

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: SDX Resources, Inc.
Address: PO Box 5061, Midland, TX 79704
Contact party: Chuck Morgan Phone: 915/685-1761
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☒ yes ☐ no
If yes, give the Division order number authorizing the project R-3311.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- * VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- * VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Bonnie Atwater

Title: Regulatory Tech.

Signature: Bonnie Atwater

Date: 11/26/97

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Application for Authorization to Inject
SDX Resources Inc.

Artesia Unit #1
Unit L, Sec. 26, T17S, R28E
1650' FSL 460' FWL
Eddy Co., New Mexico

- I. SDX plans to convert this well to an injection well in the Grayburg – San Andres formation.
- II. Operator: SDX Resources Inc.
P.O. Box 5061
Midland, TX 79704
- III. Well Data: See Attachment A.
- IV. This is an expansion of an existing project.
Division Order No.: R-3311
- V. See Attachment B1 & B2 (1/2 & 2 mile map).
- VI. See Attachment C.
- VII. (1.) Proposed Average Daily Injection Volume: 200 BWPD
Maximum Daily Injection Volume: 500 BWPD
(2.) This will be a closed system.
(3.) Proposed Average Injection Pressure: 400 psi
Proposed Maximum Injection Pressure: 1200 psi
(4.) Re-inject produced water into the same zone. Water analysis attached (Attachment D).
(5.) Not Applicable.
- VIII. (1.) The proposed injection interval is the Grayburg-San Andres through existing perms 2072' – 2082'. (May deepen and inject into open hole 2098' – 2600', San Andres). Zone consists of sands and dolomitic sands. Fresh water is from 80' to 120'. No known underlying fresh water.
- IX. Acidize perms with 1000 gallons 15% NEFE.
- X. Well logs are on file at the OCD.
- XI. Not Applicable.
- XII. Geologic and engineering data have been examined and no evidence of open faults or any other hydrological connection between the injection zone and any fresh water aquifer has been found.
- XIII. (1.) Surface Owner: Bogle Ltd.
PO Box 441
Artesia, NM 88211

All offset acreage is operated by SDX Resources Inc.
(2.) Affidavit of Publication (Attachment E).

ATTACHMENT A

III. Well Data: Artesia Unit #1

- A.
 - (1.) Unit L, Sec. 26, T17S, R28E
1650' FSL 460' FWL
Eddy Co., New Mexico
 - (2.) Casing: 7" csg @ 603', cmt w/375 sx. TOC 291' (Calc @ .75%)
4-1/2" csg @ 2098', cmt w/125 sx. TOC 819' (Calc @ .75%)
 - (3&4) Proposed well condition: Perfs from 2072' – 2082'
2-7/8" PC tubing with an AD-1 PC packer set at 1972'
- B.
 - (1.) Injection Formation: Grayburg – San Andres
 - (2.) Injection interval will be thru perforations: 2072' – 2082'
 - (3.) Well was drilled and completed as a producer in the Grayburg.
 - (4.) Perforations: 2072' – 2082'
 - (5.) Next shallow oil or gas zone: Queen
Next deeper oil or gas zone: San Andres

SDX Resources
Artesia Unit #1
26-17-28

"Present"

TOC (7") 291'

4 5/8" hole

7" @ 603'

75 SX

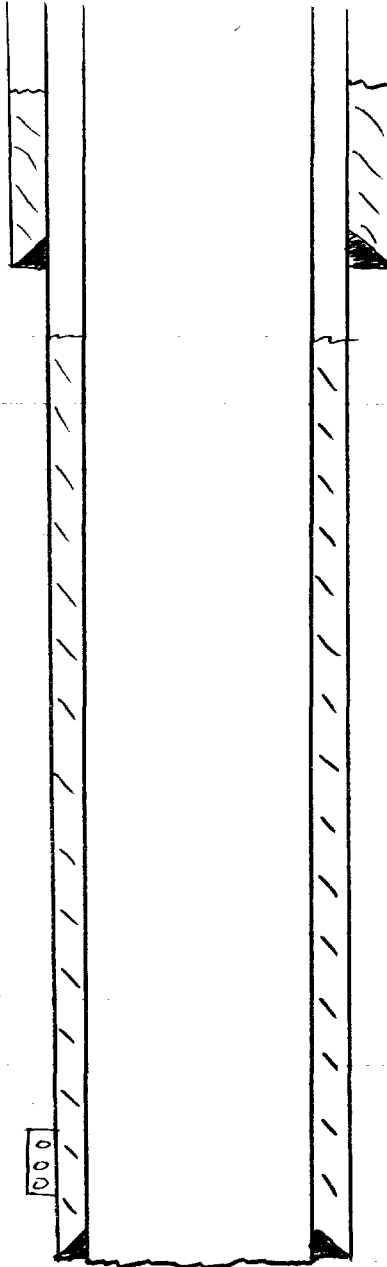
TOC (4 1/2") 819'

Perfs 2072'-82'

6 1/4" hole

4 1/2" @ 2098'

65 SX



TD 2098'

SDX Resources
Artesia Unit #1
26-17-28

"Proposed"

TOC (7") 291'

4 5/8" hole

7" @ 603'

753X

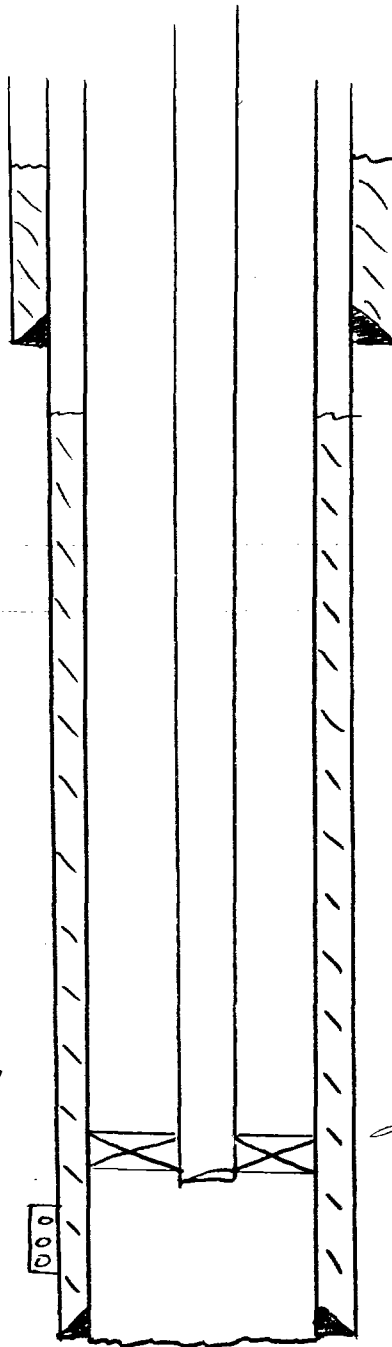
TOC (4 1/2") 819'

