District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised October 10, 2003
hmit 2 Copies to appropriate

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

### **Release Notification and Corrective Action**

|                                                                                                                                      |                                                   |                                 | OPERATOR   |                        |                                                                                                                                                                       |                                                        |                    | ] Initial        | Report       | $\boxtimes$  | Final Report |                 |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------|------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------|------------------|--------------|--------------|--------------|-----------------|
| Name of Company XTO Energy Inc.                                                                                                      |                                                   |                                 |            |                        | Contact Kim Champlin                                                                                                                                                  |                                                        |                    |                  |              |              |              |                 |
| Address #382 County Road 3100                                                                                                        |                                                   |                                 |            |                        | Telephone No. (505) 333-3100                                                                                                                                          |                                                        |                    |                  |              |              |              |                 |
|                                                                                                                                      | Aztec, NM 87410                                   |                                 |            |                        |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
| Facility Nar                                                                                                                         | Facility Name Salty Dog SWD #4 (API 30-045-32334) |                                 |            |                        | Facility Type Salt Water Disposal Injection Well                                                                                                                      |                                                        |                    |                  |              |              |              |                 |
| Surface Ow                                                                                                                           | ner Feder                                         | al                              |            | Mineral C              | wner                                                                                                                                                                  |                                                        |                    |                  | Lease N      | lo. NMN      | M1015        | 552             |
| LOCATION OF RELEASE                                                                                                                  |                                                   |                                 |            |                        |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
| Unit Letter                                                                                                                          | Section                                           | Township                        | Range      | Feet from the          | North/                                                                                                                                                                | n/South Line   Feet from the   East/West Line   County |                    |                  | County       |              |              |                 |
| K                                                                                                                                    | 01                                                | 30N                             | 14W        | 2580                   | South                                                                                                                                                                 | h 1890 West Sa                                         |                    |                  | San Juan     | San Juan     |              |                 |
|                                                                                                                                      |                                                   |                                 | La         | titude <u>36.842</u>   | 7305                                                                                                                                                                  | Longitude                                              | 108.26295          | <u>528</u> _     |              |              |              |                 |
|                                                                                                                                      |                                                   |                                 |            | NAT                    | URE                                                                                                                                                                   | OF RELI                                                | EASE               |                  |              |              |              |                 |
| Type of Rele                                                                                                                         | ase Produc                                        | ced Water                       |            | ***                    |                                                                                                                                                                       |                                                        | Release Approx     | 100              | Volume       | Recovered    | 0 bbl        |                 |
| Source of Re                                                                                                                         | lease Load                                        | d line valve                    |            |                        |                                                                                                                                                                       | Date and H                                             | lour of Occurrence | ce               | Date and     | d Hour of D  | iscover      | y               |
|                                                                                                                                      |                                                   |                                 |            |                        |                                                                                                                                                                       |                                                        | ime unknown_       |                  |              | 8 at 8:00 an |              |                 |
| Was Immedia                                                                                                                          | ate Notice (                                      |                                 | 57 v - C   | Tar Cara               |                                                                                                                                                                       | If YES, To                                             |                    |                  |              |              |              |                 |
|                                                                                                                                      |                                                   |                                 | Yes L      | No Not Re              | quirea                                                                                                                                                                | Brandon I                                              |                    |                  |              |              |              |                 |
| By Whom?                                                                                                                             |                                                   |                                 |            |                        |                                                                                                                                                                       |                                                        | Iour 07/11/08 9:   |                  |              |              |              |                 |
| Was a Water                                                                                                                          | course Read                                       |                                 | Yes 🛛      | No                     |                                                                                                                                                                       | N/A                                                    | olume Impacting    | the Wate         | rcourse.     |              |              |                 |
|                                                                                                                                      |                                                   |                                 |            |                        |                                                                                                                                                                       | IVA                                                    |                    |                  |              |              |              |                 |
| If a Watercou                                                                                                                        | ırse was Im                                       | pacted, Descr                   | ibe Fully. | *                      |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
