NM2 - ____8____

CLOSURE REPORT



July 17, 2012

Mr. Brad Jones Oil Conservation Division 1220 South St. Francis Street Santa Fe, New Mexico 87505

Email: brad.a.jones@state.nm.us Phone (505) 476-3487

RE: CENTRALIZED EVAPORATION POND #1 OCD PERMIT #NM-02-0008

Dear Mr. Jones:

XTO has determined that the Centralized Evaporation Pond #1 will be closed pursuant to the previously submitted, and approved, closure plan. The previously submitted closure plan was approved by the NMOCD on February 17, 2011. A closure report detaining the closure activities will be submitted once the closure activities outlined in the approved closure plan have been completed.

Respectfully Submitted,

James McDaniel, CHMM #15676 EH&S Supervisor XTO Energy Inc. Western Division



CC: Brandon Powell, NMOCD Aztec Office



July 15, 2013

Mr. Brad Jones Oil Conservation Division 1220 South St. Francis Street Santa Fe, New Mexico 87505

Email: brad.a.jones@state.nm.us Phone (505) 476-3487

RE: CENTRALIZED EVAPORATION POND #1 OCD PERMIT #NM-02-0008

Dear Mr. Jones:

Please find attached the *Reclamation Photos: Third Quarter 2013* for the Centralized Evaporation Pond #1 located in Section 31, Township 32N, Range 8W, San Juan County, New Mexico. Per our approved closure plan, we are required to monitor the reclamation at this facility for three (3) years, through 2015.

Respectfully Submitted,

James McDaniel, CHMM #15676 EH&S Supervisor XTO Energy Inc. Western Division



CC: Brandon Powell, NMOCD Aztec Office

NECENTO OCD



Photo 1: Reclaimed Area (View 1)

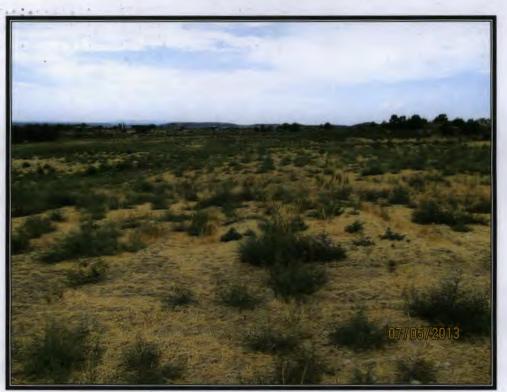


Photo 2: Reclaimed Area (View 2)

XTO Energy, Inc. Evaporation Pond #1 Section 31, Township 32N, Range 8W Third Quarter Monitoring – July 2013



Photo 3: Reclaimed Area (View 3)

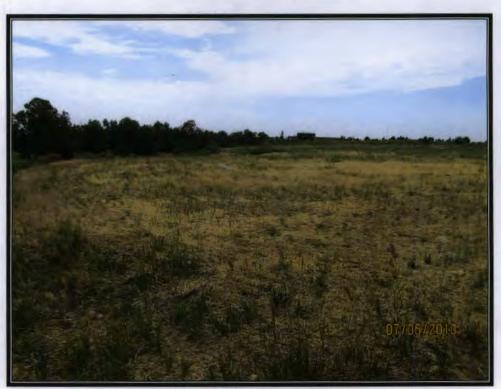


Photo 4: Reclaimed Area (View 4)



May 1, 2013

Mr. Brad Jones Oil Conservation Division 1220 South St. Francis Street Santa Fe, New Mexico 87505

Email: brad.a.jones@state.nm.us Phone (505) 476-3487

RE: CENTRALIZED EVAPORATION POND #2 OCD PERMIT #NM-02-0001

Dear Mr. Jones:

Please find attached the *Reclamation Photos: Second Quarter 2013* for the Centralized Evaporation Pond #2 located in Section 26, Township 32N, Range 9W, San Juan County, New Mexico. Per our approved closure plan, we are required to monitor the reclamation at this facility for three (3) years, through 2015.

Respectfully Submitted,

James McDaniel, CHMM #15676 EH&S Supervisor XTO Energy Inc. Western Division



CC: Brandon Powell, NMOCD Aztec Office

XTO Energy, Inc. Evaporation Pond #2 Section 26, Township 32N, Range 9W Second Quarter Monitoring – April 2013



Photo 1: Reclaimed Area (View 1)



Photo 2: Reclaimed Area (View 2)

XTO Energy, Inc. Evaporation Pond #2 Section 26, Township 32N, Range 9W Second Quarter Monitoring – April 2013



Photo 3: Reclaimed Area (View 3)

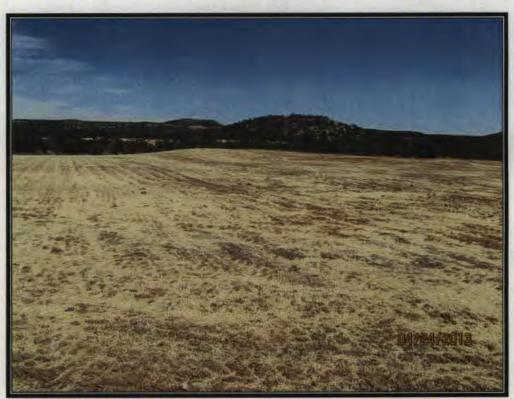


Photo 4: Removing the Leak Detection System



C TOID (TD COD) 201 (CO - 2) (D (C - 13)

August 15, 2011

Mr. Brad Jones Oil Conservation Division 1220 South St. Francis Street Santa Fe, New Mexico 87505

Email: brad.a.jones@state.nm.us Phone (505) 476-3487

RE: CENTRALIZED EVAPORATION POND #1 CLOSURE REPORT OCD PERMIT #NM-02-0008

Dear Mr. Jones:

Please accept the attached *Closure Report* and supporting information for the Centralized Evaporation Pond #1 located in Section 31, Township 32N, Range 8W, San Juan County, New Mexico.

Respectfully Submitted,

Kim Chamden

Kim Champlin EH&S Administrative Supervisor XTO Energy, Inc. San Juan Division

CC: Brandon Powell, NMOCD Aztec Office

SITE NAME:

CENTRALIZED EVAPORATION POND #1 SECTION 31, TOWNSHIP 32N, RANGE 8W SAN JUAN COUNTY, NEW MEXICO OCD PERMIT NO. NM-02-0008

SUBMITTED TO:

MR. BRAD JONES NEW MEXICO OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DRIVE SANTA FE, NEW MEXICO 87505 (505) 476-3487

SUBMITTED BY:

XTO ENERGY, INC. SAN JUAN DIVISION 382 ROAD 3100 AZTEC, NEW MEXICO 87410 (505) 333-3100

AUGUST 15, 2011

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	Attachment #2 Reclamation Plan
	Attachment #3 Photo Documentation
	Attachment #4 LT Environmental Sampling Report

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Evaporation Pond Closure Report XTO Energy, Inc. Centralized Evaporation Pond #1 OCD Permit No. NM-02-0008 August 15, 2011 Page 1

INTRODUCTION

The Centralized Evaporation Pond #1 (Pond #1) was originally permitted by the New Mexico Oil Conservation Division (OCD) for Koch Exploration in July of 1998, OCD Permit No. NM-02-0008. The pond lease and permit was acquired by XTO Energy, Inc. (XTO) in 2009 from El Paso Exploration and Production Company, and approval to transfer the permit was issued in March of 2009. The evaporation pond was used to dispose of produced water from the Gardner C #2, Gardner C #3, Gardner C #4 and Gardner C #6 well sites by previous operators. These wells are now owned and operated by XTO, however Pond #1 has not been used for disposal by XTO. XTO notified OCD in April 2009 of plans for evaporating the fluid in the pond in order to clean and inspect the liner as part of our routine operations and maintenance program. During inspection and maintenance, obsolete, damaged and non-operational equipment was removed from the location. Based on completion of this process XTO has decided to close Pond #1. A closure plan for this evaporation pond was submitted to your office and approved on February 17, 2011.

SCOPE OF CLOSURE ACTIVITIES

The purpose of this closure report is to provide details of the closure activities performed by XTO for Evaporation Pond #1 located in Section 31, Township 32N, Range 8W. XTO is proposing that Evaporation Pond #1 be closed as a Centralized Waste Facility, but allowed to remain open for potential future use. XTO will re-vegetate the area as it stands and allow the structure to remain for potential future use.

1) XTO notified the division's environmental bureau on April 28, 2009 of the cessation of operations at Pond #1 as part of our plans for evaporating the fluid in the pond in order to clean and inspect the liner. This closure plan and proposed schedule has been submitted to the division for adequacy in accordance with Paragraph 1 of Subsection A of NMAC 19.15.36.18.

This closure plan was approved by the OCD on February 17, 2011.

- 2) XTO is requesting an exception to Paragraph 2 of Subsection A of NMAC 19.15.36.18, the division's 60 days for notification of modifications of the closure plan and proposed schedule, based on the time of year and expected weather impediments. Winter precipitation, snow melt and Federal area closures will hinder closure operations. Closure activities occurred at this site from April 4, 2011 through May 23, 2011
 - Closure activities occurred at this site from April 4, 2011 through May 25, 2011
- 3) However, if the division does not notify XTO of additional closure requirements within 60 days as provided, the operator may proceed with closure in accordance with the approved closure plan; provided that the director, for good cause, extend the time for the division's response for an additional period not to exceed 60 days by written notice to XTO in accordance with Paragraph 3 of Subsection A of NMAC 19.15.36.18.

XTO is in receipt of the additional closure requirements outlined in the February 17, 2011 letter from the OCD. This letter is enclosed as *Attachment* #1.

- 4) XTO shall be entitled to a hearing concerning a modification or additional requirement the division seeks to impose if it files an application for a hearing within 10 days after receipt of written notice of the proposed modifications or additional requirements in accordance with Paragraph 4 of Subsection A of NMAC 19.15.36.18.
 A hearing was not requested by XTO Energy, Inc.
- 5) Closure shall proceed in accordance with the approved closure plan and schedule and modifications or additional requirements the division imposes. During closure operations XTO shall maintain the surface waste management facility to protect fresh water, public health, safety and the environment in accordance with Paragraph 5 of Subsection A of NMAC 19.15.36.18.

Closure activities were performed in accordance with the approved closure plan.

6) Upon completion of closure, XTO shall re-vegetate the site in accordance with the included Reclamation Plan. The surface owner of this site is the Bureau of Land Management (BLM) and the included Reclamation Plan conforms to BLM requirements and is in accordance with Paragraph 6 of Subsection A of NMAC 19.15.36.18.

XTO will reclaim the pond in accordance with BLM standards once it has been determined that the facility is no longer useful, Attachment #2.

7) All water and sediment in the pond has been removed and disposed of at an OCD permitted disposal facility in order to inspect the liner as per our agreement with OCD dated April 2009 and in accordance with Paragraph 1 Subsection E of NMAC 19.15.36.18.

All water in Evaporation Pond #1 was removed and disposed of at Agua Moss' OCD permitted injection facility, OCD permit number NMOCD-07-162. Approximately 285 yards of sediments and 1150 barrels of sludge were disposed of at CRI's OCD permitted landfill, OCD permit number NM-01-006.

8) All liners and bedding material will be inspected for re-use in other Oil and Gas operations (with OCD approval). Portions of the liner and bedding material that are deemed unusable will be properly cleaned and disposed of per 19.15.9.712 NMAC at the Bondad Landfill, located in La Plata County, Colorado (due to location) or the San Juan County Landfill, located in San Juan County, New Mexico. Concrete used to make up the leak detection system footer will be broken up and screened for Naturally Occurring Radioactive Material before being hauled to the Bondad Landfill for disposal.

