

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

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

Release Notification and Corrective Action

APR # 30-045-30660 OPERATOR ☐ Initial Report ☒ Final Report

Name of Company XTO Energy Inc.	Contact Kim Champlin
Address #382 County Road 3100, Aztec, NM 87410	Telephone No. (505) 566-7954
Facility Name WF Federal 1 #1	Facility Type Gas Well

Surface Owner BLM	Mineral Owner	Lease No. NMNM 101552
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	01	30N	14W	1940	South	1520	West	San Juan

Latitude 36.8410109633 Longitude -108.264197039

RCVD JUL 2 '08
OIL CONS. DIV.

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release Approx 50 bbl	Volume Recovered 0 bbl
Source of Release Filter Pot	Date and Hour of Occurrence 07/16/07, time unknown	Date and Hour of Discovery 07/16/07 8:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell- OCD Mark Kelly- BLM	
By Whom? Kim Champlin	Date and Hour 07/16/07 3:00PM	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse. Approximately 40 bbl	

If a Watercourse was Impacted, Describe Fully.*

Approximately 40 bbl of produced water entered an unnamed dry wash adjacent to the location and traveled approximately 194 yards down the wash. Due to recent dry weather conditions the produced water was absorbed into the wash bed. Samples were collected along the area of the wash where the impact occurred. XTO is working with the BLM on treating the elevated chlorides within the impacted areas with gypsum.

Describe Cause of Problem and Remedial Action Taken.* ☐ A lease operator noticed a release of produced water location on July 16, 2007. The tubing on location pumps into a filter pot and then into the water pipeline. The filter pot is equipped with a secondary containment system using a pressure relief valve that opens at a preset pressure and sends the water around the filter pot to dual 400 barrel lay down rectangular tanks. The filters plugged up causing the secondary containment valve to open, sending the water to the dual rectangular tanks bypassing the filter pot. These tanks filled up and ran over releasing approximately 50 barrels of produced water. The produced water was released running off location approximately 194 yards into an unnamed dry wash. Appropriate notifications were made. Dry weather conditions caused the water to be absorbed into the ground on location and in the wash bed.

Describe Area Affected and Cleanup Action Taken.*

Samples were collected and BLM was contacted to determine treatment of affected areas. Gypsum will be applied and worked into the alluvium for displacement of sodium and chloride ions. 200 lbs of gypsum was spread from the north side of the location to the end of the release in the wash in September, 2007. Area was resampled in May, 2008. All results are included.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Kim Champlin		OIL CONSERVATION DIVISION	
Printed Name: Kim Champlin		Approved by District Supervisor: [Signature] For: Charlie Perrell	
Title: Environmental Representative		Approval Date: 7/21/08	Expiration Date:
E-mail Address: Kim.Champlin@xtoenergy.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07/01/08	Phone: 505-333-3100		

* Attach Additional Sheets If Necessary

Incident # NM 0928151138

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

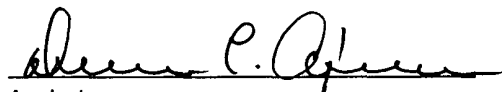
Client: XTO Energy
Sample ID: WF Fed 1-1 B
Laboratory Number: 42451
Chain of Custody: 3002
Sample Matrix: Soil Extract
Preservative: Cool
Condition: Cool & Intact

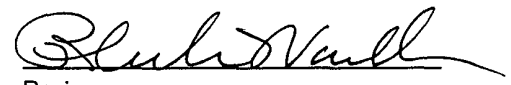
Project #: 98031-121
Date Reported: 07-18-07
Date Sampled: 07-17-07
Date Received: 07-17-07
Date Extracted: 07-17-07
Date Analyzed: 07-18-07

Parameter	Analytical Result	Units		
pH	9.41	s.u.		
Conductivity @ 25° C	854	umhos/cm		
Total Dissolved Solids @ 180C	568	mg/L		
Total Dissolved Solids (Calc)	556	mg/L		
SAR	15.2	ratio		
Total Alkalinity as CaCO3	70.8	mg/L		
Total Hardness as CaCO3	33.3	mg/L		
Bicarbonate as HCO3	70.8	mg/L	1.16	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.48	mg/L	0.01	meq/L
Nitrite Nitrogen	<0.01	mg/L	0.00	meq/L
Chloride	289	mg/L	8.15	meq/L
Fluoride	0.83	mg/L	0.04	meq/L
Phosphate	<0.01	mg/L	0.00	meq/L
Sulfate	9.03	mg/L	0.19	meq/L
Iron	1.89	mg/L	0.07	meq/L
Calcium	6.93	mg/L	0.35	meq/L
Magnesium	3.90	mg/L	0.32	meq/L
Potassium	1.18	mg/L	0.03	meq/L
Sodium	202	mg/L	8.79	meq/L
Cations			9.55	meq/L
Anions			9.55	meq/L
Cation/Anion Difference			0.01%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **WF Fed 1-1**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