Perfs 2072'-82'

6 1/4" hole

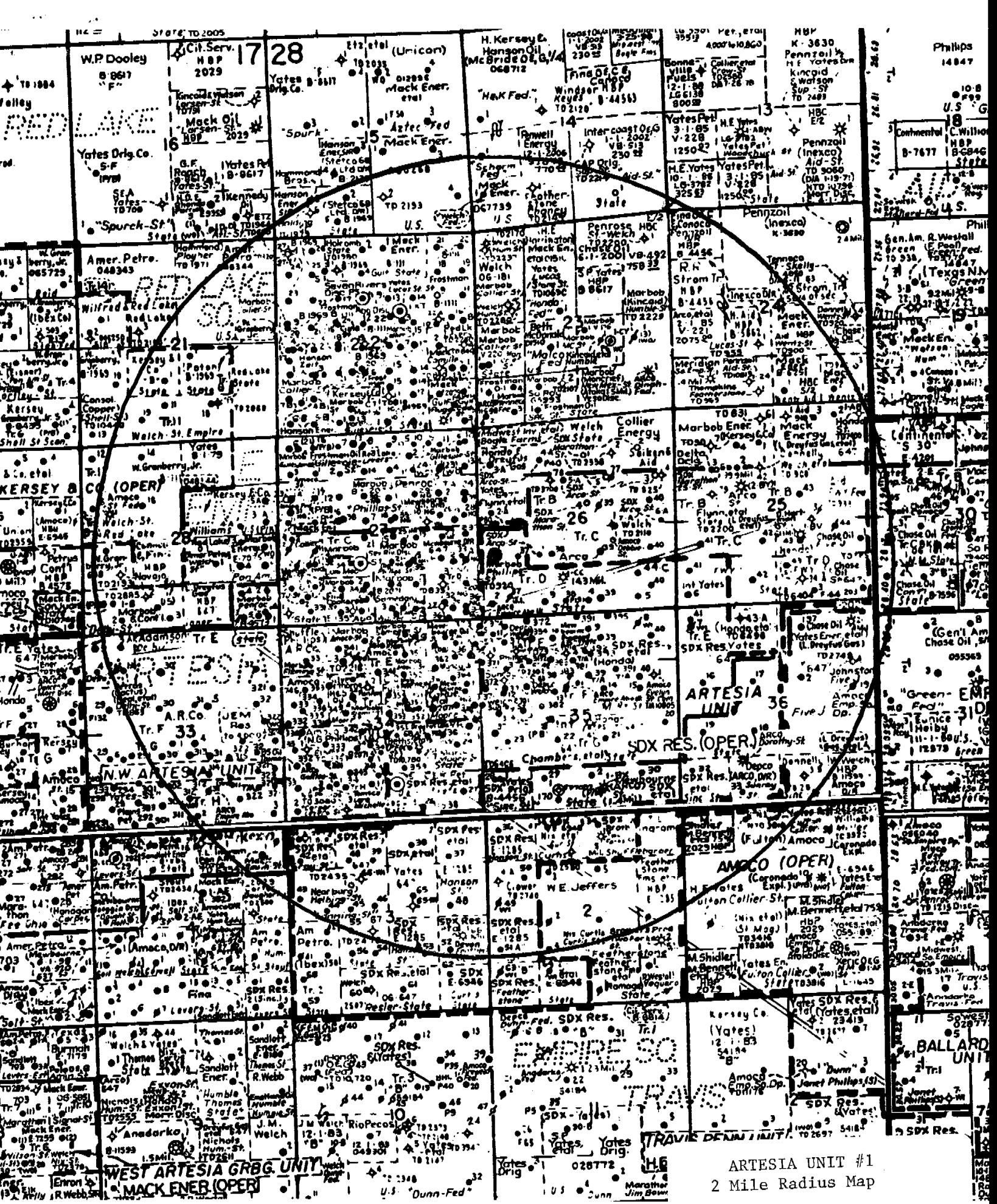
4 1/2" @ 2098'

625 3X



2 7/8" PC + bg +
AD-1 pkr @
1972'

TD 2098'



WELL NAME	LOCATION	OPERATOR	TYPE	SPUD	COMPLETION	TD	PERFS	WELLBORE INFORMATION	TRTMT	TOC	METHOD
Arco 26 A State #2	Sec. 26, T17S, R28E 2264' FNL 330' FWL	SDX Resources, Inc.	Oil	5/28/96	6/25/96	3050'	2334' - 2821'	12-1/4" hole, 8-5/8" @ 519', 375 sx 7-7/8" hole, 5-1/2" @ 3049', 550 sx	A/SWF	Surf Surf	Circ. Circ.
Arco 26 A State #3	Sec 26, T17S, R28E 990' FNL & 330' FWL	SDX Resources, Inc.	Oil	7/31/96	8/28/96	3100'	2898' - 3061'	12-1/4" hole, 8-5/8" @ 551', 375 sx 7-7/8" hole, 5-1/2" @ 3100', 575 sx	A/SWF	Surf Surf	Circ. Circ.
Arco 26 A State #5	Sec 26, T17S, R28E 1650' FNL 2310' FWL	SDX Resources, Inc.	Oil	1/8/97	2/17/97	3505'	2402' - 2704'	12-1/4" hole, 8-5/8" @ 525', 375 sx 7-7/8" hole, 5-1/2" @ 3456', 700 sx	A/F	Surf Surf	Circ. Circ.
Arco 26 A State #8	Sec. 26, T17S, R28E 1687' FNL 697' FWL	SDX Resources, Inc.	Oil	10/4/97	10/9/97	3075'	2335' - 2831'	12-1/4" hole, 8-5/8" @ 515', 375 sx 7-7/8" hole, 4-1/2" @ 3072', 750 sx	A/F	Surf Surf	Circ. Circ.
Arco 26 A State #11	Sec. 26, T17S, R28E 2280' FNL 1650' FWL	SDX Resources, Inc.	Oil	Not Drilled							
Arco 26 State #1	Sec. 26, T17S, R28E 1650' FSL 1650' FWL	SDX Resources, Inc.	Oil	9/19/93	11/3/93	3110'	2445' - 2690'	12-1/4" hole, 8-5/8" @ 530', 375 sx 7-7/8" hole, 5-1/2" @ 3103', 800 sx	A/SWF	Surf Surf	Circ. Circ.
Artesia Unit #1	Sec. 26, T17S, R28E 1650' FSL 460' FWL	SDX Resources, Inc.	Oil	12/29/60	1/16/61	2098'	2072' - 2082'	9-5/8" hole, 7" @ 603', 75 sx 6-1/4" hole, 4-1/2" @ 2098', 125 sx	SF	291' 819'	Calc (.75%) Calc (.75%)
Artesia Unit #2	Sec. 26, T17S, R28E 330' FSL 330' FWL	SDX Resources, Inc.	Oil	11/13/60	12/15/60	2154'	2110' - 2116'	10" hole, 8-5/8" @ 562', 75 sx 8" hole, 4-1/2" @ 2147', 275 sx	SF	30' 1006'	Calc (.75%) Calc (.75%)
Artesia Unit #3	Sec. 26, T17S, R28E 330' FSL 1750' FWL	SDX Resources, Inc.	Oil	12/19/60	1/5/61	2156'	2136' - 2142'	9-5/8" hole, 7" @ 599', 75 sx 6-1/8" hole, 4-1/2" @ 2156', 125 sx	SF	287' 842'	Calc (.75%) Calc (.75%)
Artesia Unit #4	Sec. 26, T17S, R28E 330' FSL 2310' FEL	SDX Resources, Inc.	Oil	1/5/61	1/10/61	2200'	2162' - 2170'	9-5/8" hole, 7" @ 605', 75 sx 6-1/4" hole, 4-1/2" @ 2196', 125 sx	SF	293' 990'	Calc (.75%) Calc (.75%)
Empire Abo Unit C #38	Sec. 26, T17S, R28E 1650' FSL 1980' FWL	Arco Oil & Gas Co.	P&A 2/8/91	7/9/60	7/22/60	6326'	6152' - 6172'	12-1/4" hole (assumed), 8-5/8" @ 720', 350 sx 7-7/8" hole (assumed), 5-1/2" @ 6326', 660 sx P&A CIBP @ 5935', 25 sx on top, 5935'-5694' 25 sx plug @ 3588'-3347' 40 sx plug @ 2170'-1776' 25 sx plug @ 1360'-1119' 25 sx plug @ 880'-634' 15 sx plug @ 120'-Surf	A	Surf 2555'	Calc (.75%) Calc (.75%)