All liner and bedding material was removed and disposed of at the Bondad Landfill. Upon removal of the sump area, it was discovered that there was no concrete in the leak detection area. The leak detection was made up of an 8" PVC connected to the 1" leak detection piping running beneath the pond liner. Please see the photographs presented in *Attachment #3*.

9) The soil beneath the evaporation pond liner, pond sidewalls, liquids receiving and treatment area, leak detection area, and area outside the berm will be sampled, by a third party contractor, into 4-ounce glass jars, capped headspace free, and analyzed for BTEX via USEPA Method 8021B, and for total petroleum hydrocarbons (TPH) via USEPA Method 418.1, total chlorides, and 3103 Subsection A and Subsection B constituents in accordance with NMAC 20.6.2.3103AB. Samples will also be collected from the natural background (for comparative purposes), to be analyzed for metals, and other inorganics listed in Subsections A and B of NMAC 20.6.2.3103. Standard metals will be analyzed via USEPA Method 6010B, Mercury will be analyzed via USEPA Method 7470 and cyanide will be analyzed via USEPA Method 9012B. Fluoride, Nitrate, Sulfate and Chlorides will be analyzed via USEPA Method 9056. Polychlorinated Biphenyls (PCB) will be analyzed via USEPA Method 8082, Volatile Organic Compounds (VOCs) will be analyzed via USEPA Method 8260B, Poly Aromatic Hydrocarbons (PAH) will be analyzed via USEPA Method 8310, Ethylene Dibromide (EDB) will be analyzed via USEPA Method 8011, Phenols will be analyzed via USEPA Method 9066, Total Dissolved Solids (TDS) will be analyzed via USEPA Method 2540C, Uranium will be analyzed via USEPA Method 200.8, and Radium 226/228 will be analyzed via USEPA *Method* 7500.

Individual grab samples will be obtained from any areas (beneath the evaporation pond liner, pond sidewalls, liquids receiving and treatment area, leak detection area, and area outside the berm) with visually obvious staining or moist soil. If the liner is obviously damaged, or there is any indication of a release, a subsurface investigation will be conducted.

Please see included closure sampling report from LT Environmental (LTE) presented as *Attachment* #4.

10) Samples will be collected in accordance with the USEPA SW-846 protocols. Four (4) soil samples will be collected from beneath the pond and along the pond sidewalls, one in each quadrant of a grid pattern. Each sample will be a 10 point composite as shown on Figure 3. Each grid will measure approximately 160' x 160'. The evaporation pond is approximately 315' x 315'. One additional composite sample will be collected beneath the concrete footer of the leak detection system as well. One background sample of virgin, undisturbed soil will be analyzed for comparative purposes. The sample results will be submitted to the OCD Santa Fe office in accordance with Paragraphs 4-5 of Subsection E of NMAC 19.15.36.18.

A sample grid map is included in the LTE Sampling Report, Attachment #4, as Figure #2.

11) Considerations: This site has an OCD Hazard Ranking of 10 based on depth to groundwater of over 100 feet, distance to a water well of over 1,000 feet, and horizontal distance to surface water of over 200 feet; see Figure 1, Vicinity Map. Sample results above 100 mg/kg TPH, 10 mg/kg benzene and 50 mg/kg BTEX standards will be

excavated and a new sample collected as per OCD Guidelines for the Remediation of Leaks, Spills and Releases. Should all closure samples return results below the closure standards determined for this site, no excavation will be required. Soil samples will be collected and analyzed for a chloride standard of 250 mg/kg or background to determine if a release has occurred.

Each of the Evaporation Pond closure samples were found in the laboratory to be below the closure standards outlined in the OCD Guidelines for the Remediation of Leaks, Spills and Releases.

12) Once laboratory analysis indicates closure standards have been achieved for the site, the evaporation pond will be backfilled using non-waste containing soil, and re-contoured and re-vegetated pursuant to the attached **Grading Plan** and **Reclamation Plan**. These plans conform to NMAC 19.15.36.18 and BLM requirements.

Upon the determination that this pond facility has no potential future use, the area will be reclaimed in accordance with BLM standards.

13) The post-closure care period for the evaporation pond closure shall be three years if XTO has achieved clean closure. During that period XTO or another responsible entity shall regularly inspect and maintain the required re-vegetation. If there has been a release to the vadose zone or to groundwater, then XTO shall comply with applicable requirements of 19.15.29 and 19.15.30 NMAC in accordance with Subsection F on NMAC 19.15.36.18.

No release has been confirmed in the Vadose Zone.

14) Once all closure activities have been completed, a report detailing on-site activities and sampling results will be prepared and submitted to OCD environmental bureau in Santa Fe.

This report is intended to be the above mentioned closure report.

XTO Energy, Inc. has completed closure activities at Evaporation Pond #1 located in Section 31, Township 32N, Range 8W, San Juan County, New Mexico. Pending approval of this closure report, Evaporation Pond #1 will no longer be permitted as a Centralized Waste Facility regulated by the OCD.

Kim Mamplin

Kim Champlin EH&S Administrative Supervisor XTO Energy, Inc.

FIGURE 1



ATTACHMENT 1



Susana Martinez Governor

Brett F. Woods, Ph.D. Acting Cabinet Secretary Daniel Sanchez Acting Division Director Oil Conservation Division



February 17, 2011

Ms. Kim Champlin XTO Energy, Inc. San Juan Division 382 Road 3100 Aztec, New Mexico 87410

RE: Facility Closure Plan Review XTO Energy, Inc. - Centralized Surface Waste Management Facility Centralized Evaporation Pond #1: Permit NM-2-008 Facility Location: Section 31, Township 32 North, Range 8 West, NMPM San Juan County, New Mexico

Dear Ms. Champlin:

The Oil Conservation Division (OCD) has reviewed XTO Energy, Inc.'s (XTO) closure plan, dated February 15, 2011, for the centralized surface waste management facility, Centralized Evaporation Pond #1 Permit NM-2-008. Based on the information provided, the facility closure plan **is hereby approved** with the following understandings and conditions:

- 1. XTO shall comply with all applicable requirements of the Surface Waste Management Rule (19.15.36 NMAC), the Oil and Gas Act (Chapter 70, Article 2 NMSA 1978), and all conditions specified in this approval.
- 2. XTO shall ensure that the closure activities identified in the February 15, 2011 submittal are completed as proposed in the closure plan.
- 3. XTO shall ensure that any backfilling and contouring at the facility shall be completed in a manner to prevent erosion and ponding of water.
- 4. XTO shall remove all above and below grade equipment and materials from the permitted footprint of the facility. This shall include any items not associated with the permitted activities.

Oil Conservation Division 1220 South St. Francis Drive • Santa Fe, New Mexico 87505 Phone (505) 476-3440 • Fax (505) 476-3462 • <u>www.emnrd.state.nm.us/OCD</u>

Ms. Champlin XTO Energy, Inc. Permit NM-2-008 February 17, 2011 Page 2 of 2

- 5. XTO shall excavate and removal any visual contamination within the permitted facility footprint. The contaminated soils shall be disposed at an OCD approved facility.
- 6. XTO shall submit a closure report at the completion of the closure activities that summarized the closure activities, including but not limited to, a final closure facility contour map; identification of material disposal facilities; sampling results; backfilling and contouring activities; re-vegetation seeding mixture and application rates; and photo documentation.

Please be advised that approval of this request does not relieve XTO of liability if its operations result in pollution of surface water, ground water, or the environment. Nor does approval relieve XTO of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Brad A. Jones Environmental Engineer

BAJ/baj

cc: OCD District III Office, Aztec

ATTACHMENT 2

Evaporation Pond Reclamation Plan XTO Energy, Inc. Centralized Evaporation Pond #1 OCD Permit No. NM-02-0008 August 2011 Page 1

RECLAMATION PLAN

The purpose of this reclamation plan is to provide a step-by-step list of the reclamation activities proposed by XTO Energy, Inc. for the Centralized Evaporation Pond #1 located in Section 31, Township 32N, Range 8W.

- 1) Once closure activities for the Centralized Evaporation Pond #1 have been completed pursuant to NMAC 19.15.36.18, the former pond location will be backfilled using on-site material used to build the pond's structure upon its completion. During the ponds completion, native material was excavated to create the pond, and the native material was used to build the external structure of the evaporation pond. XTO Energy, Inc. (XTO) proposes to use the existing, native soil to backfill the former pond location, supplementing with outside sources of material should enough native material not be available on site. All supplemental soil will be added to the top portion of the backfilled location, and will match the native soil type.
- 2) The site will be graded according to the attached *Grading Plan* prepared by Geomat, Inc. (Geomat). The grading plan was completed using survey points in and around the former location of the Centralized Evaporation Pond #1 in order to match the natural grade of the surrounding area. This will be done in such a way as to minimize sheet and rill erosion as well as to prevent surface ponding in the reclamation area.
- **3)** The site will be seeded using the approved seed mixture of the Farmington Field Office (FFO) of the Bureau of Land Management (BLM) for the area in which the pond is located. Seeding will be re-completed after the second growing season if satisfactory cover is not achieved. XTO will provide signs and surface roughening in order to protect seed and seedling establishment.
- 4) XTO will monitor the site quarterly, except during winter months due to poor road conditions, in order to monitor the progress of the reclamation area. Excessive weeds will be removed during quarterly monitoring, and progress photos will be collected. An annual report will be submitted to the BLM regarding the progress of the reclamation area for the first three (3) years, or until acceptable coverage has been obtained, whichever comes later. Acceptable coverage is considered 70 percent of the native coverage.

ATTACHMENT 3

- - - -

XTO Energy, Inc. Evaporation Pond #1 Section 31, Township 32N, Range 8W



Photo 1: Evaporation Pond #1 before closure activities



Photo 2: Removing the Leak Detection System

XTO Energy, Inc. Evaporation Pond #1 Section 31, Township 32N, Range 8W



Photo 3: Removing the Leak Detection System



Photo 4: Bottom of Leak Detection System, 8" PVC, No Concrete Sump Found

XTO Energy, Inc. Evaporation Pond #1 Section 31, Township 32N, Range 8W



Photo 5: Pond after Liner Removal



Photo 5: Pond after Liner and Leak Detection Removed

ATTACHMENT 4



LT Environmental, Inc.

2243 Main Avenue, Suite 3 Durango, Colorado 81301 T 970.385.1096 / F 970.385.1873

June 21, 2011

Mr. James McDaniel XTO Energy, Inc. 382 CR 3100 Aztec, NM 87410

RE: Soil Sampling Results XTO Energy, Inc. Centralized Evaporation Pond #1 Permit NM-02-0008 San Juan County, New Mexico

Dear Mr. McDaniel:

LT Environmental, Inc. (LTE) is pleased to provide XTO Energy, Inc. (XTO) with this letter summarizing the results of soil sampling activities at the Centralized Evaporation Pond #1, permit number NM-02-0008 (Site). The Site is located in the northeast ¹/₄ of the northwest ¹/₄ of Section 31 in Township 32 North, Range 8 West, San Juan County, New Mexico (Figure 1). LTE collected soil samples for closure of the evaporation pond, which was used by previous operators to dispose of produced water generated at nearby natural gas wells.

SOIL SAMPLING

XTO removed all water and sediment from the pond, the pond liner, and any other facility equipment prior to sampling. On May 12 and May 16, 2011, LTE collected ten composite soil samples and one background soil sample from locations specified in the January 13, 2011 closure plan submitted by XTO to the New Mexico Oil Conservation Division (NMOCD) and approved by the NMOCD on February 17, 2011. LTE conducted a visual investigation of the Site and did not observe any stained or moist soil from which to collect additional samples.