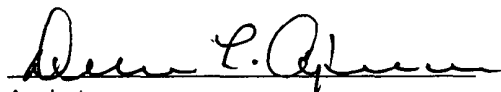
Client: XTO Energy
Sample ID: WF Fed 1-1 M
Laboratory Number: 42452
Chain of Custody: 3002
Sample Matrix: Soil Extract
Preservative: Cool
Condition: Cool & Intact

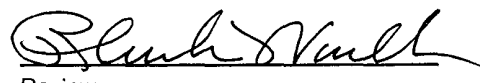
Project #: 98031-121
Date Reported: 07-18-07
Date Sampled: 07-17-07
Date Received: 07-17-07
Date Extracted: 07-17-07
Date Analyzed: 07-18-07

Parameter	Analytical Result	Units		
pH	9.25	s.u.		
Conductivity @ 25° C	1,080	umhos/cm		
Total Dissolved Solids @ 180C	660	mg/L		
Total Dissolved Solids (Calc)	654	mg/L		
SAR	6.4	ratio		
Total Alkalinity as CaCO3	120	mg/L		
Total Hardness as CaCO3	154	mg/L		
Bicarbonate as HCO3	120	mg/L	1.97	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.23	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.01	mg/L	0.00	meq/L
Chloride	299	mg/L	8.43	meq/L
Fluoride	1.62	mg/L	0.09	meq/L
Phosphate	<0.01	mg/L	0.00	meq/L
Sulfate	41.0	mg/L	0.85	meq/L
Iron	3.26	mg/L	0.12	meq/L
Calcium	26.1	mg/L	1.30	meq/L
Magnesium	21.6	mg/L	1.78	meq/L
Potassium	9.94	mg/L	0.25	meq/L
Sodium	181	mg/L	7.89	meq/L
Cations			11.34	meq/L
Anions			11.34	meq/L
Cation/Anion Difference			0.02%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: WF Fed 1-1


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

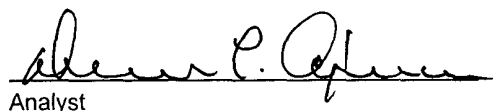
Client: XTO Energy
Sample ID: WF Fed 1-1 T
Laboratory Number: 42453
Chain of Custody: 3002
Sample Matrix: Soil Extract
Preservative: Cool
Condition: Cool & Intact

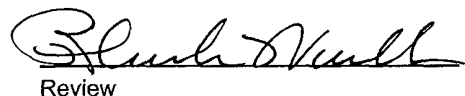
Project #: 98031-121
Date Reported: 07-18-07
Date Sampled: 07-17-07
Date Received: 07-17-07
Date Extracted: 07-17-07
Date Analyzed: 07-18-07

Parameter	Analytical Result	Units		
pH	9.41	s.u.		
Conductivity @ 25° C	702	umhos/cm		
Total Dissolved Solids @ 180C	452	mg/L		
Total Dissolved Solids (Calc)	448	mg/L		
SAR	9.5	ratio		
Total Alkalinity as CaCO3	57.6	mg/L		
Total Hardness as CaCO3	41.0	mg/L		
Bicarbonate as HCO3	57.6	mg/L	0.94	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	3.53	mg/L	0.06	meq/L
Nitrite Nitrogen	<0.01	mg/L	0.00	meq/L
Chloride	116	mg/L	3.27	meq/L
Fluoride	0.91	mg/L	0.05	meq/L
Phosphate	<0.01	mg/L	0.00	meq/L
Sulfate	133	mg/L	2.77	meq/L
Iron	1.64	mg/L	0.06	meq/L
Calcium	10.9	mg/L	0.54	meq/L
Magnesium	3.35	mg/L	0.28	meq/L
Potassium	5.19	mg/L	0.13	meq/L
Sodium	140	mg/L	6.08	meq/L
Cations			7.09	meq/L
Anions			7.09	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: WF Fed 1-1


Analyst


Review

CHAIN OF CUSTODY RECORD

3002

Client: XTO Energy			Project Name / Location: WFFed 1-1			ANALYSIS / PARAMETERS														
Client Address: @xtoenergy.com Lisa-Wim* (e-mail)			Sampler Name: K. Hoekstra			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)					Sample Cool	Sample Intact
Client Phone No:			Client No.: 98031-121																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl ₂ HNO ₃														
WFFED 1-1 BG	7-17	8:15 AM	42450	Soil	1 bag														✓	✓
WFFED 1-1 B	7-17	8:37 AM	42451	I	I														✓	✓
WFFED 1-1 M	7-17	8:28 AM	42452	I	I														✓	✓
WFFED 1-1 T	7-17	8:25 AM	42453	I	I														✓	✓
Relinquished by: (Signature) <i>Kurt Hoekstra</i>						Date	Time	Received by: (Signature) <i>Christen M. Walter</i>										Date	Time	
Relinquished by: (Signature)								Received by: (Signature)												
Relinquished by: (Signature)								Received by: (Signature)												

ENVIROTECH INC.