|                                                                                                                                      | se of Probl                                       | em and Reme                     | dial Actio | n Taken.*□ <b>An X</b> | TO em                                                                                                                                                                 | nłovee receiv                                          | ed a callout nag   | e for hig        | h-high ta    | nk level on  | the loc      | ation. Upon     |
|                                                                                                                                      |                                                   |                                 |            | ed water was no        |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
|                                                                                                                                      |                                                   |                                 |            | ched to determin       |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
|                                                                                                                                      |                                                   |                                 |            | rough the natur        |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
|                                                                                                                                      |                                                   |                                 |            |                        | ut due to dry weather conditions the released produced water was absorbed into the re collected by Sierra Chemical Company for analysis (results attached). Lab resul |                                                        |                    |                  |              |              |              |                 |
|                                                                                                                                      |                                                   | were present                    |            |                        |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
| Describe Area Affected and Cleanup Action Taken.* The valve on the pipeline was closed and a vac truck was dispatched immediately. I |                                                   |                                 |            |                        |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |
|                                                                                                                                      |                                                   |                                 |            | as absorbed into       | the gro                                                                                                                                                               | ound and the                                           | vac truck was u    | nable to         | recover a    | iny of the r | elease.      | Lab results     |
|                                                                                                                                      |                                                   | ence of hydro                   |            | e is true and comp     | lete to t                                                                                                                                                             | he hest of my                                          | knowledge and i    | ınderstan        | d that nur   | suant to NM  | IOCD r       | ules and        |
| regulations a                                                                                                                        | l operators                                       | are required t                  | o report a | nd/or file certain r   | elease n                                                                                                                                                              | otifications a                                         | nd perform correct | ctive acti       | ons for rel  | eases which  | may er       | ndanger         |
| public health                                                                                                                        | or the envi                                       | ronment. The                    | acceptance | ce of a C-141 repo     | ort by th                                                                                                                                                             | e NMOCD m                                              | arked as "Final R  | Report" de       | oes not rel  | ieve the ope | rator of     | f liability     |
| should their of                                                                                                                      | perations h                                       | nave failed to                  | adequately | investigate and r      | emediat                                                                                                                                                               | e contaminati                                          | on that pose a thi | reat to gr       | ound wate    | r, surface w | ater, hu     | man health      |
|                                                                                                                                      |                                                   | ıddition, NMC<br>ws and/or regu |            | otance of a C-141      | report d                                                                                                                                                              | oes not reliev                                         | e the operator of  | responsi         | bility for c | ompliance v  | with any     | y other         |
| reuerai, state,                                                                                                                      | or local la                                       | ws allu/of regu                 | mations.   |                        |                                                                                                                                                                       | OIL CONSERVATION DIVISION                              |                    |                  |              |              |              |                 |
|                                                                                                                                      | 1/2.                                              | / In                            | mel        | ,<br>14?               |                                                                                                                                                                       | OIL CONSERVATION DIVISION                              |                    |                  |              |              |              |                 |
| Signature:                                                                                                                           | rum                                               |                                 | myc        | ····                   |                                                                                                                                                                       |                                                        |                    |                  | , ,          | 1.           | For!         | Charie<br>Penin |
| Printed Name                                                                                                                         | : Kim Ch                                          | amplin                          |            |                        |                                                                                                                                                                       | Approved by                                            | District Supervis  | sor: <b>[</b> 2] | of B         | ell          | -            | Pernin          |
|                                                                                                                                      |                                                   | Pr                              |            |                        |                                                                                                                                                                       |                                                        |                    |                  |              |              | -            |                 |
| Title Enviro                                                                                                                         | onmental F                                        | Representativ                   | e          |                        |                                                                                                                                                                       | Approval Dat                                           | te: 7-23-01        | d E              | Expiration   | Date:        |              |                 |
| E-mail Addre                                                                                                                         | ess Kim (                                         | Champlin@x                      | toeneray 4 | com                    |                                                                                                                                                                       | Conditions of                                          | f Approval:        |                  |              |              | _            |                 |
|                                                                                                                                      |                                                   | - nampim@x                      | toener gy. | LUM                    |                                                                                                                                                                       | Conditions of Approval:  Attached                      |                    |                  |              | [            |              |                 |
| Date: 07/                                                                                                                            | 21/08                                             | Pho                             | one: 505-3 | 333-3100               |                                                                                                                                                                       |                                                        |                    |                  |              |              |              |                 |