Composite soil sample locations are shown in Figure 2. Four ten-point composite samples were collected from beneath the former pond liner including the bottom and side walls of the pond (Samples A, B, C, and D). Five-point composite samples were collected beneath the former leak detection sump (Sample E), beneath the former liquids receiving and treatment area (Sample F), and from four areas outside of the former berm (Samples G, H, I, and J). A discrete background sample was collected from the ground surface outside of the facility perimeter in the estimated up-gradient direction (north). For each composite soil sample, LTE deposited the appropriate number of aliquots of soil into plastic bags, thoroughly mixed the contents and sampled into 4-ounce glass jars. The soil samples were stored on ice and shipped in a cooler to Environmental Science Corporation in Mt. Juliet, Tennessee, and Hall Environmental Analysis Laboratory in Albuquerque, New Mexico following strict chain of custody procedures. The soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes by United States Environmental Protection Agency (USEPA) Method 8021B and total petroleum hydrocarbons by USEPA Method 418.1. Additionally, the following constituents listed in Subsections A and B of



J. McDaniel Page 2

20.6.2.3103 of the New Mexico Administrative Code were analyzed based on knowledge of process: arsenic, barium, cadmium, chromium, cyanide, fluoride, lead, total mercury, nitrate, selenium, silver, uranium, combined radioactivity, copper, iron, manganese, chloride, sulfate, total dissolved solids, zinc, and pH.

RESULTS

Table 1 lists the soil analytical results determined in the background sample and composite closure samples. The complete laboratory analytical reports are attached as Appendix A.

LTE appreciates the opportunity to provide environmental services to XTO. If you have any questions regarding this report, please contact us at (970) 385-1096.

Sincerely,

LT ENVIRONMENTAL, INC.

ahlay L agn

Ashley L. Ager, M.S. Senior Geologist/Office Manager

Brooke Herb Staff Geologist

Attachments (4)

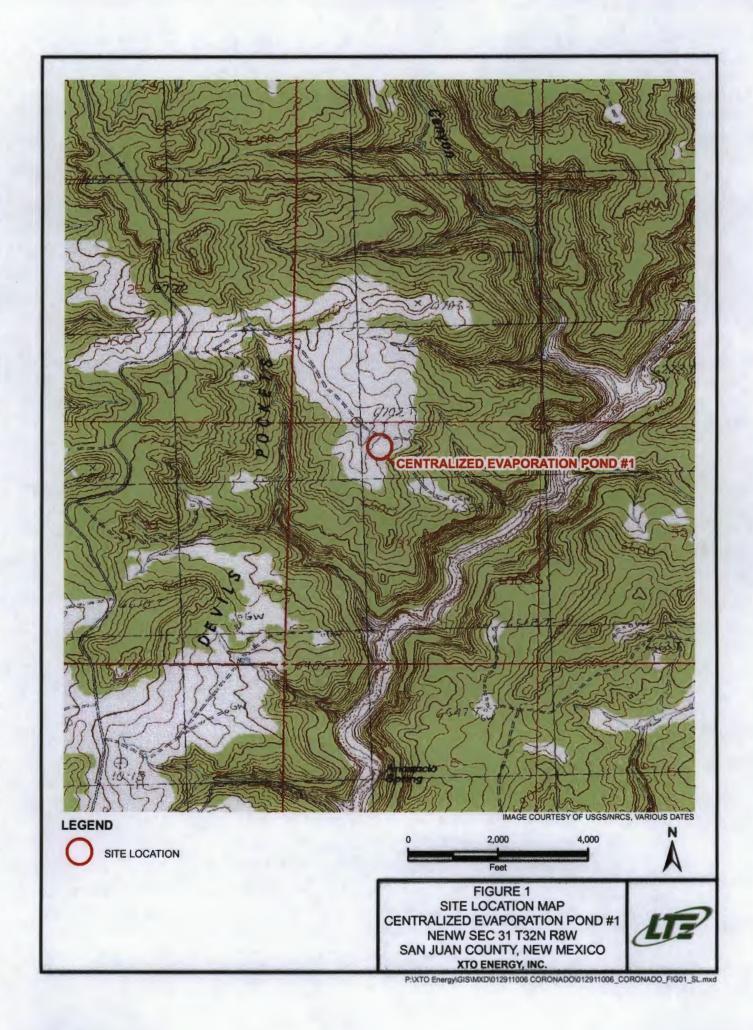
Figure 1 – Site Location Map Figure 2 – Soil Sampling Location Map

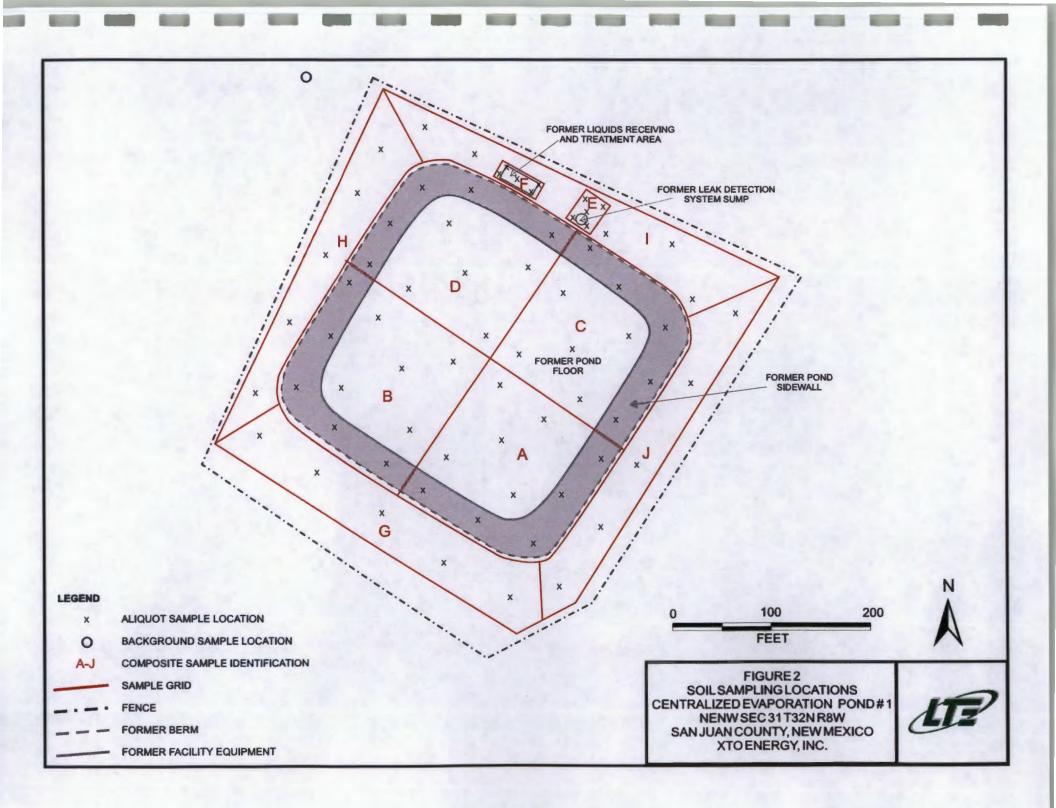
Table 1 - Soil Analytical Results

Appendix A - Laboratory Analytical Reports

FIGURES







TABLE



TABLE 1

SOIL SAMPLE RESULTS CENTRALIZED EVAPORAVTION POND #1 XTO ENERGY, INC.

San	nple ID	Background	A	В	С	D	E	F	G	Н	1	J
Samp	le Date	5/13/2011	5/13/2011	5/13/2011	5/13/2011	5/13/2011	5/16/2011	5/13/2011	5/13/2011	5/13/2011	5/13/2011	5/13/2011
Analyte	Units											
Benzene	mg/kg	< 0.0026	< 0.0027	< 0.0028	< 0.0027	< 0.0026	< 0.0026	< 0.0026	< 0.0026	< 0.0027	< 0.0026	< 0.0027
Toluene	mg/kg	< 0.026	<0.027	< 0.028	< 0.027	<0.026	< 0.026	< 0.026	< 0.026	<0.027	< 0.026	< 0.027
Ethylbenzene	mg/kg	<0.0026	< 0.0027	< 0.0028	< 0.0027	< 0.0026	< 0.0026	< 0.0026	< 0.0026	< 0.0027	< 0.0026	< 0.0027
Total Xylene	mg/kg	< 0.0080	< 0.0080	< 0.0083	< 0.0080	< 0.0080	< 0.0079	< 0.0077	< 0.0078	< 0.0080	< 0.0078	< 0.0081
Total Petroleum Hydrocarbons	mg/kg	<20	<20	<20	<20	<20	<20	35	<20	46	39	<20
pH	S.U.	7.4	8.8	8.5	8.8	8.5	7.5	9.2	10.0	9.0	7.1	7.7
Total Dissolved Solids	%	94	94	91	94	94	95	97	96	93	96	93
Sulfate	mg/kg	< <u>5</u> 3	220	400	250	380	540	680	260	340	270	280
Nitrate	mg/kg	<1.1	1.1	9.1	2.3	20.0	4.7	20.0	18.0	27.0	26.0	15.0
Chloride	mg/kg	42	91	240	190	180	150	310	560	330	420	210
Uranium	mg/kg	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Arsenic	mg/kg	4.0	1.8	3.3	3.6	2.7	19.0	7.1	7.0	5.3	4.2	1.3
Barium	mg/kg	180	130	250	250	350	380	510	370	220	390	130
Cadmium	mg/kg	<0.26	<0.27	<0.28	< 0.27	< 0.26	0.76	< 0.26	< 0.26	<0.27	< 0.26	<0.27
Chromium	mg/kg	11.0	5.1	5.2	5.3	5.4	6.2	5.9	5.5	5.6	6.6	5.2
Cyanide	mg/kg	< 0.26	<0.27	<0.28	< 0.27	< 0.26	< 0.26	< 0.26	< 0.26	<0.27	<0.26	<0.27
Fluoride	mg/kg	4.9	16.0	18.0	7.7	9.1	6.7	4.1	11.0	8.2	13.0	11.0
Lead	mg/kg	11.0	8.0	7.9	9.0	9.3	15.0	9.2	9.8	10.0	9.2	8.4
Mercury	mg/kg	0.033	0.022	0.037	0.041	0.039	0.043	0.023	0.037	0.034	0.026	< 0.022
Selenium	mg/kg	<].1	<1.1	<1.1	<1.1	<1.1	7.5	<1.0	<1.0	<1.1	<1.0	<1.1
Silver	mg/kg	<0.53	< 0.53	<0.55	< 0.53	< 0.53	<0.53	< 0.51	<0.52	< 0.54	<0.52	< 0.54
Copper	mg/kg	8.2	13.0	14.0	14.0	15.0	9.3	12.0	14.0	18.0	18.0	17.0
Iron	mg/kg	13,000	10,000	12,000	11,000	12,000	10,000	11,000	12,000	12,000	12,000	12,000
Manganese	mg/kg	240	110	130	100	170	130	160	110	120	180	120
Zinc	mg/kg	37	31	40	42	35	33	31	40	34	41	43
Radium-226	pCi/g	0.889	1.060	0.793	1.080	0.933	1.000	0.600	0.842	0.849	0.943	0.865
Radium -228	pCi/g	0.905	0.871	0.878	1.410	1.340	0.967	1.100	2.010	0.801	1.420	0.953
Combined Radioactivity	pCi/g	1.794	1.931	1.671	2.490	2.273	1.967	1.700	2.852	1.650	2.363	1.818

Notes:

% - percent mg/kg - milligram per kilogram pCi/g - PicoCurries per gram S.U. - Standard unit

