

SDX Resources, Inc.
New Mexico Oil Conservation Division
Form C-108 "Application for Authorization to Inject"

RE: NW State #8, 1090' FSL, 2126' FWL, Sec 32, T17S, R28E
Eddy Co., New Mexico

- I. SDX plans to convert the above referenced well to an injection well in the Artesia, Queen/Grayburg/San Andres pool.
- II. Operator: SDX Resources, Inc., PO Box 5061, Midland, TX 79704
- III. Well Data: Please see "Well Data Sheet" attached.
- IV. This is not an expansion of an existing project.
- V. Map attached designating: ½ mile radius of review and 2 mile radius.
- VI. There are twenty-one wells within the area of review which penetrate the proposed injection zone, ½ mile review area "Well Tabulation" attached.
- VII. Proposed average daily injection volume: 500 bbls per day. This will be a closed system. Proposed average injection pressure is estimated @ 300 psi. The proposed maximum injection pressure is 500 psi (to be increased by step rate at a later date). Formation water analysis is attached.
- VIII. The Queen/Grayburg/San Andres formation(s) consist of dolomite and sandstones with alternating beds of silty to sandy dolomite and gray arkosic sandstones. Generally the gross thickness of the Grayburg ranges from 300 to 400' thick and the San Andres ranges from 350 – 400' thick. Both of these zones are actively flooded in the area with positive response. There are no known sources of drinking water underlying the proposed injection interval. Limited fresh water zones overlie the proposed injection zone at approximately 150'.
- IX. The proposed injection interval may be acidized with 15% HCL acid.
- X. Well logs are on file with the Oil Conservation Division.
- XI. No fresh water wells are within a ½ mile radius.
- 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. Copies of the Oil Conservation Division Form C-108, the Well Data Sheet and map have been sent to the offset operators, surface owner(s) as per the listing attached.

A copy of the Legal Notice as published in the Artesia Daily News is attached to this filing.

"Well Data Sheet"
SDX Resources, Inc.
Form C-108 "Application for Authorization to Inject"

NW State #8

- A. (1) Unit Letter N, Section 32, T17S, R28E, 1090' FSL, 2126' FWL
 Eddy County, New Mexico
- (2) Casing: 8-5/8" @ 461' w/350 sx Cl C – circulated to surface
 5-1/2" @ 3302' w/600 sx Lite & Cl C – circulated to surface
 2-3/8" tubing & packer to be set within 100' of top perforation
 Status of well is producing
- B. (1) Injection Formation: San Andres
- (2) Injection interval will be through perforations @ 2523' – 2859'
- (3) Well was drilled and completed as a producer in the Artesia
 (Queen/Grayburg/San Andres) pool
- (4) Initial perforations – same as above
- (5) Next shallow oil or gas zone: Queen
 Next deeper oil or gas zone: Abo

SAMPLE**Pro-Kem, Inc.**
WATER ANALYSIS REPORT

JUL 14 1999

Oil Co. : SDX Resources

Lease : N.W. St.

Well No. : # 1

Lab No. : F:\ANALYSES\Jul0999.001

Sample Loc. :

Date Analyzed: 09-July-1999

Date Sampled : 01-July-1999

ANALYSIS

1. pH 5.950
2. Specific Gravity 60/60 F. 1.118
3. CaCO₃ Saturation Index @ 80 F. -0.029
@ 140 F. +0.871

Dissolved Gasses

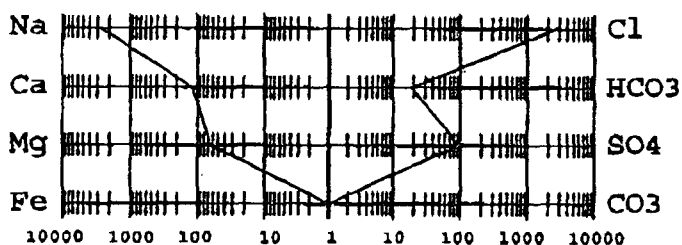
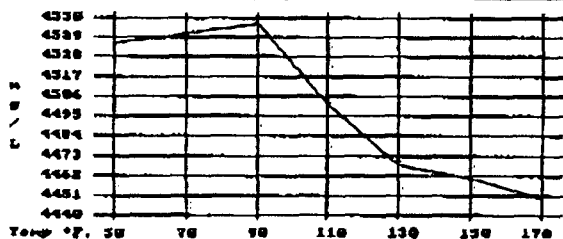
	MG/L	EQ. WT.	*MEQ/L
4. Hydrogen Sulfide	10		
5. Carbon Dioxide	160		
6. Dissolved Oxygen	Not Determined		