WELL NAME	LOCATION	OPERATOR	TYPE	SPUD	COMPLETION	TD	PERFS	WELLBORE INFORMATION	TRTMT	TOC	METHOD
Empire Abo Unit D #38	Sec. 26, T17S, R28E 330' FSL 2310' FWL	Arco Oil & Gas Co.	TA 6/29/90	4/28/80	9/8/80	6435'	6210' - 6222' 6158' - 6170'	12-1/4" hole (assumed), 8-5/8" @ 739', 300 sx 7-7/8" hole (assumed), 5-1/2" @ 6435', 150 sx T&A CIBP @ 6181'	A	19' 5578'	Calc (.75%) Calc (.75%)
State #78	Sec. 26, T17S, R28E 1650' FNL 2310' FWL	Flynn-Welch-Yates	P&A 11/25/68	10/14/44	2/19/45	3700'	OH	8-1/4" @ 300', 25 sx 7" @ 1943', 25 sx P&A PB 458'. 50 sx cmt plug 10 sx plug @ surface	A		
State A #16	Sec. 26, T17S, R28E 500' FSL 820' FWL	Hondo-Internat-Yates	Oil	5/18/60	6/3/60	6220'	6080' - 6100'	12-1/4" hole (assumed), 8-5/8" @ 750', 275 sx 7-7/8" hole (assumed), 5-1/2" @ 6218', 570 sx	A	90' 2961'	Calc (.75%) Calc (.75%)
State A #31	Sec. 26, T17S, R28E 1650' FSL 990' FWL	Hondo-Internat-Yates	Oil	8/14/60	8/27/60	6280'	6070' - 6080'	12-1/4" hole (assumed), 8-5/8" @ 738', 360 sx 7-7/8" hole (assumed), 5-1/2" @ 6223', 660 sx	A	Surf 2452'	Calc (.75%) Calc (.75%)
State CC #1	Sec. 26, T17S, R28E 990' FSL 2235' FWL	Hondo Oil & Gas	Gas	10/4/84	1/3/85	10900'	10011' - 10018' 10432' - 10500'	17-1/2" hole (assumed), 13-3/8" @ 669', 950 sx 12-1/4" hole (assumed), 8-5/8" @ 2600', 1050 sx 7-7/8" hole (assumed), 5-1/2" @ 10900', 1740 sx	SF	Surf 81' 3443'	Calc (.75%) Calc (.75%) Calc (.75%)
Empire Abo Unit P #36	Sec. 27, T17S, R28E 330' FSL 660' FEL	Arco Oil & Gas	Oil	7/3/60	7/18/62	6271'	6180' - 6225'	12-1/2" hole (assumed), 8-5/8" @ 751', 350 sx 7-7/8" hole (assumed), 5-1/2" @ 6271', 750 sx 5-1/2' csg sqzd from 1525'	A	Surf 1890' 150'	Calc (.75%) Calc (.75%) Temp
Empire Abo Unit I #36	Sec. 27, T17S, R28E 1650' FSL 660' FEL	Arco Oil & Gas	Oil TA	7/26/60	8/27/60	6262'	6040' - 6193'	12-1/4" hole (assumed), 8-5/8" @ 870', 400 sx 7-7/8" hole (assumed), 5-1/2" @ 6262', 850 sx CIBP @ 6006'	A	Surf Surf	Circ Circ
Empire Abo Unit J #35	Sec. 27, T17S, R28E 1650' FSL 1750' FEL	Arco Oil & Gas	Oil	6/7/61	6/25/61	6199'	6060' - 6080'	12-1/4" hole (assumed), 8-5/8" @ 1002', 500 sx 7-7/8" hole (assumed), 4-1/2" @ 6199', 850 sx	A	Surf 640'	Calc (.75%) Survey
Empire Abo Unit D #361	Sec. 27, T17S, R28E 136' FSL 800' FEL	Arco Oil & Gas	Oil	2/12/79	3/23/79	6414'	6300' - 6310'	12-1/4" hole (assumed), 8-5/8" @ 800', 450 sx 7-7/8" hole (assumed), 5-1/2" @ 6414', 1600 sx	A/SF	Surf Surf	Calc (.75%) Calc (.75%)
Gilliespie State #1	Sec. 27, T17S, R28E 966' FNL 653' FEL	Marbob Energy Corp	Oil	7/9/81	7/22/81	3500'	1855' - 2404'	12-1/4" hole (assumed), 8-5/8" @ 530', 225 sx 7-7/8" hole (assumed), 4-1/2" @ 3500', 900 sx	SF	Surf Surf	Calc (.75%) Calc (.75%)
Gilliespie State #13	Sec. 27, T17S, R28E 990' FNL 330' FEL	Marbob Energy Corp	Oil	12/18/78	1/3/79	793'	746' - 751'	6-1/4" hole (assumed), 4-1/2" @ 803' w/250 sx Does not penetrate Injection Interval	A	Surf	Calc (.75%)