Pond #1_Table 1.xlsx



APPENDIX A

LABORATORY ANALYTICAL REPORTS





12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859 Tax I.D. 62-0814289

Est. 1970

James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410

Report Summary

Monday May 23, 2011

Report Number: L516328 Samples Received: 05/17/11 Client Project:

Description: CORONADO POND #1

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487 GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140 NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233 AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A, TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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				Mt. Jul (615) 7 1-800-7 Fax (61	Gebanon Rd. Liet, TN 37122 758-5858 767-5859 15) 758-5859	
YOUR LAB OF CHOICE				Tax I.I	0. 62-0814289	
TOUR LAB OF CHOICE				Est. 19	970	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	May	y 23,2011		
			ESC	C Sample # :	: L516328-01	L
Date Received : May 17, 201 Description : CORONADO POND #1	.1		Sit	te ID : (CORONADO POND	#1
Sample ID : A			Pro	oject # :		
Collected By : Brooke Herb Collection Date : 05/13/11 11:23				5,000 # .		
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	91. 16. 1.1 220	11. 1.1 1.1 53.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1 1 1 1
Cyanide	BDL	0.27	mg/kg	9012B	05/20/11	1
рH	8.8		su	9045D	05/18/11	1
Total Solids	94.		£	2540G	05/20/11	1
Mercury	0.022	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	1.8 130 BDL 5.1 13. 100000 8.0 110 BDL BDL BDL BDL BDL BDL BDL BDL	1.1 0.27 0.53 1.1 5.3 0.27 0.53 1.1 0.53 1.6 0.0027 0.027 0.027 0.0027 0.0080	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/19/11 05/19/11 05/19/11	1 1 1 1 1 1 1 1 5 5 5 5
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	05/19/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-01 (PH) - 8.8@21.2c

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ESC IVE SIGNIFEINICIEIS				Mt. Jul (615) 7 1-800-7 Fax (61	67-5859 5) 758-5859	
				Tax I.D	. 62-0814289	
YOUR LAB OF CHOICE				Est. 19	70	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	May	23,2011		
	2011		ESC	Sample # :	L516328-02	2
Description : CORONADO POND	#1		Sit	e ID : C	CORONADO POND	#1
Sample ID : B			Pro	ject # :		
Collected By : Brooke Herb Collection Date : 05/13/11 11:3'	7					
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	240 18. 9.1 400	11. 1.1 1.1 55.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	
Cyanide	BDL	0.28	mg/kg	9012B	05/20/11	1
рH	8.5		su	9045D	05/18/11	1
Total Solids	91.		8	2540G	05/20/11	1
Mercury	0.037	0.022	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	3.3 250 BDL 5.2 14. 12000 7.9 130 BDL BDL BDL BDL BDL BDL BDL BDL BDL	1.1 0.28 0.28 0.55 1.1 5.5 0.28 0.55 1.1 0.55 1.6 0.0028 0.028 0.0028 0.0028	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/19/11 05/19/11 05/19/11	1 1 1 1 1 1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	05/19/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-02 (PH) - 8.5021.2c

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ELA'B B'C'I'E'N'C'E'S				Mt. Jul (615) 7 1-800-7 Fax (61	ebanon Rd. iet, TN 37122 58-5858 67-5859 5) 758-5859	
YOUR LAB OF CHOICE					0. 62-0814289	
YOUR LAB OF CHOICE				Est. 19	70	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	May	23,2011		
Date Received : May 17, 20	11		ESC	: Sample # :	L516328-03	
Description : CORONADO POND #1			Sit	eID: C	CORONADO POND	#1
Sample ID : C			Pro	ject # :		
Collected By : Brooke Herb Collection Date : 05/13/11 11:30			110	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Parameter	Dry Result	Det. Limit	Units	Method	Date	<u>Di</u> 1.
Chloride Fluoride Nitrate Sulfate	190 7.7 2.3 250	11. 1.1 1.1 53.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1 1 1 1
Cyanide	BDL	0.27	mg/kg	9012B	05/20/11	1
pH	8.8		su	9045D	05/18/11	1
Total Solids	94.		8	2540G	05/20/11	1
Mercury	0.041	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	3.6 250 BDL 5.3 14. 11000 9.0 100 BDL BDL BDL BDL BDL BDL BDL BDL	1.1 0.27 0.53 1.1 5.3 0.27 0.53 1.1 0.53 1.6 0.0027 0.027 0.027 0.0027 0.0027	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/18/11 05/18/11 05/18/11 05/18/11 05/18/11	1 1 1 1 1 1 1 1 1 5 5 5 5
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	05/19/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-03 (PH) - 8.8@21.2c

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ELAIB BICHTERNICHES				Mt. Jul (615) 7 1-800-7 Fax (61	ebanon Rd. iet, TN 37122 58-5858 67-5859 5) 758-5859 0. 62-0814289	
YOUR LAB OF CHOICE				Est. 19	70	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	Ma	y 23,2011		
Date Received : May 17, 20 Description : CORONADO POND #1			ES	C Sample # :	L516328-04	ł
Sample ID : D			Si	te ID : (CORONADO POND	#1
Collected By : Brooke Herb Collection Date : 05/13/11 11:15			Pr	oject # :		
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	180 9.1 20. 380	11. 1.1 1.1 53.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056		1 1 1 1
Cyanide	BDL	0.26	mg/kg	9012B	05/20/11	1
pH	8.5		su	9045D	05/18/11	1
Total Solids	94.		8	2540G	05/20/11	1
Mercury	0.039	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	2.7 350 BDL 5.4 15. 12000 9.3 170 BDL BDL BDL BDL BDL BDL BDL	1.1 0.26 0.26 0.53 1.1 5.3 0.26 0.53 1.1 0.53 1.6 0.0026 0.0026 0.0026 0.0026 0.0080	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/19/11 05/19/11	1
<pre>Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)</pre>	106.		% Rec.	8021B	05/19/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Det. Limit - Practical quantitation Exactly, Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-04 (PH) - 8.5021.2c

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EVA B SIGNIFE IN CORES				Mt. Jul: (615) 75 1-800-76 Fax (615	67-5859 5) 758-5859	
				Tax I.D.	. 62-0814289	
YOUR LAB OF CHOICE				Est. 197	70	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	Ma	y 23,2011		
Date Received : May 17, 20 Description : CORONADO POND #1			ES	C Sample # :	L516328-05	
Sample ID : F			Sit	te ID : C	ORONADO POND	#1
•			Pro	oject # :		
Collected By : Brooke Herb Collection Date : 05/13/11 10:49						
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	310 4.1 20. 680	10. 1.0 1.0 51.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1 1 1 1
Cyanide	BDL	0.26	mg/kg	9012B	05/20/11	1
PH	9.2		su	9045D	05/18/11	1
Total Solids	97.		8	2540G	05/20/11	1
Mercury	0.023	0.020	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Totual Xylene	7.1 510 BDL 5.9 12. 11000 9.2 160 BDL BDL BDL BDL BDL BDL BDL	1.0 0.26 0.26 0.51 1.0 5.1 0.26 0.51 1.0 0.51 1.5 0.0026 0.026 0.0026 0.0026 0.0077	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/19/11 05/19/11 05/19/11	1 1 1 1 1 1 1 1 5 5 5 5 5
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	05/19/11	-

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-05 (PH) - 9.2@21.2c

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EVALUE BICHIERNICHEIS					Mt. Juli (615) 75 1-800-76 Fax (615	57-5859 5) 758-5859 . 62-0814289	
James McDaniel XTO Energy - San Jua 382 Road 3100 Aztec, NM 87410	an Division	REPORT	OF ANALYSIS	Ma	y 23,2011		
Date Received : Description :	May 17, 2011 CORONADO POND #1				C Sample # : te ID : C	L516328-06 ORONADO POND	
Sample ID :	G			51	ceib; c	JRONADO POND	# 1
Collected By : Collection Date :	Brooke Herb 05/13/11 11:46			Pr	oject # :		
Parameter	D	ry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate		560 11. 18. 260	10. 1.0 1.0 52.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1 1 1 1
Cyanide		BDL	0.26	mg/kg	9012B	05/20/11	1
рH		10.		su	9045D	05/18/11	1
Total Solids		96.		90	2540G	05/20/11	1
Mercury		0.037	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene Surrogato Becoverv(A		7.0 370 BDL 5.5 14. 12000 9.8 110 BDL BDL BDL BDL BDL BDL BDL BDL BDL	1.0 0.26 0.52 1.0 5.2 0.26 0.52 1.0 0.52 1.6 0.0026 0.0026 0.0026 0.0026 0.0078	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/19/11 05/19/11	1 1 1 1 1 1
Surrogate Recovery(% a,a,a-Trifluorotol		106.		% Rec.	8021B	05/19/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Det. Limit - Fractical guartitation 2000,

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VOUR LAB DE CHOICE				Mt. Juli (615) 75 1-800-76 Fax (615	57-5859 5) 758-5859 . 62-0814289	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	Ma	y 23,2011	U	
Date Received : May 17, 201 Description : CORONADO POND #1	1			C Sample # :		
Sample ID : H					ORONADO POND	Η.Τ.
Collected By : Brooke Herb Collection Date : 05/13/11 11:42			Pro	oject # :		
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	330 8.2 27. 340	11. 1.1 1.1 54.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1 1 1 1
Cyanide	BDL	0.27	mg/kg	9012B	05/20/11	1
pH	9.0		su	9045D	05/18/11	1
Total Solids	93.		90	2540G	05/20/11	1
Mercury	0.034	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene Surrogate Recovery(%)	5.3 220 BDL 5.6 18. 12000 10. 120 BDL BDL 34. BDL BDL BDL BDL	1.1 0.27 0.54 1.1 5.4 0.27 0.54 1.1 0.54 1.6 0.0027 0.027 0.0027 0.0027 0.0027	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/19/11 05/19/11 05/19/11	1 1 1 1 1 1 1 1 5 5 5 5 5
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	05/19/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-07 (PH) - 9.0021.2c

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EVAN BURGETERNIC FEIS				Mt. Jul (615) 7 1-800-7 Fax (61	ebanon Rd. iet, TN 37122 58-5858 67-5859 5) 758-5859 . 62-0814289	
YOUR LAB OF CHOICE				Est. 19		
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORI	C OF ANALYSIS	May	y 23,2011	,,,	
Date Received : May 17, 2 Description : CORONADO POND #			ESC	C Sample # :	L516328-08	3
Sample ID : I	_		Sit	te ID : C	CORONADO POND	#1
Collected By : Brooke Herb Collection Date : 05/13/11 11:57			Pro	oject # :		
Parameter	Dry Result	Det. Limit	Units	Method	Date	<u>Di</u> 1.
Chloride Fluoride Nitrate Sulfate Cyanide	420 13. 26. 270 BDL	10. 1.0 1.0 52. 0.26	mg/kg mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056 9012B	05/18/11 05/18/11 05/18/11 05/18/11 05/20/11	1 1 1
pH	7.1		su	9045D	05/20/11	1
Total Solids	96.		8	2540G	05/23/11	1
Mercury	0.026	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	4.2 390 BDL 6.6 18. 12000 9.2 180 BDL BDL BDL BDL BDL BDL BDL BDL	1.0 0.26 0.26 0.52 1.0 5.2 0.26 0.52 1.0 0.52 1.6 0.0026 0.026 0.0026 0.0026 0.0078	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/18/11 05/18/11 05/18/11	1 1 1 1 1 1 5 5 5
<pre>Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)</pre>	84.6		% Rec.	8021B	05/18/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-08 (PH) - 7.1020.9c