5796 U.S. Highway 64 • Farmington, New Mexico 87401 • (505) 632-0615

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW


CATION / ANION ANALYSIS

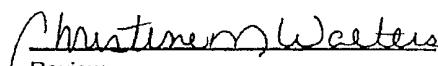
Client:	XTO Energy	Project #:	98031-0121
Sample ID:	WF Fed 1 #1 B-RS	Date Reported:	05-12-08
Laboratory Number:	45333	Date Sampled:	05-06-08
Chain of Custody:	4341	Date Received:	05-06-08
Sample Matrix:	Soil Extract	Date Extracted:	05-07-08
Preservative:		Date Analyzed:	05-08-08
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	9.40	s.u.		
Conductivity @ 25° C	273	umhos/cm		
Total Dissolved Solids @ 180C	176	mg/L		
Total Dissolved Solids (Calc)	166	mg/L		
SAR	4.6	ratio		
Total Alkalinity as CaCO3	72.0	mg/L		
Total Hardness as CaCO3	19.7	mg/L		
Bicarbonate as HCO3	72.0	mg/L	1.18	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	2.5	mg/L	0.04	meq/L
Nitrite Nitrogen	0.005	mg/L	0.00	meq/L
Chloride	20.0	mg/L	0.56	meq/L
Fluoride	0.83	mg/L	0.04	meq/L
Phosphate	14.3	mg/L	0.45	meq/L
Sulfate	27.2	mg/L	0.57	meq/L
Iron	8.97	mg/L	0.32	meq/L
Calcium	4.56	mg/L	0.23	meq/L
Magnesium	2.03	mg/L	0.17	meq/L
Potassium	3.75	mg/L	0.10	meq/L
Sodium	46.8	mg/L	2.04	meq/L
Cations			2.85	meq/L
Anions			2.85	meq/L
Cation/Anion Difference			0.04%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **WF Fed 1 #1.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	XTO Energy	Project #:	98031-0121
Sample ID:	WF Fed 1 #1 M-RS	Date Reported:	05-12-08
Laboratory Number:	45334	Date Sampled:	05-06-08
Chain of Custody:	4341	Date Received:	05-06-08
Sample Matrix:	Soil Extract	Date Extracted:	05-07-08
Preservative:		Date Analyzed:	05-08-08
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	9.25	s.u.		
Conductivity @ 25° C	352	umhos/cm		
Total Dissolved Solids @ 180C	230	mg/L		
Total Dissolved Solids (Calc)	197	mg/L		
SAR	6.3	ratio		
Total Alkalinity as CaCO3	74.0	mg/L		
Total Hardness as CaCO3	17.5	mg/L		
Bicarbonate as HCO3	74.0	mg/L	1.21	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.0	mg/L	0.02	meq/L
Nitrite Nitrogen	<0.01	mg/L	0.00	meq/L
Chloride	19.0	mg/L	0.54	meq/L
Fluoride	<0.1	mg/L	0.00	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	61.8	mg/L	1.29	meq/L
Iron	0.37	mg/L	0.01	meq/L
Calcium	6.92	mg/L	0.35	meq/L
Magnesium	0.05	mg/L	0.00	meq/L
Potassium	2.51	mg/L	0.06	meq/L
Sodium	60.3	mg/L	2.62	meq/L
Cations			3.05	meq/L
Anions			3.05	meq/L
Cation/Anion Difference			0.05%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: WF Fed 1 #1.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

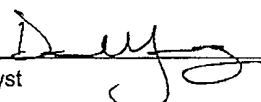
CATION / ANION ANALYSIS

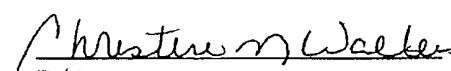
Client:	XTO Energy	Project #:	98031-0121
Sample ID:	WF Fed 1 #1 T-RS	Date Reported:	05-12-08
Laboratory Number:	45335	Date Sampled:	05-06-08
Chain of Custody:	4341	Date Received:	05-06-08
Sample Matrix:	Soil Extract	Date Extracted:	05-07-08
Preservative:		Date Analyzed:	05-08-08
Condition:	Intact		

Parameter	Analytical Result	Units		
pH	9.16	s.u.		
Conductivity @ 25° C	343	umhos/cm		
Total Dissolved Solids @ 180C	260	mg/L		
Total Dissolved Solids (Calc)	234	mg/L		
SAR	6.3	ratio		
Total Alkalinity as CaCO3	58.0	mg/L		
Total Hardness as CaCO3	23.6	mg/L		
Bicarbonate as HCO3	58.0	mg/L	0.95	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	3.7	mg/L	0.06	meq/L
Nitrite Nitrogen	<0.01	mg/L	0.00	meq/L
Chloride	32.0	mg/L	0.90	meq/L
Fluoride	0.43	mg/L	0.02	meq/L
Phosphate	17.3	mg/L	0.55	meq/L
Sulfate	63.0	mg/L	1.31	meq/L
Iron	5.15	mg/L	0.18	meq/L
Calcium	7.37	mg/L	0.37	meq/L
Magnesium	1.26	mg/L	0.10	meq/L
Potassium	3.25	mg/L	0.08	meq/L
Sodium	70.2	mg/L	3.05	meq/L
Cations			3.79	meq/L
Anions			3.79	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **WF Fed 1 #1.**


Analyst


Review

4341

san juan reproduction 578-129

Well Name: WF Federal 1 # 1
Re-Sampled Arroyo
5-6-08