WELL NAME	LOCATION	OPERATOR	TYPE	SPUD	COMPLETION	TD	PERFS	WELLBORE INFORMATION	TRTMT	TOC	METHOD
NG Phillips State #2	Sec. 27, T17S, R28E 990' FSL 1650' FEL	Marbob Energy Corp.	Oil	7/3/59	8/8/59	1975'	1502' - 1944'	NA Does not penetrate Injection Interval.	A	NA	NA
NG Phillips State #3	Sec. 27, T17S, R28E 330' FSL 330' FEL	Marbob Energy Corp.	Oil P&A 1/1/284	8/24/60	10/3/60	2133'	2082' - 2092'	10" hole, 8-5/8" @ 501', 50 sx 8" hole, 5-1/2" @ 2122', 135 sx P&A 25 sx plug @ 2100' - 1875'. Sqz 5-1/2" @ 1050' w/150 sx. Came out of hole. Perf 600', Sqz 150 sx. Came out of hole.	SF	Surf 1350'	Circ Calc (.75%)
NG Phillips State #4	Sec. 27, T17S, R28E 1650' FSL 330' FEL	Marbob Energy Corp.	Oil	11/11/60	1/4/61	2083'	2056' - 2064'	12-1/4" hole (assumed), 8-5/8" @ 559', set 7-7/8" hole (assumed), 5-1/2" @ 2050', 365 sx	SF	Set Surf	Calc (.75%)
NG Phillips State #5	Sec. 27, T17S, R28E 1650' FSL 1650' FEL	Marbob Energy Corp.	Oil P&A Dec-92	1/12/61	3/15/61	2062'	2024' - 2034'	12-1/4" hole (assumed), 8-5/8" @ 555', set 7-7/8" hole (assumed), 5-1/2" @ 2057', 381 sx P&A 25 sx plug @ 1970' 25 sx plug @ 1910', Tagged @ 1826' Load hole w/mud 25 sx plug @ 1600' 25 sx plug @ 900' 25 sx plug @ 610' 10 sx plug @ surface	SF	Set Surf	Calc (.75%)
NG Phillips State #6	Sec. 27, T17S, R28E 1650' FSL 990' FEL	Marbob Energy Corp.	Oil	5/27/61	7/5/61	874'	830' - 840'	12-1/4" hole (assumed), 8-5/8" @ 840', set Does not penetrate Injection Interval.	SF	Set	
NG Phillips State #9 former State BZ #4 & Phillips #2	Sec. 27, T17S, R28E 2263' FNL 660' FEL	Marbob Energy Corp.	Oil P&A 5/26/79	1/18/63	4/4/63	6204'	6128' - 6160'	12-1/4" hole (assumed), 8-5/8" @ 963', 650 sx 7-7/8" hole (assumed), 4-1/2" @ 6204', 150 sx P&A 25 sx plug @ 6140'-6000' Pull 4-1/2" csg @ 5340', 25 sx cmt. 25 sx plug @ 2600' Re-Enter Re-ran 4-1/2" csg to 2263, 75 sx cmt Perf 1960' - 1972' P&A Set BP @ 1935', 3 sx cmt. Shot 4-1/2" csg @ 1362', 100 sx plug in & out csg Set BP @ 1300', 35 sx cmt. Perf 778' - 915' Set BP 950', 3 sx cmt	AF	Surf 5552'	Circ. Calc (.75%)

WELL NAME	LOCATION	OPERATOR	TYPE	SPUD	COMPLETION	TD	PERFS	WELLBORE INFORMATION	TRTMT	TOC	METHOD
NG Phillips State #10	Sec. 27, T17S, R28E 2645' FSL 1325' FEL	Penroc	WIW	11/16/71	NA	2043'	2007' - 2018'	12-1/4" hole (assumed), 9-5/8" @ 485', 400 sx 8-3/4" hole (assumed), 7" @ 2043', 275 sx	-	88' 231'	Calc (.75%) Calc (.75%)
NG Phillips State #13	Sec. 27, T17S, R28E 965' FSL 979' FEL	Marbob Energy Corp.	P&A 8/10/84	12/13/80	NA	920'	NA	12-1/4" hole (assumed), 8-5/8" @ 163', 100 sx 7-7/8" hole (assumed), 4-1/2" @ 920', 300 sx No information on P&A. Does not penetrate Injection Interval.	NA	Surf	Calc (.75%)
NG Phillips State #15	Sec. 27, T17S, R28E 2310' FSL 2310' FEL	Marbob Energy Corp.	Oil	8/18/75	NA	880'	809' - 818'	8" hole (assumed), 4-1/2" @ 880', 150 sx Does not penetrate Injection Interval.	ASWF		
NG Phillips State #19	Sec. 27, T17S, R28E 2268' FSL 1638' FEL	Marbob Energy Corp.	Oil	9/13/76	NA	878'	819' - 828'	8" hole (assumed), 4-1/2" @ 878', 175 sx Does not penetrate Injection Interval.	ASWF		
NG Phillips State #20	Sec. 27, T17S, R28E 965' FSL 300' FEL	Marbob Energy Corp.	Oil	6/15/76	8/5/76	910'	853' - 865'	7" @ 500', no cmt, (pulled 90') 8" hole (assumed), 4-1/2" @ 906', 175 sx Does not penetrate Injection Interval.	ASWF		
NG Phillips State #22	Sec. 27, T17S, R28E 390' FSL 978' FEL	Marbob Energy Corp.	P&A 11/3/79	7/10/79	NA	455'	--	8-5/8" @ 226', 5 yds + 50 sx. P&A 75 sx plug @ 248' 35 sx plug @ 232' 50 sx plug @ 230' 50 sx plug @ 228' 25 sx plug @ 150' 10 sx plug @ surface	NA		
NG Phillips State #24	Sec. 27, T17S, R28E 1625' FNL 330' FEL	Marbob Energy Corp.	Oil	11/30/80	1/2/81	1100'	755' - 777'	12-1/4" hole (assumed), 8-5/8" @ 60', 60 sx 7-7/8" hole (assumed), 4-1/2" @ 1100', 358 sx Does not penetrate Injection Interval.	SWF	Surf Surf	Calc (.75%) Calc (.75%)
NG Phillips State #26	Sec. 27, T17S, R28E 2265' FNL 978' FEL	Marbob Energy Corp.	Oil	4/3/81	5/19/81	900'	792' - 813'	12-1/4" hole (assumed), 8-5/8" @ 144', 75 sx 7-7/8" hole (assumed), 4-1/2" @ 900', 200 sx Does not penetrate Injection Interval.	SF	Surf 31'	Calc (.75%) Calc (.75%)
NG Phillips State #27	Sec. 27, T17S, R28E 2264' FSL 978' FEL	Marbob Energy Corp.	Oil	4/5/81	5/20/81	2550'	2018' - 2028'	12-1/4" hole (assumed), 8-5/8" @ 457', 275 sx 7-7/8" hole (assumed), 4-1/2" @ 2550', 525 sx	SWF	Surf 268'	Calc (.75%) Calc (.75%)
NG Phillips State #28	Sec. 27, T17S, R28E 2261' FNL 330' FEL	Marbob Energy Corp.	Oil	4/12/81	5/20/81	2500'	2050' - 2060'	12-1/4" hole (assumed), 8-5/8" @ 435', 275 sx 7-7/8" hole (assumed), 4-1/2" 2500', 825 sx	SWF	Surf Surf	Calc (.75%) Calc (.75%)
NG Phillips State #32	Sec. 27, T17S, R28E 440' FSL 979' FEL	Marbob Energy Corp.	Oil	5/24/83	6/21/83	3749'	2046' - 2696'	12-1/4" hole (assumed), 8-5/8" @ 547', 350 sx 7-7/8" hole (assumed), 5-1/2" @ 3749', 1050 sx	SWF	Surf Surf	Calc (.75%) Calc (.75%)