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				Mt. Jul (615) 7: 1-800-7		
				Tax I.D	. 62-0814289	
YOUR LAB OF CHOICE				Est. 19	70	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	May	y 23,2011		
Date Received : May 17, 201 Description : CORONADO POND #1	1		ESC	C Sample # :	L516328-09	•
			Sit	te ID : C	ORONADO POND	#1
Sample ID : J Collected By : Brooke Herb Collection Date : 05/13/11 11:51			Pro	oject # :		
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	210 11. 15. 280	11. 1.1 1.1 54.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1 1
Cyanide	BDL	0.27	mg/kg	9012B	05/20/11	1
рH	7.7		su	9045D	05/20/11	1
Total Solids	93.		÷	2540G	05/23/11	1
Mercury	BDL	0.022	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	1.3 130 BDL 5.2 17. 12000 8.4 120 BDL BDL BDL BDL BDL BDL BDL BDL BDL	1.1 0.27 0.54 1.1 5.4 0.27 0.54 1.1 0.54 1.6 0.0027 0.027 0.027 0.0027 0.0027	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/20/11 05/18/11 05/18/11 05/18/11	1 1 1 1 1 1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	91.7		% Rec.	8021B	05/18/11	5

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-09 (PH) - 7.7@20.6c

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				Mt. Juli (615) 75 1-800-76 Fax (615	67-5859 5) 758-5859	
				Tax I.D.	. 62-0814289	
YOUR LAB OF CHOICE				Est. 197	70	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	OF ANALYSIS	May	, 23,2011		
Date Received : May 17, 20 Description : CORONADO POND #1	11		ESC	: Sample # :	L516328-10)
Sample ID : BACKGROUND			Sit	e ID : C	ORONADO POND	#1
Collected By : Brooke Herb Collection Date : 05/13/11 13:16			Pro	oject # :		
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	42. 4.9 BDL BDL	11. 1.1 1.1 53.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1
Cyanide	BDL	0.26	mg/kg	9012B	05/20/11	1
рH	7.4		su	9045D	05/20/11	1
Total Solids	94.		do	2540G	05/23/11	1
Mercury	0.033	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	4.0 180 BDL 11. 8.2 130000 11. 240 BDL BDL BDL BDL BDL BDL	1.1 0.26 0.26 0.53 1.1 5.3 0.26 0.53 1.1 0.53 1.6 0.0026 0.0026 0.0026 0.0026 0.0080	wd/kg wd/kg wd/kg wd/kg wd/kg wd/kg wd/kg wd/kg wd/kg wd/kg wd/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B		1 1 1 1 1 1 1 1 5 5 5
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	90.6		% Rec.	8021B	05/18/11	

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/23/11 14:46 Printed: 05/23/11 14:46 L516328-10 (PH) - 7.4@20.7c

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Summary of Remarks For Samples Printed 05/23/11 at 14:46:44

TSR Signing Reports: 288 R5 - Desired TAT

drywt

Sample: L516328-01 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-02 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-03 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-04 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-05 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-06 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-07 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-08 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-09 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-09 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46 Sample: L516328-09 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/23/11 14:46

LAB SCILENCES

YOUR LAB OF CHOICE

XTO Energy - San Juan Division James McDaniel 382 Road 3100

Aztec, NM 87410

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859 Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L516328

May 23, 2011

		Laboratory				0-+- 1 1
Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury	< .02	mg/kg			WG536047	7 05/18/11 10:2
На	4.30	su			WG536090	0 05/18/11 15:3
Arsenic	< 1	mg/kg			WG536025	5 05/18/11 16:4
Barium	< .25	mg/kg				5 05/18/11 16:4
Cadmium	< .25	mg/kg				5 05/18/11 16:4
Chromium	< .5	mg/kg				5 05/18/11 16:4
Copper	< 1	mg/kg				5 05/18/11 16:4
Iron	< 5	mg/kg			WG536025	5 05/18/11 16:4
Lead	< .25	mg/kg			WG536025	5 05/18/11 16:4
Manganese	< .5	mg/kg			WG536025	5 05/18/11 16:4
Selenium	< 1	mg/kg			WG536025	5 05/18/11 16:4
Silver	< .5	mg/kg			WG536025	5 05/18/11 16:4
Zinc	< 1.5	mg/kg			WG536025	5 05/18/11 16:4
Chloride	< 10	mg/kg			WG536120	0 05/18/11 10:3
Fluoride	< 1	mg/kg				0 05/18/11 10:3
Nitrate	< 1	mg/kg				0 05/18/11 10:3
Sulfate	< 50	mg/kg			WG536120	0 05/18/11 10:3
Benzene	< .0005	mg/kg				9 05/18/11 19:1
Ethylbenzene	< .0005	mg/kg				9 05/18/11 19:1
Toluene	< .005	mg/kg				9 05/18/11 19:1
Total Xylene	< .0015	mg/kg				9 05/18/11 19:1
a,a,a-Trifluorotoluene(PID)		% Rec.	94.62	54-144	WG536259	9 05/18/11 19:1
Benzene	< .0005	mg/kg				05/19/11 05:5
Ethylbenzene	< .0005	mg/kg				9 05/19/11 05:5
Toluene	< .005	mg∕kg				9 05/19/11 05 : 5
Total Xylene	< .0015	mg∕kg				9 05/19/11 05:5
a,a,a-Trifluorotoluene(PID)		% Rec.	107.2	54-144	WG536389	9 05/19/11 05:5
pH	4.30	su			WG536341	05/20/11 08:1
Cyanide	< .25	mg/kg			WG536405	5 05/20/11 08:1
Fotal Solids	< .1	0			WG536423	8 05/20/11 10:5
Arsenic	< 1	mg/kg			WG536040	05/20/11 20:3
Barium	< .25	mg/kg) 05/20/11 20:3
Cadmium	< .25	mg/kg			WG536040) 05/20/11 20:3
Chromium	< .5	mg/kg) 05/20/11 20:3
Copper	< 1	mg/kg				05/20/11 20:3
Iron	< 5	mg/kg				0 05/20/11 20:3
Lead	< .25	mg/kg				0 05/20/11 20:3
langanese	< .5	mg/kg) 05/20/11 20:3
Selenium	< 1	mg∕kg			WG536040	0 05/20/11 20:3
Silver	< .5	mg/kg			WG536040	0 05/20/11 20:3
Zinc * Performance of this Analyt	< 1.5	mg/kg			WG536040	05/20/11 20:3

Performance of this Analyte is outside of established criteria.
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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XTO Energy - San Juan Division James McDaniel 382 Road 3100

Aztec, NM 87410

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May 23, 2011

Est. 1970

Quality Assurance Report Level II

L516328

Analyte	Result	Labo Uni	ratory Blank ts	ec	Limit	Batch Date	Analyzed
Total Solids	< .1	°				WG536848 05/2	3/11_08:53
			Duplicate				
Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.0300	0.0340	11.8	20	L516355-01	WG536047
рН	su	6.60	6.60	0	1	L515640-04	WG536090
рH	su	9.00	9.20	2.20*	1	L516328-05	WG536090
Arsenic	mg/kg	0	0.600	NA	20	L516321-04	WG536025
Barium	mg/kg	3.30	2.80	15.8	20	L516321-04	WG536025
Cadmium	mgr/kgr	0	0.0920	NA	20	L516321-04	WG536025
Chromium	mg/kg	1.90	1.40	31.3*	20	1516321-04	WG536025
Copper	mg/kg	2.20	1.80	17.7	20	L516321-04	WG536025
Iron	mg/kg	1500	1190	23.7*	20	L516321-04	WG536025
Lead	mg/kg	4.20	3.40	20.6*	20	L516321-04	WG536025
Manganese	mq/kq	7.40	5.62	26.9*	20	L516321-04	WG536025
Selenium	mor/kor	0	0.510	NA	20	L516321-04	WG536025
Silver	mg/kg	0	0	0	20	L516321-04	WG536025
Zinc	mg/kg	46.0	34.2	30.1*	20	L516321-04	WG536025
Sulfate	mg/kg	0	6.50	NA	20	L516426-03	WG536120
Sulfate	mg/kg	0	5.30	NA	20	L516426-05	WG536120
рН	su	7.10	7.10	0	1	L516328-08	WG536341
рH	su	9.20	9.20	0	1	L516495-38	WG536341
Cyanide	mg/kg	0	0	0	20	L516328-01	WG536405
Total Solids	õ	94.0	93.1	0.486	5	L516328-07	WG536423
Arsenic	mg/kg	6.60	5.60	16.4	20	L516355-01	WG536040
Barium	mg/kg	55.0	51.0	7.37	20	L516355-01	WG536040
Cadmium	mq/kq	5.40	3.40	45.8*	20	L516355-01	WG536040
Chromium	mg/kg	30.0	28.0	6.23	20	L516355-01	WG536040
Copper	mg/kg	28.0	27.3	4.30	20	L516355-01	WG536040
Iron	mg/kg	22000	21800	1.82	20	L516355-01	WG536040
Lead	mg/kg	18.0	16.0	8.96	20	L516355-01	WG536040
Manganese	mg/kg	540.	442.	20.3*	20	L516355-01	WG536040
Selenium	mg/kg	2.00	1.80	13.0	20	L516355-01	WG536040
Silver	mg/kg	1.00	1.00	2.96	20	L516355-01	WG536040
Zinc	mg/kg	100.	85.9	19.1	20	L516355-01	WG536040
Total Solids	°.	72.0	73.8	2.60	5	L516971-07	WG536848
		Laborato	ry Control Sam				
Analyte	Units	Known V		apie esult	% Rec	Limit	Batch

Mercury mg/kg 8.77 7.48 85.3 71.6-127.7 WG536047 * Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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LAB SICILENCES

YOUR LAB OF CHOICE

XTO Energy - San Juan Division James McDaniel 382 Road 3100

Aztec, NM 87410

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Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L516328

May 23, 2011

		Laboratory Con				
Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Н	su	6.3	6.30	100.	97.98-102.02	WG5360
Arsenic	mg/kg	192	181.	94.3	78.6-120.8	WG5360
Barium	mg/kg	420	392.	93.3	78.8-121.4	WG5360
Jadmium	mg/kg	70.1	66.1	94.3	78.5-121.5	WG5360
Chromium	mg/kg	168	162.	96.4	80.4-120.2	WG5360
Copper	mg/kg	122	118.	96.7	81.6-119.7	WG5360
ron	mg/kg	18100	16800	92.8	50.7-149.7	WG5360
ead	mg/kg	113	110.	97.3	77.3-122.1	WG5360
langanese	mq/kq	441	433.	98.2	78.9-120.9	WG5360
elenium	mg/kg	176	172.	97.7	75.6-125.0	WG5360
Silver	mg/kg	115	99.9	86.9	66-133.9	WG5360
linc	mg/kg	437	416.	95.2	78.5-121.7	WG5360
					0.5.445	1105061
Chloride	mg/kg	200	202.	101.	85-115	WG5361
luoride	mg/kg	20	19.7	98.5	85-115	WG5361
litrate	mg/kg	20	19.9	99.5	85-115	WG5361
Sulfate	mg/kg	200	202.	101.	85-115	WG5361
enzene	mg/kg	.05	0.0408	81.5	76-113	WG5362
thvlbenzene	ma/ka	.05	0.0437	87.4	78-115	WG5362
oluene	mg/kg	.05	0.0427	85.5	76-114	WG5362
otal Xylene	mg/kg	.15	0.130	86.9	81-118	WG5362
, a, a-Trifluorotoluene (PID)				92.75	54-144	WG5362
Benzene	mg/kg	.05	0.0550	110.	76-113	WG5363
Cthylbenzene	mg/kg	.05	0.0517	103.	78-115	WG5363
oluene	mg/kg	.05	0.0518	103.	76-114	WG5363
otal Xylene	mg/kg	.15	0.154	104.	81-118	WG5363
, a, a-Trifluorotoluene (PID)	mg/ kg	.15	0.134	106.6	54-144	WG5363
		6.3	6.30	100.	97.98-102.02	WG5363
DH	su	0.3	6.30	100.	97.90-102.02	WG2363
Cyanide	mg/kg	28.1	28.3	101.	50-150	WG5364
otal Solids	0,5 10	50	50.0	100.	85-155	WG5364
rsenic	mg/kg	192	170.	88.5	78.6-120.8	WG5360
arium	mg/kg	420	386.	91.9	78.8-121.4	WG5360
admium	mg/kg	70.1	62.4	89.0	78.5-121.5	WG5360
hromium	mq/kq	168	160.	95.2	80.4-120.2	WG5360
opper	mg/kg	122	118.	96.7	81.6-119.7	WG5360
ron	mg/kg	18100	16600	91.7	50.7-149.7	WG5360
ead	mg/kg	113	102.	90.3	77.3-122.1	WG5360
anganese	mg/kg	441	428.	97.1	78.9-120.9	WG5360
elenium	mg/kg mg/kg	176	162.	92.0	75.6-125.0	WG5360
ilver	mg/kg mg/kg	115	113.	98.3	66-133.9	WG5360
linc	mg/kg	437	407.	93.1	78.5-121.7	WG5360

* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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LAB SCILENCES

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Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L516328

May 23, 2011

Analyte	Units		atory Contr n Val	ol Sample Resul		% Rec		Limit	Batch
Total Solids	8	50	A.A.W	50.0		100.		85-155	WG536848
10004 1001200									
Analyte	Units	Laboratory Result	Control Sa Ref	%Rec	lcate	Limit	RPD	Limit	Batch
рH	su	6.30	6.30	100.		97.98-102.02	0	20	WG536090
Chloride	mg/kg	207.	202.	104.		85-115	2.44	20	WG536120
Fluoride	mg/kg	20.2	19.7	101.		85-115	2.51	20	WG536120
Nitrate	mg/kg	20.3	19.9	102.		85-115	1.99	20	WG536120
Sulfate	mg/kg	208.	202.	104.		85-115	2.93	20	WG536120
Benzene	mg∕kg	0.0465	0.0408	93.0		76-113	13.2	20	WG536259
Ethylbenzene	mg/kg	0.0509	0.0437	102.		78-115	15.2	20	WG536259
Toluene	mg/kg	0.0483	0.0427	97.0		76-114	12.3	20	WG536259
Total Xylene	mg/kg	0.152	0.130	102.		81-118	15.6	20	WG536259
a,a,a-Trifluorotoluene(PID)				89.28		54-144			WG536259
Benzene	mg/kg	0.0542	0.0550	108.		76-113	1.58	20	WG536389
Ethylbenzene	mg/kg	0.0506	0.0517	101.		78-115	2.16	20	WG536389
Toluene	mg/kg	0.0507	0.0518	101.		76-114	2.20	20	WG536389
Total Xylene	mg/kg	0.150	0.154	100.		81-118	2.20	20	WG536389
a,a,a-Trifluorotoluene(PID)				106.8		54-144			WG536389
рH	su	6.30	6.30	100.		97.98-102.02	0	20	WG536341
Cyanide	mg/kg	27.9	28.3	99.0		50-150	1.42	20	WG536405
			Matrix Spi	ke					
Analyte	Units	MS Res	Ref Res	VT	% Rec	Limit		Ref Samp	Batch
Mercury	mg∕kg	0.323	0.0340	.25	116.	70-130		L516355-01	WG536047
Arsenic	mg/kg	48.6	0.600	50	96.0	75-125		L516321-04	WG536025
Barium	mg/kg	50.7	2.80	50	95.8	75-125		L516321-04	WG536025
Cadmium	mg/kg	48.0	0.0920	50	95.8	75-125		L516321-04	WG536025
Chromium	mg/kg	50.6	1.40	50	98.4	75-125		L516321-04	WG536025
Copper	mg∕kg	52.5	1.80	50	101.	75-125		L516321-04	WG536025
Iron	mg/kg	1430	1190	50	480.*	75-125		L516321-04	WG536025
Lead	mg/kg	54.6	3.40	50	102.	75-125		L516321-04	WG536025
Manganese	mg∕kg	57.1	5.62	50	103.	75-125		L516321-04	WG536025
Selenium	mg/kg	48.1	0.510	50	95.2	75-125		L516321-04	WG536025
Silver	mg/kg	48.2	0	50	96.4	75-125		L516321-04	WG536025
Zinc	mg∕kg	84.8	34.2	50	101.	75-125		L516321-04	WG536025
Sulfate	mg/kg	532.	4.00	500	106.	80-120		L516426-01	WG536120
Benzene	mg/kg	0.180	0	.05	72.0	32-137		L516328-08	WG536259
Ethylbenzene	mg/kg	0.185	0	.05	74.0	10-150		L516328-08	WG536259
Toluene	mg/kg	0.187	0	.05	74.7	20-142		L516328-08	WG536259
Total Xylene	mg/kg	0.561	0	.15	74.8	16-141		L516328-08	WG536259

Performance of this Analyte is outside of established criteria.
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Est. 1970

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L516328

May 23, 2011

			Matrix S						
Analyte	Units	MS Res	Ref Re	es TV	% Rec	Limit		Ref Samp	Batch
a,a,a-Trifluorotoluene(PID)					87.43	54-14	4		
Benzene	mg/kg	0.263	0	.05	105.	32-13	7	L516467-10	WG5363
Ethylbenzene	mg/kg	0.245	0	.05	98.2	10-15	0	L516467-10	WG5363
Toluene	mg/kg	0.245	0	.05	98.2	20-14	2	L516467-10	WG5363
Total Xylene	mg/kg	0.729	0	.15	97.2	16-14	1	L516467-10	WG5363
a,a,a-Trifluorotoluene(PID)	5 5				106.7	54-14	4		WG5363
Cyanide	mg/kg	3.82	0	3.33	115.	80-12	0	L516355-04	W G5364
Arsenic	mg∕kg	46.3	5.60	50	81.4	75-12	5	L516355-01	WG5360
Barium	mg/kg	95.2	51.0	50	88.4	75-12	5	L516355-01	WG5360
Cadmium	mg/kg	46.6	3.40	50	86.4	75-12	5	L516355-01	WG5360
Chromium	mg/kg	68.9	28.0	50	81.8	75-12	5	L516355-01	WG5360
Copper	mg/kg	73.1	27.3	50	91.6	75-12	5	L516355-01	WG5360
Iron	mg/kg	22600	21800	50	1600*	75-12	5	L516355-01	WG5360
Lead	mg/kg	58.0	16.0	50	84.0	75-12		L516355-01	WG5360
Manganese	mg/kg	627.	442.	50	370.*	75-12		L516355-01	WG5360
Selenium	mq/kq	41.1	1.80	50	78.6	75-12		L516355-01	WG5360
Silver	mg/kg	45.2	1.00	50	88.4	75-12		L516355-01	WG5360
Zinc	mg/kg	138.	85.9	50	104.	75-12		L516355-01	WG5360
Arsenic	mg/kg mg/kg	52.0	4.10	50	95.8	75-12		L516355-04	WG5360
Barium	mg/kg	76.0	26.0	50	100.	75-12		L516355-04 L516355-04	WG5360 WG5360
		58.4		50	88.8	75-12			WG5360 WG5360
Cadmium Chromium	mg/kg		14.0			75-12		L516355-04	
	mg/kg	59.2	8.70	50	101.			L516355-04	WG5360
Lead	mg/kg	59.8	9.20	50	101.	75-12		L516355-04	WG5360
Selenium	mg/kg	46.4	1.20	50	90.4	75-12		L516355-04	WG5360
Silver	mg/kg	48.8	0.330	50	96.9	75-12	5	L516355-04	WG5360
Analyte	Units	Mat MSD	rix Spike Ref	Duplicate %Rec	Limit	RPD	T i mi	it Ref Samp	Batch
Analyte	Units	MSD	Kei	*KeC	Limit	RPD	Lim	it ker Samp	Batch
Mercury	mg∕kg	0.288	0.323	102.	70-130	11.5	20	L516355-01	WG5360
Arsenic	mg/kg	45.0	48.6	88.8	75-125	7.69	20	L516321-04	WG5360
Barium	mg/kg	47.8	50.7	90.0	75-125	5.89	20	L516321-04	WG5360
Cadmium	mg/kg	45.4	48.0	90.6	75-125	5.57	20	L516321-04	WG5360
Chromium	mg/kg	47.8	50.6	92.8	75-125	5.69	20	L516321-04	WG5360
Copper	mg/kg	48.4	52.5	93.2	75-125	8.13	20	L516321-04	WG5360
Iron	mg/kg	1330	1430	280.*	75-125	7.25	20	L516321-04	WG5360
Lead	mg/kg	50.9	54.6	95.0	75-125	7.01	20	L516321-04	WG5360
langanese	mq/kq	52.8	57.1	94.4	75-125	7.83	20	L516321-04	WG5360
Selenium	ma/ka	44.6	48.1	88.2	75-125	7.55	20	L516321-04	WG5360
Silver	mg/kg	45.6	48.2	91.2	75-125	5.54	20	L516321-04	WG5360
linc	mg/kg	80.4	84.8	92.4	75-125	5.33	20	L516321-04	WG5360
Sulfate	mg/kg	529.	532.	105.	80-120	0.566	20	L516426-01	WG5361
Benzene	mg/kg	0.185	0.180	74.1	32-137	2.91	39	L516328-08	WG5362
Sthylbenzene	mg/kg	0.190	0.185	75.8	10-150	2.38	44	L516328-08	WG5362
	mg/kg	0.189	0.187	75.6	20-142	1.15	42	L516328-08	WG5362
l'oluene									
Toluene Total Xylene	mg/kg	0.572	0.561	76.2	16-141	1.95	46	L516328-08	WG5362

Performance of this Analyte is outside of established criteria.
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

Page 16 of 18

A . 8 S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

XTO Energy - San Juan Division James McDaniel 382 Road 3100

Aztec, NM 87410

Analyte

Benzene

12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62~0814289

May 23, 2011

Est. 1970

Quality Assurance Report Level II

107.

