NE/4 NE/4	10
Well No. 17	NE/4 NW/4	10
Well No. 15	SW/4 NW/4	10
Well No. 19	SW/4 NE/4	10
Well No. 24	NE/4 SE/4	10
Well No. 18	NE/4 NW/4	11
Well No. 21	SW/4 NW/4	11
Well No. 29	SW/4 NE/4	11
Well No. 30 (undrilled)	NE/4 SW/4	11

(2) That the subject waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

S E A L

esr/

A. L. PORTER, Jr., Member & Secretary

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3747
Order No. R-2869-A

APPLICATION OF DEPCO, INC., FOR AN
AMENDMENT TO ORDER NO. R-2869, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 17, 1968, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 29th day of April, 1968, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That by Order No. R-2869, International Oil & Gas Corporation was authorized to institute a waterflood project in the Artesia Pool by the injection of water into the Queen, Grayburg, and San Andres formations through nine wells in Sections 10 and 11, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicant, Depco, Inc., as successor to International Oil & Gas Corporation, seeks the amendment of said Order No. R-2869 to substitute the following-described water injection wells:

EDDY COUNTY, NEW MEXICO
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

<u>WELL</u>	<u>LOCATION</u>	<u>SECTION</u>
Dunn "B" No. 5	NE/4 SE/4	11
Dunn "A" No. 1	SW/4 NE/4	12
Dunn "B" No. 6	SW/4 SW/4	12

in lieu of the following-described wells which were included in the originally-authorized water injection wells:

EDDY COUNTY, NEW MEXICO
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

<u>WELL</u>	<u>LOCATION</u>	<u>SECTION</u>
Dunn "B" No. 15	SW/4 NW/4	10
Dunn "B" No. 19	SW/4 NE/4	10
Dunn "B" No. 21	SW/4 NW/4	11

(4) That approval of the subject application will not violate correlative rights and should increase the efficiency of the waterflood project and result in greater ultimate recovery of oil, thereby preventing waste.

IT IS THEREFORE ORDERED:

(1) That Order No. R-2869 is hereby amended by deleting from the water injection wells authorized therein the following-described wells:

EDDY COUNTY, NEW MEXICO
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

<u>WELL</u>	<u>LOCATION</u>	<u>SECTION</u>
Dunn "B" No. 15	SW/4 NW/4	10
Dunn "B" No. 19	SW/4 NE/4	10
Dunn "B" No. 21	SW/4 NW/4	11

and substituting in lieu thereof as water injection wells the following-described wells:

-3-

CASE No. 3747

Order No. R-2869-A

EDDY COUNTY, NEW MEXICO
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM

<u>WELL</u>	<u>LOCATION</u>	<u>SECTION</u>
Dunn "B" No. 5	NE/4 SE/4	11
Dunn "A" No. 1	SW/4 NE/4	12
Dunn "B" No. 6	SW/4 SW/4	12

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/



OIL CONSERVATION DIVISION

January 17, 1995

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

Attention: Chuck Morgan

Administrative Order NSL-3465

Dear Mr. Morgan:

Reference is made to your application dated October 26, 1994 for eleven unorthodox oil well locations for the purpose of completing an efficient injection/production pattern on your Dunn "B" Federal Lease within the International Oil & Gas Queen-Grayburg-San Andres Waterflood Project Area, established by Division Order No. R-2869 dated February 11, 1965.

These eleven wells are to be located in Township 18 South, Range 28 East, NMPM, Artesia-Queen-Grayburg-San Andres Pool, Eddy County, New Mexico.

<i>Name & Well No.</i>	<i>Footage Location</i>	<i>Section</i>	<i>Unit</i>	<i>Dedicated 40-Acre Tract</i>
38	1330' FNL -2583' FEL	10	G	SW/4 NE/4
39	1319' FNL - 60' FEL	10	A	NE/4 NE/4
40	330' FNL - 1309' FWL	10	C	NE/4 NW/4
41	330' FNL - 2583' FEL	10	B	NW/4 NE/4

VILLAGRA BUILDING - 408 Galisteo

Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830

Park and Recreation Division
P.O. Box 1147 87504-1147
827-7465

2040 South Pacheco

Office of the Secretary
827-5950

Administrative Services
827-5925

Energy Conservation & Management
827-5900

Mining and Minerals
827-5970

Oil Conservation
827-7131

<i>Name & Well No.</i>	<i>Footage Location</i>	<i>Section</i>	<i>Unit</i>	<i>Dedicated 40-Acre Tract</i>
42	330' FNL - 1192' FEL	10	A	NE/4 NE/4
43	1330' FNL - 1509' FWL	10	F	SE/4 NW/4
44	2310' FNL - 1309' FWL	10	F	SE/4 NW/4
45	2310' FNL - 2583' FEL	10	G	SW/4 NE/4
46	2500' FNL - 1330' FEL	10	G	SW/4 NE/4
47	2595' FSL - 10' FEL	10	I	NE/4 SE/4
50	1310' FNL - 1300' FWL	11	D	NW/4 NW/4

By the authority granted me under the provisions of General Rule 104 F.(1), the above-described unorthodox oil well locations are hereby approved:

Sincerely,



William J. LeMay
Director

WJL/MES/kv

cc: Oil Conservation Division - Hobbs
US Bureau of Land Management - Carlsbad

APPLICATION OF DEPCO, INC.
TO EXPAND ITS DUNN COOPERATIVE
WATER FLOOD PROJECT IN ARTESIA
POOL IN EDDY COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER WFX NO. 381

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order No. R-2869-A, Depco, Inc., has made application to the Commission on October 16, 1972, for permission to expand its Dunn Cooperative Water Flood Project in the Artesia Pool, Eddy County, New Mexico.

NOW, on this 31st day of October, 1972, the Secretary-Director finds:

1. That application has been filed in due form.
2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
3. That no objection has been received within the waiting period as prescribed by Order No. R-2869-A.
4. That the proposed injection wells are eligible for conversion to water injection under the terms of Order No. R-2869-A.
5. That the proposed expansion of the above-referenced water flood project will not cause waste nor impair correlative rights.
6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Depco, Inc., be and the same is hereby authorized to inject water into the Queen, Grayburg, San Andres formation through the following described wells for purposes of secondary recovery, to wit:

Dunn "B" Well No. 8 located in Unit O of Section 12,
Dunn "B" Well No. 15 located in Unit E of Section 10,