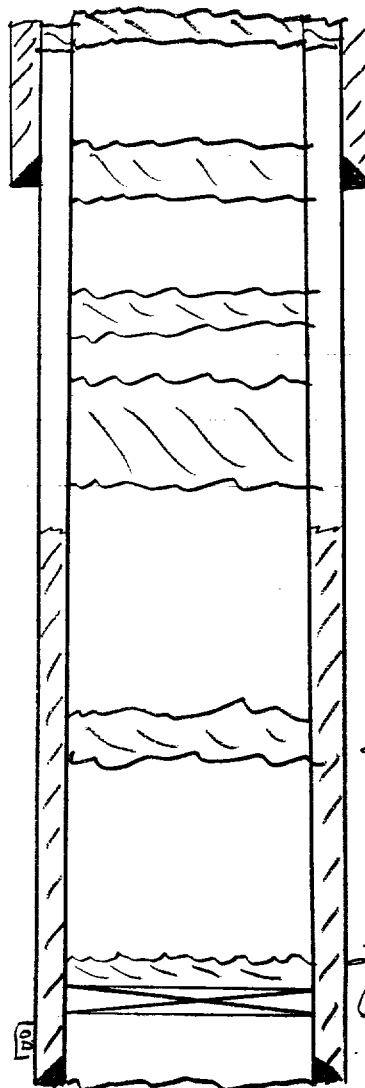
WELL NAME	LOCATION	OPERATOR	TYPE	SPUD	COMPLETION	TD	PERFS	WELLBORE INFORMATION	TRTMT	TOC	METHOD
NG Phillips State #33	Sec. 27, T17S, R28E 1650' FSL 455' FEL	Marbob Energy Corp.	Oil	7/23/83	8/2/83	3000'	2428' - 2766'	12-1/4" hole (assumed), 8-5/8" @ 517', 350 sx 7-7/8" hole (assumed), 5-1/2" @ 3000', 850 sx	SGF	Surf Surf	Calc (.75%) Calc (.75%)
NG Phillips State #34	Sec. 27, T17S, R28E 1725' FNL 330' FEL	Marbob Energy Corp.	Oil	8/11/83	10/2/83	3020'	2280' - 2612'	12-1/4" hole (assumed), 8-5/8" @ 523', 325 sx 7-7/8" hole (assumed), 5-1/2" @ 3020', 850 sx	SWF	Surf Surf	Calc (.75%) Calc (.75%)
NG Phillips State #36	Sec. 27, T17S, R28E 335' FSL 330' FEL	Marbob Energy Corp.	Oil	2/16/84	3/17/84	3012'	2443' - 2845'	12-1/4" hole (assumed), 8-5/8" @ 500', 250 sx 7-7/8" hole (assumed), 5-1/2" @ 3012', 600 sx	SGF	Surf Surf	Calc (.75%) Calc (.75%)
NG Phillips State #37	Sec. 27, T17S, R28E 1165' FSL 978' FEL	Marbob Energy Corp.	Oil	5/13/84	6/6/84	2980'	2155' - 2774'	12-1/4" hole (assumed), 8-5/8" @ 500', 350 sx 7-7/8" hole (assumed), 5-1/2" @ 2980', 600 sx	SWF	Surf Surf	Calc (.75%) Calc (.75%)
State BW #1	Sec. 27, T17S, R28E 330' FSL 979' FWL	Pan American	Oil	6/4/60	6/20/60	6189'	6106' - 6136'	12-1/4" hole (assumed), 8-5/8" @ 754', 250 sx 7-7/8" hole (assumed), 4-1/2" @ 6187', 750 sx	A	154' 2927'	Calc (.75%) Calc (.75%)
Walker State #1	Sec. 27, T17S, R28E 990' FSL 1650' FEL	Marbob Energy Corp.	Oil	1/28/75	4/6/75	895'	834' - 846'	4-1/2" @ 885', 225 sx Does not penetrate Injection Interval.	A/SWF		
Walker State #2	Sec. 27, T17S, R28E 330' FSL 1650' FEL	Marbob Energy Corp.	Oil	3/30/61	5/3/61	2079'	2040' - 2050'	12-1/4" hole (assumed), 8-5/8" @ 552', set 7-7/8" hole (assumed), 5-1/2" @ 2077', 584 sx	A/SF	Set Surf	Calc (.75%) Calc (.75%)
Empire Abo Unit E #363	Sec. 34, T17S, R28E 650' FNL 120' FEL	Atlantic Richfield Co.	Oil	1/30/79	3/3/79	6350'	6260' - 6270'	12-1/4" hole (assumed), 8-5/8" @ 800', 450 sx 7-7/8" hole (assumed), 5-1/2" @ 6350', 1650 sx	A/F	Surf Surf	Calc (.75%) Calc (.75%)
Amoco State A #2	Sec. 34, T17S, R28E 443' FNL 978' FEL	Marbob Energy Corp.	Oil	12/12/85	1/2/86	3090'	2319' - 2820'	12-1/4" hole (assumed), 8-5/8" @ 505', 350 sx 7-7/8" hole (assumed), 5-1/2" @ 3082', 1000 sx	A/SGF	Surf Surf	Calc (.75%) Calc (.75%)
Pan American State #1	Sec. 34, T17S, R28E 505' FNL 660' FEL	Cactus Drfg Co.	Oil	4/25/61	6/24/61	2593'	2100' - 2112'	12-1/4" hole (assumed), 8-5/8" @ 578', 50 sx 7-7/8" hole (assumed), 5-1/2" @ 2535', 150 sx	SF	458' 1678'	Calc (.75%) Calc (.75%)
Empire Abo Unit E #374	Sec. 35, T17S, R28E 220' FNL 700' FWL	Atlantic Richfield Co.	Oil	1/18/79	2/11/79	6358'	6255' - 6271'	12-1/4" hole (assumed), 8-5/8" @ 800', 450 sx 7-7/8" hole (assumed), 5-1/2" @ 6345', 1425 sx	A/F	Surf Surf	Calc (.75%) Calc (.75%)
Artesia Unit #10	Sec. 35, T17S, R28E 360' FNL 1952' FWL	SDX Resources, Inc.	Oil	1/31/61	2/7/61	2215'	2167' - 2173'	10-3/4" hole, 7" @ 580', 75 sx 6-1/4" hole, 4.5" @ 2214', 125 sx	SF	375' 1008'	Calc (.75%) Calc (.75%)
Empire Abo Unit E #384	Sec. 35, T17S, R28E 600' FNL 1400' FWL	Atlantic Richfield Co	Oil	1/3/79	1/24/79	6300'	6222' - 6236'	12-1/4" hole (assumed), 8-5/8" @ 750', 400 sx 7-7/8" hole (assumed), 5-1/2" @ 6300', 1550 sx	A/F	Surf Surf	Calc (.75%) Calc (.75%)
Artesia Unit #69	Sec. 35, T17S, R28E 430' FNL 990' FWL	SDX Resources, Inc.	Oil	8/24/97	10/1/97	3000'	2603' - 2859'	12-1/4" hole, 8-5/8" @ 355', 375 sx 7-7/8" hole, 5-1/2" @ 2991', 650 sx	A/F	Surf Surf	Circ. Circ.
Artesia Unit #11	Sec. 35, T17S, R28E 360' FNL 360' FWL	SDX Resources, Inc.	Oil	11/10/60	12/16/60	2166'	2130' - 2140'	10" hole, 8-5/8" @ 460', 50 sx 8" hole, 4-1/2" @ 2166', 430'	A/F	106' 382'	Calc (.75%) Calc (.75%)