L516328

Ref

0.263

Units MSD

mg/kg 0.269

Matrix Spike Duplicate %Rec Limit RPD Limit Ref Samp Batch 32-137 2.19 39 L516467-10 WG536389 L516467-10 10-150 20-142 0.390 WG536389 44 L516467-10 WG536389 1.66 42

Dell'2elle	mg/ ng	0.205	0.205	107.	Ja 197	2.12	~ ~	DOTO10: 20	1100000000
Ethylbenzene	mg/kg	0.245	0.245	97.8	10-150	0.390	44	L516467-10	WG536389
Toluene	mg/kg	0.250	0.245	99.8	20-142	1.66	42	L516467-10	WG536389
Total Xylene	mq/kq	0.720	0.729	96.0	16-141	1.20	46	L516467-10	WG536389
a, a, a-Trifluorotoluene (PID)				107.9	54-144				WG536389
Cyanide	mg/kg	3.61	3.82	108.	80-120	5.65	20	L516355-04	WG536405
Arsenic	mg/kg	44.1	52.0	80.0	75-125	16.4	20	L516355-04	WG536040
Barium	mg/kg	93.1	76.0	134.*	75-125	20.2*	20	L516355-04	WG536040
Cadmium	mg/kg	41.1	58.4	54.2*	75~125	34.8*	20	L516355-04	WG536040
Chromium	mg/kg	69.6	59.2	122.	75-125	16.1	20	L516355-04	WG536040
Copper	mg/kg	69.4	73.1	84.2	75-125	5.19	20	L516355-01	WG536040
Iron	mg/kg	22900	22600	2200*	75-125	1.32	20	L516355-01	WG536040
Lead	mg/kg	54.8	59.8	91.2	75-125	8.73	20	L516355-04	WG536040
Manganese	mg/kg	444.	627.	4.00*	75-125	34.2*	20	L516355-01	WG536040
Selenium	mg/kg	38.0	46.4	73.6*	75-125	19.9	20	L516355-04	WG536040
Silver	mg/kg	42.6	48.8	84.5	75-125	13.6	20	L516355-04	WG536040
Zinc	mg/kg	119.	138.	66.2*	75-125	14.8	20	L516355-01	WG536040
Arsenic	mg/kg	51.6	52.0	95.0	75-125	0.772	20	L516355-04	WG536040
Barium	mg/kg	76.2	76.0	100.	75-125	0.263	20	L516355-04	WG536040
Cadmium	mg/kg	58.8	58.4	89.6	75-125	0.683	20	L516355-04	WG536040
Chromium	mg/kg	59.0	59.2	101.	75-125	0.338	20	L516355-04	WG536040
Lead	mg/kg	60.8	59.8	103.	75-125	1.66	20	L516355-04	WG536040
Selenium	mg/kg	46.2	46.4	90.0	75-125	0.432	20	L516355-04	WG536040
Silver	mg/kg	49.0	48.8	97.3	75-125	0.409	20	L516355-04	WG536040

Batch number /Run number / Sample number cross reference

WG536047: R1691954: L516328-01 02 03 04 05 06 07 08 09 10 WG536090: R1692249: L516328-01 02 03 04 05 06 07 WG536025: R1692289: L516328-01 02 03 04 05 06 WG536120: R1692610: L516328-01 02 03 04 05 06 07 08 09 10 WG536259: R1692929: L516328-08 09 10 WG536389: R1693090: L516328-01 02 03 04 05 06 07 WG536305: R1695309: L516328-08 09 10 WG536405: R1694549: L516328-08 09 10 WG536423: R1694549: L516328-01 02 03 04 05 06 07 08 09 10 WG536423: R1694679: L516328-01 02 03 04 05 06 07 WG536040: R1696830 R1696831: L516328-08 07 09 10 WG536848: R1697115: L516328-08 09 10

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

Page 17 of 18



YOUR LAB OF CHOICE

XTO Energy - San Juan Division James McDaniel 382 Road 3100

Aztec, NM 87410

Quality Assurance Report Level II

L516328

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier. 12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

May 23, 2011

Page 18 of 18

Company Name/Address					Alternate Bill	ling			_		Analy	sis/Co	ontain	er/Pre	eserva	itive			Chain of Custody Pageof
XTO Energy, Inc. 382 County _≀ Road 3100 Aztec, NM 87410					XTORNM	03181	0S				I. Se							B033 Prepared by:	
					Report to: Jame E-mail to: jame			oenergy.com			Pb. Hg	ma.zn						ENVIRON Science corp 12065 Lebar Mt. Juliet TN	on Road
Project Description: PHONE: 505-333-3701 FAX:		ojectiv	-	₩ -			City/S Dject #	State Collected:	NM		, CN - F	5	as N					Phone (615) Phone (800) . FAX (61	758-5858 767-5859
Collected by: Collected by(signature): Bracker HAS	Site/Facil] (Li N T	ab MU lext [WO []	JST be Day Day	ND # 1 e Notified) 100%	Email	?N	ts Needed	No of	(1008) X2	Ba, Cd, Cr	-		HO SC				CoCode XTORNM Template/Prelogin	(lab use only)
Packed on Ice NY_¥ Sample ID	Comp/C		hree (Mat		25%	FAX?		loYes Time	Cotrs	BTex (S	Q9	So	F				Shipped Via: Fed Ex Remarks/contaminant	Sample # (lab only)
A	Car				Deptit	5		11:23	2	1	T		Ť					Remarks.comannan	1516328-01
B		- • •		1	•		<u>a</u> _	11:37	2										-07
G								11:30	2										-03
other D								11:15	2						-			NO SAMPLE	-04 COLLECTED
F	┼──┨					+		1049	2	Ħ	F			F	-				- 05
G						╞╌╊		1146	2	$\left \right $	\mathbf{H}			\mathbb{H}^{-}	 				-08
H						┼╌╂╴		11:42	a				H	Ħ	-				-07
I I		/		1.	1		,	1157	3		V	V	4	V	1				- 08
Matrix: SS-Soil/Solid GW-Groundwa Remarks: "ONLY 1 COC Per Site!		V-Wa	stewa	ter D)W-Drinking W	Vater (о - тс	ther			<u> </u>					рН_		Temp Flow	Other
Relinquisher by (Signature)	Date 5/13	11	Time:	zo	Received by:(S			Int		4	les retu 65°	179	a: FedE	961	60	Other			(iab use only)
Relinadisher by (Signature	Date		Time:		Received by: (Signature	:) `	2.5		Temp	3.1	ł		Bottle		-40	z		
Relinquisher by:(Signature	Date:		Time:		Received for I		ignatur			Date:	17	Ìĸ		Time	790	0		pH Checked:	NCF:

.

Company Name/Address			Alternate Bil	ling		_		Analy	sis/Co	Intaine	er/Pre	servativ	e		Chain of Custody Page 2 of 2
XTO Energy, Inc. 382 County Road 3100 Aztec, NM 87410		-	Report to: Jam		oenergy.com			Pb. Ha. Se	ma, Za	-				Prepared by: ENVIRONI Science cor 12065 Lebar	MENTAL p non Road
Project Description: CORDNAD PHONE: 505-333-3701 FAX: Collected by:			J	Lab Project #	State Collected: an Cty, N	M	(r.cn ⁻ .E	Cu Fe	asin				Mt. Juliet TN Phone (615) Phone (800) . FAX (61	758-5858
Collected by: Brooke Herb Collected by(signature): Hobbut Packed on Ice N_Y_X	^	ab MUST be lext Day WO Day hree Day	e Notified) 100% 50%	Date Result		No of	BTEX (8021	s.ba, Cd.(la & CL	Cu NO3	nds' pf			CoCode XTORNM Template/Prelogin Shipped Via: Fed Ex	(lab use only)
Sample ID	Comp/Grab		Depth	Date	Time	Cntrs		Q	O	S				Remarks/contaminant	Sample # (lab only)
BACK GROUND	Comp Grab	\$/S S/S	0-2"	5/ 3/ 11 5/1 3/ 11	115101 15:40 13:16		ł	¥	J	4	Ţ				1516328-09 -10
····									.a						
Matrix: SS-Soil/Solid GW-Groundwa Remarks: "ONLY 1 COC Per Site		stewater D	W-Drinking V	Vater OT-O	ther								pH	Temp Flow	Other
Relinguisher by:(Signature	Date: 5/13/11 Date:	Time: 14.30 Time:	Received by:(S		S-N-S-		Samp Temp	:		a: FedE		s Receive	d:	Condition DK	(lab use only)
Relinquisher by:(Signature	Date:	Time:	Received for	lab by: (Signatur	re)		Date:	17/			Time:	2900		pH Checked:	NCF:

¥	ESC	
L·A·B	S.C.I.E.N.C.E.S	5

NON-CONFORMANCE FORM

Login No.: 1516324
Date: 5/12/14
Evaluated by: Dustin C
Client: XTORVM

Laphne

Non-Conformance (check applicable items)

7

Parameter(s) past holding time	🗹 Login Clarification Needed
Improper temperature	Chain of custody is incomplete
Improper container type	□ Chain of Custody is missing (see below)
□ Improper preservation	□ Broken container(s) (See below)
Container lid not intact	□ Broken container: sufficient sample
	volume remains for analysis requested (See below)
If no COC: Received by	 Insufficient packing material inside cooler Improper handling by carrier (FedEx / UFS / Courier Sample was frozen
comments: <u>Climt we</u>	with torun TIDS on all scimples. An scimples
Login Instructions:	TSR Initials:
Client informed by call / (mail) / fax	/ voice mail date: 5/17 time: 14:00
Client contact: in	formed clitent



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James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410

Report Summary

Tuesday May 24, 2011

Report Number: L516365 Samples Received: 05/17/11 Client Project:

Description: Coronado Pond 1

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

OWNE K. KICHAI

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487 GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140 NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233 AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A, TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences. Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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				Mt. Jul (615) 7 1-800-7	ebanon Rd. iet, TN 37122 58-5858 67-5859 5) 758-5859	
				Tax I.D	. 62-0814289	
YOUR LAB OF CHOICE				Est. 19	70	
James McDaniel XTO Energy - San Juan Division 382 Road 3100 Aztec, NM 87410	REPORT	C OF ANALYSIS	Ma	y 24,2011		
Date Received : May 17, 2			ES	C Sample # :	L516365-01	
Description : Coronado Pond 1			Si	te ID : C	CORONADO POND	1
Sample ID : E			Pro	oject # :		
Collected By : Brooke Herb Collection Date : 05/16/11 12:28						
Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chloride Fluoride Nitrate Sulfate	150 6.7 4.7 540	10. 1.0 1.0 53.	mg/kg mg/kg mg/kg mg/kg	9056 9056 9056 9056	05/18/11 05/18/11 05/18/11 05/18/11	1
Cyanide	BDL	0.26	mg/kg	9012B	05/24/11	1
рH	7.5		su	9045D	05/20/11	1
Total Solids	95.		÷	2540G	05/23/11	1
Mercury	0.043	0.021	mg/kg	7471	05/18/11	1
Arsenic Barium Cadmium Chromium Copper Iron Lead Manganese Selenium Silver Zinc Benzene Toluene Ethylbenzene Total Xylene	19. 380 0.76 6.2 9.3 10000 15. 130 7.5 BDL 33. BDL BDL BDL BDL BDL	1.0 0.26 0.53 1.0 5.3 0.26 0.53 1.0 0.53 1.6 0.0026 0.0026 0.0026 0.0079	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 8021B 8021B 8021B 8021B	05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11 05/18/11	1 1 1 1 1 1
Surrogate Recovery(%) a,a,a-Trifluorotoluene(PID)	88.9		% Rec.	8021B	05/18/11	

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 05/24/11 16:43 Printed: 05/24/11 16:43 L516365-01 (PH) - 7.5@20.7c

Page 2 of 8

Attachment A List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L516365-01	WG536757	SAMP	Cyanide	R1698973	J3

Page 3 of 8

Attachment B Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.
- Surrogate Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Page 4 of 8

Summary of Remarks For Samples Printed 05/24/11 at 16:43:24

TSR Signing Reports: 288 R5 - Desired TAT

drywt

Sample: L516365-01 Account: XTORNM Received: 05/17/11 09:00 Due Date: 05/24/11 00:00 RPT Date: 05/24/11 16:43

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LAB SICILEINICES

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XTO Energy - San Juan Division James McDaniel 382 Road 3100