Cations

7. Calcium (Ca ⁺⁺)	2,341	/ 20.1 =	116.47
8. Magnesium (Mg ⁺⁺)	741	/ 12.2 =	60.74
9. Sodium (Na ⁺)	60,071	/ 23.0 =	2,611.78
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 ⁻)	1,098	/ 61.1 =	17.97
14. Sulfate (SO ₄ ⁼)	4,500	/ 48.8 =	92.21
15. Chloride (Cl ⁻)	94,979	/ 35.5 =	2,675.46
16. Total Dissolved Solids	163,730		
17. Total Iron (Fe)	7	/ 18.2 =	0.38
18. Total Hardness As CaCO ₃	8,898		
19. Resistivity @ 75 F. (Calculated)	0.028 /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	17.97	1,456
CaSO ₄	68.07	92.21	6,277
CaCl ₂	55.50	6.28	349
Mg(HCO ₃) ₂	73.17	0.00	0
MgSO ₄	60.19	0.00	0
MgCl ₂	47.62	60.74	2,892
NaHCO ₃	84.00	0.00	0
NaSO ₄	71.03	0.00	0
NaCl	58.46	2,608.44	152,490

*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, CO₂ in solution.

Pro-Kem, Inc.

SAMPLE**WATER ANALYSIS REPORT**

Oil Co. : SDX Resources
 Lease : N.W. St.
 Well No.: Injection Plant
 Lab No. : F:\ANALYSES\Oct1601.001

Sample Loc. :
 Date Analyzed: 16-October-2001
 Date Sampled : 26-September-2001

ANALYSIS

1. pH 7.600
2. Specific Gravity 60/60 F. 1.128
3. CaCO₃ Saturation Index @ 80 F. +1.737
 @ 140 F. +2.697

Dissolved Gasses

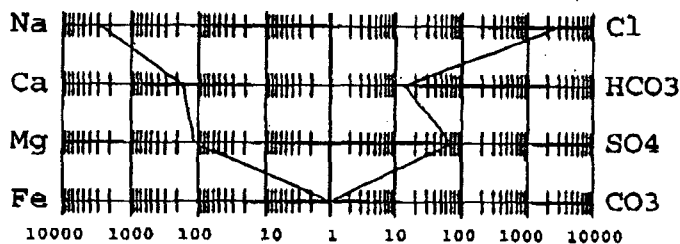
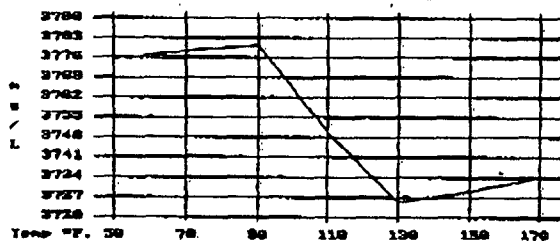
- | | MG/L | EQ. WT. | *MEQ/L |
|---------------------|----------------|---------|--------|
| 4. Hydrogen Sulfide | 10 | | |
| 5. Carbon Dioxide | Not Determined | | |
| 6. Dissolved Oxygen | Not Determined | | |

Cations

- | | | | |
|---------------------|----------------|----------|----------|
| 7. Calcium (Ca++) | 3,339 | / 20.1 = | 166.12 |
| 8. Magnesium (Mg++) | 1,331 | / 12.2 = | 109.10 |
| 9. Sodium (Na+) | 63,599 | / 23.0 = | 2,765.17 |
| 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 ⁻) | 781 | / 61.1 = | 12.78 |
| 14. Sulfate (SO ₄ ⁼) | 3,300 | / 48.8 = | 67.62 |
| 15. Chloride (Cl ⁻) | 104,976 | / 35.5 = | 2,957.07 |
| 16. Total Dissolved Solids | 177,326 | | |
| 17. Total Iron (Fe) | 9 | / 18.2 = | 0.49 |
| 18. Total Hardness As CaCO ₃ | 13,816 | | |
| 19. Resistivity @ 75 F. (Calculated) | 0.016 /cm. | | |

LOGARITHMIC WATER PATTERN
*meq/L.**Calcium Sulfate Solubility Profile**

COMPOUND	EQ. WT.	X	*meq/L = mg/L.
Ca(HCO ₃) ₂	81.04	12.78	1,036
CaSO ₄	68.07	67.62	4,603
CaCl ₂	55.50	85.71	4,757
Mg(HCO ₃) ₂	73.17	0.00	0
MgSO ₄	60.19	0.00	0
MgCl ₂	47.62	109.10	5,195
NaHCO ₃	84.00	0.00	0
NaSO ₄	71.03	0.00	0
NaCl	58.46	2,762.26	161,482

*Milli Equivalents per Liter

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