

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.

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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 #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

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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/well.
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, Grayburg and Queen formations. Offset Queen, Grayburg produced water and 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 Queen and 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 and copies of pertinent log sections are included with the application.
- 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.
- 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").