WELL NAME	LOCATION	OPERATOR	TYPE	SPUD	COMPLETION	TD	PERFS	WELLBORE INFORMATION	TRTMT	TOC	METHOD
Artesia Unit #70	Sec. 35, T17S, R28E 915' FNL 990' FWL	SDX Resources, Inc.	Oil	12/14/92	1/13/93	10600'		13-3/8" @ 400', 375 sx 9-5/8" @ 2600', 1000 sx Proposed Work Drill plugs out to 3122'. Set 4-1/2" @ 3122', 625 sx	A/F	Surf Surf	Calc (.75%) Calc (.75%)
Empire Abo Unit E 337	Sec. 35, T17S, R28E 660' FNL, 660' FWL	ARCO Permian	Oil TA 9/19/96	8/3/60	8/16/60	6350'	2640' - 2900' 6283' - 6313'	12-1/4" hole, 8-5/8" @ 752', 400 sx 7-7/8" hole (assumed), 5-1/2" @ 6348', 800 sx TA CIBP 6022'	A	46' Surf	Calc (.75%) Circ.
Empire Abo Unit E #372	Sec. 35, T17S, R28E 100' FNL 1290' FWL	Atlantic Richfield Co.	Oil	7/13/77	8/6/77	6383'	6252' - 6270'	12-1/4" hole (assumed), 8-5/8" @ 750', 400 sx 7-7/8" hole (assumed), 5-1/2" @ 6383', 1000 sx	A/F	Surf 669'	Calc (.75%) Calc (.75%)
Empire Abo Unit #373	Sec. 35, T17S, R28E 150' FNL 15' FWL	Atlantic Richfield Co.	Oil	3/29/78	4/16/78	6275'	6216' - 6228'	12-1/4" hole (assumed), 8-5/8" @ 800', 480 sx 7-7/8" hole (assumed), 5-1/2" @ 6275', 1300 sx	A/F	Surf Surf	Calc (.75%) Calc (.75%)

Good O+G
 Empire Also Unit C # 38
 26-17-28

P4Q
 2/8/91

1 3/4" hole, 8 5/8" @
 720', 350 SX
 TDC surf



15 SX @ 120 - Surf.

25 SX @ 880 - 634'

25 SX @ 1360 - 1119'

40 SX @ 2170' - 1776'

TDC 2555'

25 SX @ 3588' - 3347'

Perfs 6152 - 6172'

