

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: P.O. Box 5061, Midland, TX 79704  
Contact party: Chuck Morgan Phone: 505/748-9724
- 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 \_\_\_\_\_.
- 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 915/685-1761 Title Regulatory Assistant  
Signature: Bonnie Atwater Date: March 4, 1996

- \* 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.

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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.

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Conoco 7 State #2  
Unit Letter L, Sec. 7, T19S, R29E  
1980' FSL & 541' FWL, API # 30-015-23693  
Eddy Co., New Mexico

Conoco 7 State #3  
Unit Letter E, Sec. 7, T19S, R29E  
1980' FNL & 542' FWL, JAPI #30-015-23694  
Eddy Co., New Mexico

Conoco 7 State #4  
Unit Letter D, Sec. 7, T19S, R29E  
660' FNL & 540' FWL, API #30-015-23919  
Eddy Co., New Mexico

Conoco 7 State #5  
Unit Letter F, Sec. 7, T19S, R29E  
2180' FNL & 1740' FWL, API #30-015-23920  
Eddy Co., New Mexico

Conoco 7 State #6  
Unit Letter C, Sec. 7, T19S, R29E  
660' FNL & 1740' FWL, API #30-015-23921  
Eddy Co., New Mexico

Conoco 7 State #7  
Unit Letter G, Sec. 7, T19S, R29E  
1980' FNL & 1980' FEL, API #30-015-23930  
Eddy Co., New Mexico

Conoco 7 State #8  
Unit Letter B, Sec. 7, T19S, R29E  
660' FNL & 1880' FEL, API #30-015-23931  
Eddy Co., New Mexico

Conoco 7 State #9  
Unit Letter A, Sec. 7, T19S, R29E  
660' FNL & 660' FEL, API #30-015-23932  
Eddy Co., New Mexico

Conoco 7 State #11  
Unit Letter H, Sec. 7, T19S, R29E  
1980' FNL & 560' FEL, API #30-015-24157  
Eddy Co., New Mexico

Conoco 7 State #12  
Unit Letter K, Sec. 7, T19S, R29E  
1880' FSL & 1980' FWL, API #30-015-25160  
Eddy Co., New Mexico

Conoco 7 State #13  
Unit Letter J, Sec. 7, T19S, R29E  
1980' FSL & 1980' FEL, API #30-015-25161  
Eddy Co., New Mexico

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- I. SDX plans to convert the above mentioned wells into injection wells in the Queen/Grayburg formation.
- II. Operator: SDX Resources, Inc.  
PO Box 5061  
Midland, Texas 79704  
  
Attention: Chuck Morgan 505/748-9724
- III. Well Data: See Attachment "A".
- IV. This is not an expansion of an existing project.
- V. See Attachment "B".
- VI. See Attachment "C".
- VII.
  - 1) Proposed average daily injection volume: 200 BWPD.  
Maximum daily injection volume: 1000 BWPD.
  - 2) System will be a closed system.
  - 3) Proposed average injection pressure: Unknown  
Proposed maximum injection pressure: To be determined by a step rate test.
  - 4) Injection water would be produced water from the producing wells on the Conoco 7 State lease in the San Andres and Grayburg formations. Double Eagle's fresh water could possibly be added to the system. Injection fluid analysis (Attachment D).
  - 5) Formation water analysis (Attachment E).
- VIII.
  - 1) The proposed injection interval is the portion of the Grayburg consisting of porous sand and dolomite.
  - 2) Limited fresh water zones overlies the proposed injection zone at estimated 150'.
- IX. The proposed injection interval may be acidized with 15% HCl acid.
- X. Well logs and test data are on file at the OCD.
- XI. Fresh Water Analysis from fresh water wells (Attachment "F").
- 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.

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- XIII. A) Certified letters sent to offset operators (See Attachment "G"). Surface is owned by State of New Mexico.
- B) Affidavit of Publication (Attachment "H").