\* Attach Additional Sheets If Necessary

Incident#1 kmDQ 286281H RCVD JUL 23'08 DIL CONS. DIV.

DIST. 3



# WATER ANALYSIS REPORT

# **SAMPLE**

Oil Co.: XTO energy Lease: Salty Dog

Well No.: 4

Location: North Battery Attention: John Weaver

Attention: John We

Date Sampled: 7-10-08
Date Analyzed: 10-July-2008
Lab ID Number: Jul1008.001-1
Salesperson: Jason Hare

Requested By: John Weaver File Name: Jul1008.001

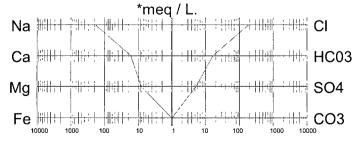
# **ANALYSIS**

1. Ph 8.000 2. Specific Gravity 60/60 F. 1.021

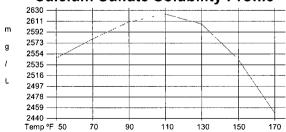
3. CACO3 Saturation Index @ 80F 1.338 Severe @ 140F 2.128 Severe

|                | <b>Dissolved Gasse</b>                                 | S           | _            | MG/L.                                              |     | EQ.    | WT. | *ME    | EQ/L |
|----------------|--------------------------------------------------------|-------------|--------------|----------------------------------------------------|-----|--------|-----|--------|------|
| 4.<br>5.<br>6. | Hydrogen Sulfide<br>Carbon Dioxide<br>Dissolved Oxygen | _           |              | Not Determined<br>Not Determined<br>Not Determined |     | ,      |     | ***    |      |
|                | <u>Cations</u>                                         |             |              |                                                    |     |        |     |        |      |
| 7.             | Calcium                                                | (Ca++)      |              | 321                                                | 1   | 20.1   | =   | 15.97  |      |
| 8.             | Magnesium                                              | (Mg++)      |              | 97                                                 | /   | 12.2   | =   | 7.95   |      |
| 9.             | Sodium                                                 | (Na+)       | (Calculated) | 4,150                                              | 1   | 23.0   | =   | 180.43 |      |
| 10.            | Barium                                                 | (Ba++)      |              | 0                                                  | 1   | 68.7   | =   | 0.00   |      |
|                | Anions                                                 |             |              |                                                    |     |        |     |        |      |
| 11.            | Hydroxyl                                               | (OH-)       |              | 0                                                  | 1   | 17.0   | =   | 0.00   |      |
| 12.            | Carbonate                                              | (CO3=)      |              | 0                                                  | 1   | 30.0   | =   | 0.00   |      |
| 13.            | Bicarbonate                                            | (HCO3-)     |              | 976                                                | 1   | 61.1   | =   | 15.97  |      |
| 14.            | Sulfate                                                | (SO4=)      |              | 250                                                | /   | 48.8   | =   | 5.12   |      |
| 15.            | Chloride                                               | (CI-)       |              | 6,499                                              | 1   | 35.5   | =   | 183.07 |      |
| 16.            | Total Dissolved So                                     | olids       |              | 12,293                                             |     |        |     |        |      |
| 17.            | Total Iron                                             | (Fe)        |              | 2.00                                               | 1   | 18.2   | =   | 0.11   |      |
| 18.            | Manganese                                              | (Mn++)      |              | Not Determined                                     |     |        |     |        |      |
| 19.            | Total Hardness as                                      | CaCO3       |              | 1,201                                              |     |        |     |        |      |
| 20.            | Resistivity @ 75 F                                     | . (Calculat | ed)          | 0.379                                              | Ohm | · mete | ers |        |      |

### LOGARITHMIC WATER PATTERN



### **Calcium Sulfate Solubility Profile**



#### PROBABLE MINERAL COMPOSITION

|        | ,,,,, | 0011111 001 | ~~ | - In In 19111 4 In 1 |           |
|--------|-------|-------------|----|----------------------|-----------|
| mg/L.  | T. =  | EQ. WT      | Χ  | *meq/L               | COMPOUND  |
| 1,294  |       | 81.04       |    | 15.97                | Ca(HCO3)2 |
| 0      |       | 68.07       |    | 0.00                 | CaSO4     |
| 0      |       | 55.50       |    | 0.00                 | CaCl2     |
| 0      |       | 73.17       |    | 0.00                 | Mg(HCO3)2 |
| 308    |       | 60.19       |    | 5.12                 | MgSO4     |
| 134    |       | 47.62       |    | 2.82                 | MgCl2     |
| 0      |       | 84.00       |    | 0.00                 | NaHCO3    |
| 0      |       | 71.03       |    | 0.00                 | NaSO4     |
| 10,537 | 1     | 58.46       |    | 180.25               | NaCl      |
|        |       |             | 4  |                      | *         |

\* milliequivalents per Liter

Jason Hare, Analyst