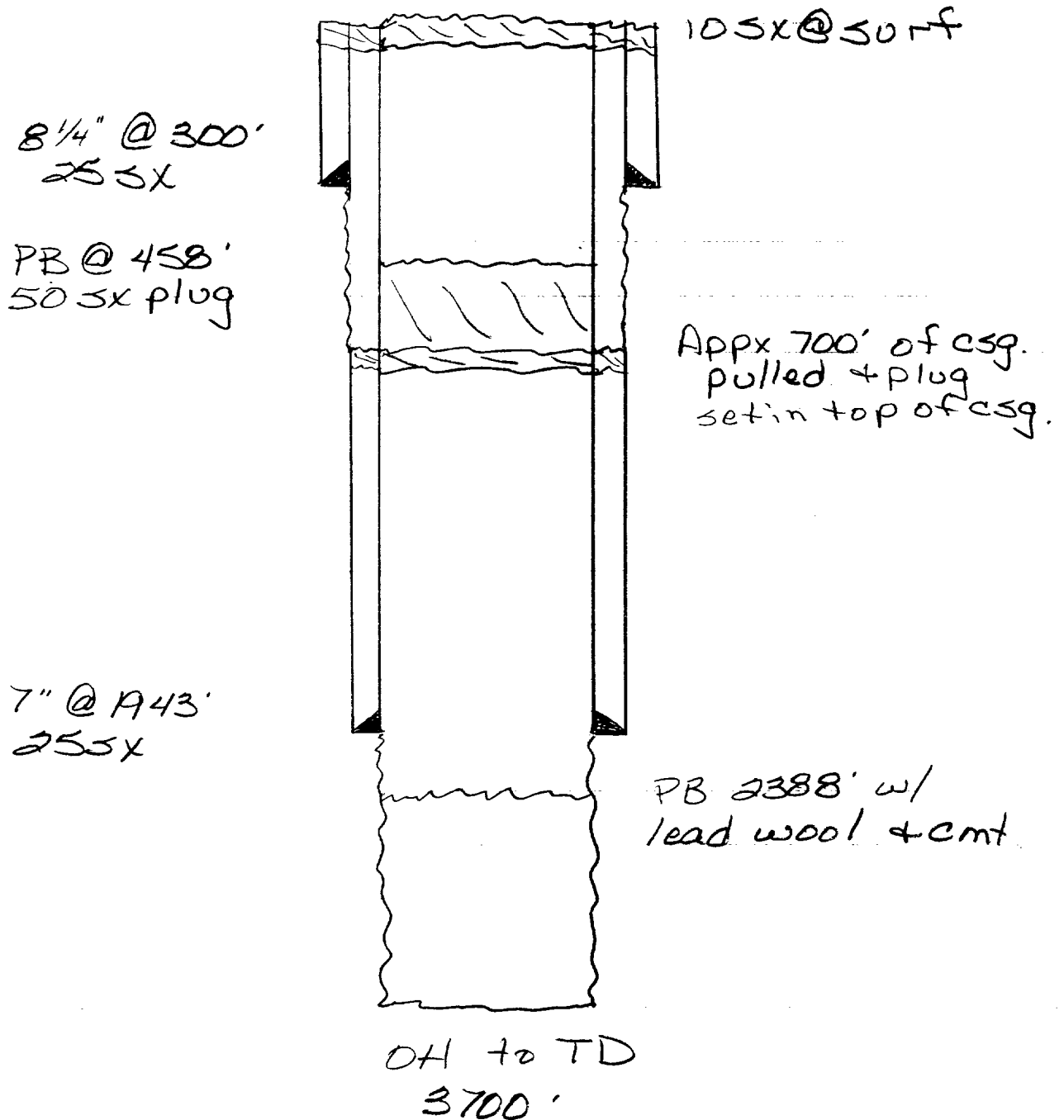
7 7/8" hole, 8 5/8" @ 6326
 660 SX

TDC 2555' (calc) TD 6326

25 SX on top 5935 - 5694'
 CIBP @ 5935'

Flynn-Welch-Yates
State #78
26-17-28

P4Q
11/25/68



Info on this well is very vague.

Marlow
Phillips St #3
27-17-28

A+A
1-12-84

8 5/8" @ 501'
50 SX, surf

TDC 1350'

Perf @ 600' Sqz w/
150 SX. Came out hole.

Sqz 5 1/2" @ 1050'
w/150 SX Came
out of hole

Perf's 2082-92'

5 1/2" @ 2122'
135 SX

25 SX 2100-1875'

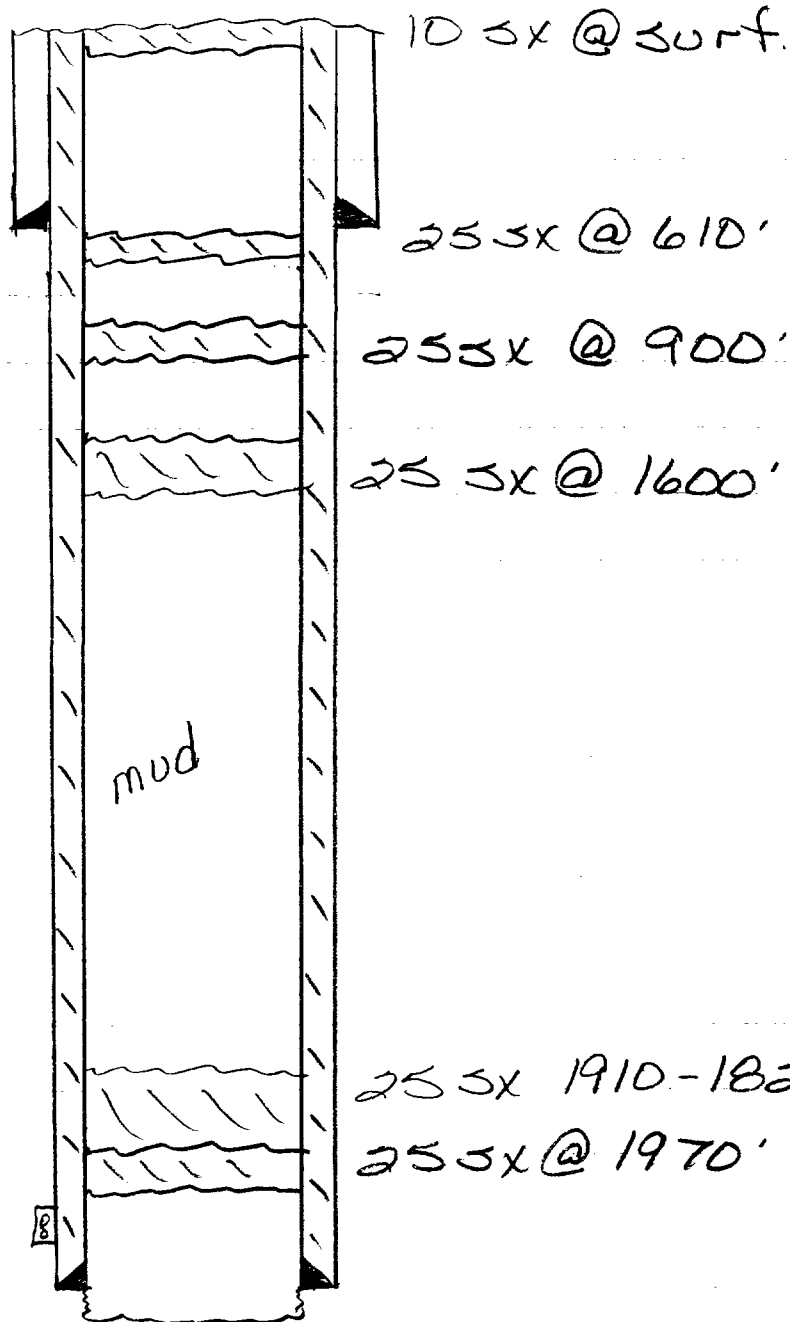
TD 2133'

ATTACHMENT C

Marlow
Phillips St #5
27-17-28

R+Q

8 5/8" @ 555'
set



Pert's 2024-34'

5 1/2" @ 2057'
381 3x, surf

TD 2062'

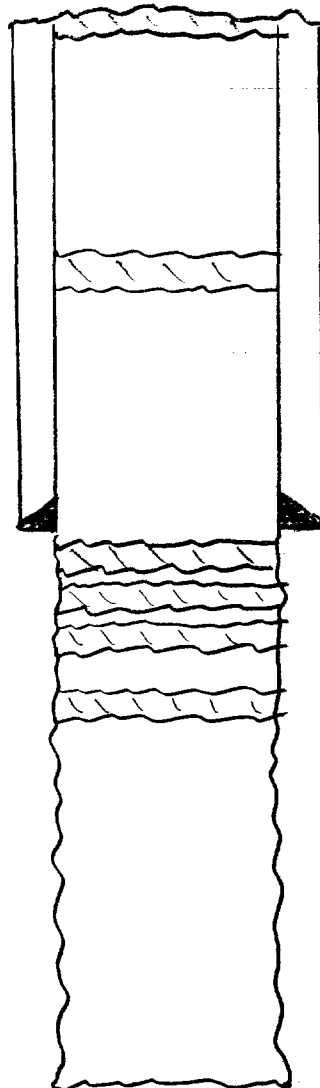
p4 a
5/26/79



Marlow
Phillips St #22
27-17-28

R4A
11/3/79

8 5/8" @ 226'
50 sx + 5 yds



10 sx @ surf.

25 sx @ 150'

50 sx @ 228'

50 sx @ 230'

35 sx @ 232'

75 sx @ 248'

TD 455'

RF

BY:

1300

Pro-Kem, Inc. WATER ANALYSIS REPORT

SAMPLE

Oil Co. : SDX Resources
 Lease : Artesia Unit
 Well No.: Heater Treater
 Lab No. :

Sample Loc. :
 Date Analyzed: 07-May-1996
 Date Sampled :

ANALYSIS

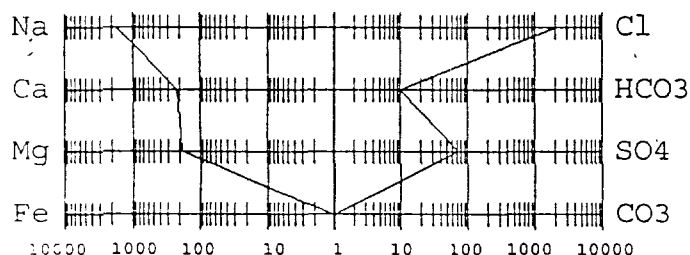
- pH 6.000
- Specific Gravity 60/60 F. 1.090
- CaCO₃ Saturation Index @ 80 F. -0.197
 @ 140 F. +0.683

Dissolved Gasses		MG/L	EQ. WT.	*MEQ/L
4.	Hydrogen Sulfide	80		
5.	Carbon Dioxide	Not Determined		
6.	Dissolved Oxygen	Not Determined		

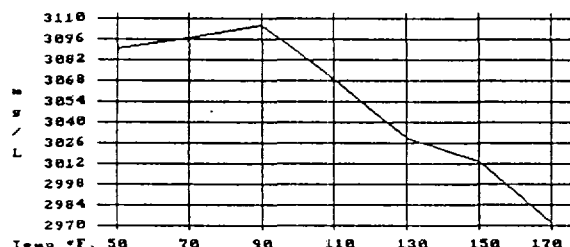
Cations					
7.	Calcium (Ca++)	4,208	/	20.1 =	209.35
8.	Magnesium (Mg++)	2,127	/	12.2 =	174.34
9.	Sodium (Na+) (Calculated)	39,677	/	23.0 =	1,725.09
10.	Barium (Ba++)	Not Determined			

Anions					
11.	Hydroxyl (OH ⁻)	0	/	17.0 =	0.00
12.	Carbonate (CO ₃ ⁼)	0	/	30.0 =	0.00
13.	Bicarbonate (HCO ₃ ⁻)	586	/	61.1 =	9.59
14.	Sulfate (SO ₄ ⁼)	3,400	/	48.8 =	69.67
15.	Chloride (Cl ⁻)	71,984	/	35.5 =	2,027.72
16.	Total Dissolved Solids	121,982			
17.	Total Iron (Fe)	14	/	18.2 =	0.77
18.	Total Hardness As CaCO ₃	19,267			
19.	Resistivity @ 75 F. (Calculated)	0.066 /cm.			

LOGARITHMIC WATER PATTERN *meq/L.



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION			
COMPOUND	EQ. WT. X	*meq/L =	mg/L.
Ca (HCO ₃) ₂	81.04	9.59	777
CaSO ₄	68.07	69.67	4,743
CaCl ₂	55.50	130.09	7,220
Mg (HCO ₃) ₂	73.17	0.00	0
MgSO ₄	60.19	0.00	0
MgCL ₂	47.62	174.34	8,302
NaHCO ₃	84.00	0.00	0
NaSO ₄	71.03	0.00	0
NaCl	58.46	1,723.28	100,743
*Milli Equivalents per Liter			

This water is somewhat corrosive due to the pH observed on analysis. The corrosivity is increased by the content of mineral salts, and the presence of H₂S in solution.

NOTICE OF APPLICATION FOR FLUID INJECTION WELL PERMIT

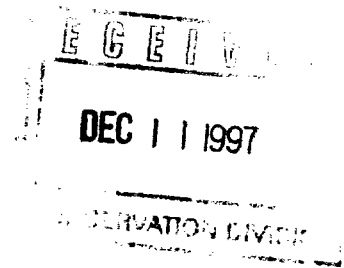
SDX Resources, Inc., located at 511 W. Ohio, Ste 601, Midland, TX 79702, mailing address PO Box 5061, Midland, TX 79704, Contact: Chuck Morgan 915/685-1761 is seeking administrative approval from the New Mexico Oil Conservation Division to complete the Artesia Unit #1 located in Sec. 26, T17S, R28E, perms 2072'-2082' as an injection well. The proposed injection zone is the Grayburg-San Andres formation. SDX Resources, Inc. intends to inject a maximum of 500 barrels of produced formation water per day at a maximum injection pressure of 1200#.

Interested parties must file objections or request for hearing with the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505 within 15 days of this notice.

Legal ad to be printed in the Artesia Daily Press.

SDX RESOURCES, INC.

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



December 9, 1997

NMOCD
2040 S. Pacheco
Santa Fe, NM 87505

Attention: David Catanach

Re: Artesia Unit #1
Sec. 26, T17S, R28E
Eddy Co., NM
C-108 Attachment

Mr. Catanach:

Enclosed is the "Affidavit of Publication" for the above referenced well. This was printed in the Artesia Daily Press on November 28, 1997. This is to be added to the C-108 application that was mailed to your office on November 26, 1997.

Sincerely,

Bonnie Atwater
Regulatory Technician

/ba

enclosure

cc: Bogle Ltd

Affidavit of Publication

No. 16072

STATE OF NEW MEXICO,

County of Eddy:

Gary D. Scott being duly sworn, says: That he is the Publisher of The Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached Legal Notice

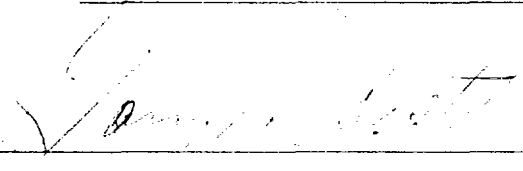
was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for 1 consecutive weeks on the same day as follows:

First Publication November 28, 1997

Second Publication _____

Third Publication _____

Fourth Publication _____


Subscribed and sworn to before me this 4th day of December 19 97

Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1999

Copy of Publication

LEGAL NOTICE

NOTICE OF APPLICATION FOR FLUID INJECTION WELL PERMIT

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Published in the Artesia Daily Press, Artesia, N.M. November 28, 1997.

Legal 16072