Aztec, NM 87410

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Est. 1970

Quality Assurance Report Level II

L516365

May 24, 2011

		Labora	itory Blan	k			
Analyte	Result	Units	0	Rec	Limit	Batch	Date Analyzed
Mercury	< .02	mg/kg	r			WG536048	05/18/11 11:5
Chloride	< 10	mg/kg	r			WG536120	05/18/11 10:3
Fluoride	< 1	mg/kg				WG536120	05/18/11 10:3
Nitrate	< 1	mg/kg				WG536120	05/18/11 10:3
Sulfate	< 50	mg/kg	r			WG536120	05/18/11 10:3
Benzene	< .0005	mg/kg	I				05/18/11 19:1
Ethylbenzene	< .0005	mg/kg					05/18/11 19:1
Toluene	< .005	mg/kg					05/18/11 19:1
Total Xylene	< .0015	mg/kg					05/18/11 19:1
a,a,a-Trifluorotoluene(PID)		% Rec		94.62	54-144	WG536259	05/18/11 19:1
рH	4.30	su				WG536341	05/20/11 08:1
Total Solids	< .1	0.				WG536848	05/23/11 08:5
Cyanide	< .25	mg/kg	r			WG536757	05/24/11 10:3
		Du	plicate				
Analyte	Units	Result	Duplicat	e RPD	Limit	Ref Sam	p Batch
Mercury	mg/kg	0.0150	0.0150	0	20	L516355	-04 WG53604
Sulfate	mg/kg	0	6.50	NA	20	L516426	-03 WG53612
Sulfate	mg/kg	0	5.30	NA	20	L516426	-05 WG53612
рН	su	7.10	7.10	0	1	L516328	
рH	su	9.20	9.20	0	1	L516495	-38 WG53634
Total Solids	8	72.0	73.8	2.60	5	L516971	-07 WG53684
Cyanide	mg/kg	0.670	0.660	1.20	20	L516441	-01 WG53675
Cyanide	mg/kg	2.90	0.780	115.*	20	L516355	<u>-06 WG53675</u>
		Laboratory	Control				
Analyte	Units	Known Val		Result	% Rec	Limit	Batch
Mercury	mg/kg	8.77	7	.02	80.0	71.6-127	.7 WG53604
Chloride	mg/kg	200		02.	101.	85-115	WG53612
Fluoride	mg/kg	20		9.7	98.5	85-115	WG53612
Nitrate	mg/kg	20		9.9	99.5	85-115	WG53612
Sulfate	mg/kg	200	2	02.	101.	85-115	WG53612
Benzene	mg/kg	.05		.0408	81.5	76-113	WG53625
Ethylbenzene	mg/kg	.05		.0437	87.4	78-115	WG53625
Toluene	mg/kg	.05	0	.0427	85.5	76-114	WG53625

Performance of this Analyte is outside of established criteria.
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

Page 5 of 8

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Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L516365

May 24, 2011

				trol Sample		0		T La La	D. L.
Analyte	Units	Kno	wn Val	Resul	.t	% Rec		Limit	Batch
Total Xylene a,a,a-Trifluorotoluene(PID)	mg∕kg	.15		0.130		86.9 92.75		81-118 54-144	WG5362 WG5362
рH	su	6.3		6.30		100.		97.98-102.02	WG536
Total Solids	8	50		50.0		100.		85-155	WG5368
Cyanide	mg/kg	28.	1	21.4		76.2		50-150	WG5367
		Laborator	y Control	Sample Dupl	icate				
Analyte	Units	Result	Ref	%Rec		Limit	RPD	Limit	Batch
Chloride	mg/kg	207.	202.	104.		85-115	2.44	20	WG5361
fluoride	mg/kg	20.2	19.7	101.		85-115	2.51	20	WG5361
Nitrate	mg/kg	20.3	19.9	102.		85-115	1.99	20	WG5361
Sulfate	mg/kg	208.	202.	104.		85-115	2.93	20	WG5361
Benzene	mg/kg	0.0465	0.0408	93.0		76-113	13.2	20	WG536
Sthylbenzene	mg/kg	0.0509	0.0437	102.		78-115	15.2	20	WG5362
oluene	mg/kg	0.0483	0.0427	97.0		76-114	12.3	20	WG5362
'otal Xylene	mq/kq	0.152	0.130	102.		81-118	15.6	20	WG5362
a,a,a-Trifluorotoluene(PID)	<u>.</u>			89.28		54-144			WG5362
DH	su	6.30	6.30	100.		97.98-102.02	0	20	WG5363
Cyanide	mg/kg	27.7	21.4	98.0		50-150	25.7*	20	WG5367
			Matrix S	pike					
Analyte	Units	MS Res	Ref Re	s TV	% Rec	Limit		Ref Samp	Batch
Mercury	mg/kg	0.262	0.0150	.25	98.8	70-130		L516355-04	WG5360
Sulfate	mg/kg	532.	4.00	500	106.	80-120		L516426-01	WG5361
Benzene	mg/kg	0.180	0	.05	72.0	32-137		L516328-08	WG5362
Sthylbenzene	mg/kg	0.185	0	.05	74.0	10-150		L516328-08	WG5362
Toluene	mg/kg	0.187	0	.05	74.7	20-142		L516328-08	WG5362
Total Xylene	mg/kg	0.561	õ	.15	74.8	16-141		L516328-08	WG5362
a, a, a-Trifluorotoluene (PID)		01501	0	110	87.43	54-144			WG5362
Cyanide	mg/kg	3.24	0	3.33	97.3	80-120		L516355-13	WG5367
		Mat	rix Spike :	Duplicate					
Analyte	Units			Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/kg	0.267	0.262	101.	70-130	1.89	20	L516355-04	WG5360
Sulfate * Performance of this Analyt	mg/kg			105.	80-120	0.566	20	L516426-01	WG5361

* Performance of this Analyte is outside of established criteria. For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

Page 6 of 8

YOUR LAB OF CHOICE

Aztec, NM 87410

XTO Energy - San Juan Division James McDaniel 382 Road 3100 12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859 Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report Level II

L516365

May 24, 2011

		Ma	trix Spik	e Duplicate	2				
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limi	t Ref Samp	Batch
Benzene Ethylbenzene Toluene Total Xylene a.a.a Trifluorotoluene(PID)	mg/kg mg/kg mg/kg mg/kg	0.185 0.190 0.189 0.572	0.180 0.185 0.187 0.561	74.1 75.8 75.6 76.2 89.45	32-137 10-150 20-142 16-141 54-144	2.91 2.38 1.15 1.95	39 44 42 46	L516328-08 L516328-08 L516328-08 L516328-08	WG536259 WG536259 WG536259 WG536259 WG536259
Cyanide	mg/kg	3.44	3.24	103.	80-120	5.99	20	L516355-13	WG536757

Batch number /Run number / Sample number cross reference

WG536048: R1691955: L516365-01 WG536120: R1692610: L516365-01 WG536070: R1692809: L516365-01 WG536259: R1692929: L516365-01 WG536341: R1694309: L516365-01 WG536848: R1697115: L516365-01 WG536757: R1698973: L516365-01

* Calculations are performed prior to rounding of reported values.
 * Performance of this Analyte is outside of established criteria.
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

Page 7 of 8



YOUR LAB OF CHOICE

XTO Energy - San Juan Division James McDaniel 382 Road 3100

Aztec, NM 87410

Quality Assurance Report Level II

L516365

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier. 12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

May 24, 2011

Company Name/Address Alternate Billing				Analys	sis/Co	ontaine	er/Prese	rvative			Chain of Custody				
XTO Energy, Inc. 382 County Road 3100			XTORNM031810S				Halse						B038 Prepared by:	Pageof	
Aztec, NM 87410				nes McDaniel nes_mcdaniel@xt	oenergy.com			F, PD,	n, 2n					ENVIRON Science cor 12065 Lebar Mt. Juliet TN	p non Road
Project Description: CORONAD PHONE: 505-333-3701 FAX:		no. 	I	San Jug Lab Project #	State Collected: n Hy , N	ЭМ	(16	CC, CA	Fe, M	750				Phone (615) Phone (800)	758-5858
Collected by: Collected by(signature): Packed on Ice N_Y_		JADO P ab MUST be Next Day I wo Day Three Day	e Notified) 100% 50%	P.O.# Date Result Email?N FAX?N	o_X_Yes	No of	STEX (803)	s, Ba, Cd	A CI.CU	04 N03	HQ 501			CoCode XTORNM Template/Prelogin Shipped Via: Fed Ex	(lab use only)
Sample ID	Comp/Grab	Matrix [*]	Depth	Date 5//io//i	Time	Cntrs		0	$\overline{\mathcal{S}}$	$\frac{1}{2}$				Remarks/contaminant	Sample # (lab only)
				-/////	dra				-						<i>L.</i>
······						<u> </u>									
															· · · · · · · · · · · · · · · · · · ·
						+									
							<u>.</u>								
Matrix: SS-Soil/Solid GW-Groundy	vater WW-Wa	stewater D	W-Drinking	Nater OT-O			<u> </u>					 рН		Temp	<u>1</u>
Remarks: "ONLY 1 COC Per Site					· •									Flow	Other
Relingelisher by:(Signature	Date: 5/14/11 Date:	Time: 1430 Time:	Received by:(S. M.		Samp 4 Temp	341	ned via 98	5)4(109 Bottles F	SOther ecceived:		Condition	(iab use only)
Relinquisher by:(Signature	Date:	Time:	Recfived for	lab by: (Signatur	e)		Date:	3.4 1-1	11		Time:	2-40z en		pH Checked:	NCFYES



COVER LETTER

Thursday, June 16, 2011

James McDaniel XTO Energy 382 County Road 3100 Aztec, NM 87410

TEL: (505) 787-0519 FAX (505) 333-3280

RE: Coronado Pond #1

Dear James McDaniel:

Order No.: 1105695

Hall Environmental Analysis Laboratory, Inc. received 11 sample(s) on 5/17/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901 AZ license # AZ0682



4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109 505.345.3975 ■ Fax 505.345.4107 www.hallenvironmental.com

Page 1 of 11

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lab Order:	XTO Energy 1105695	Client Sample ID: A Collection Date: 5/13/2011 11:23:00 AM Date Received: 5/17/2011 Matrix: SOIL									
Project: Lab ID:	Coronado Pond #1 1105695-01										
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed				
EPA METHOD Uranium	6010B: SOIL METALS	ND	25		mg/Kg	5	Analyst: ELS 5/31/2011 12:08:13 PM				
EPA METHOD Petroleum Hydr		ND	20		mg/ Kg	1	Analyst: LRW 5/20/2011				

Qualifiers:

- Value exceeds Maximum Contaminant Level ٠
- Έ Estimated value
- Analyte detected below quantitation limits J
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- Analyte detected in the associated Method Blank В
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits S 1

Hall Environmental Analysis Laboratory, Inc.

Date: 16-Jun-11 Analytical Report

CLIENT:	XTO Energy	Client Sample ID: B									
Lab Order:	1105695			Co	5/13/2011	5/13/2011 11:37:00 AM					
Project: Lab ID:	Coronado Pond #1 1105695-02										
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed				
EPA METHOD Uranium	6010B: SOIL METALS	ND	25		mg/Kg	5	Analyst: ELS 5/31/2011 12:21:04 PM				
EPA METHOD	418.1: TPH						Analyst: LRW				
Petroleum Hydr	rocarbons, TR	ND	20		mg/Kg	1	5/20/2011				

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- 2

Page 2 of 11

Date: 16-Jun-11 Analytical Report

Analyst: LRW

Page 3 of 11

5/20/2011

1

Hall Environmental Analysis Laboratory, Inc. **CLIENT: XTO Energy** Client Sample ID: C Lab Order: 1105695 Collection Date: 5/13/2011 11:30:00 AM **Project:** Coronado Pond #1 Date Received: 5/17/2011 Matrix: SOIL Lab ID: 1105695-03 Analyses Result **PQL** Qual Units DF **Date Analyzed** EPA METHOD 6010B: SOIL METALS Analyst: ELS **5** · 5/31/2011 12:23:02 PM ND 25 Uranium mg/Kg

20

mg/Kg

ND

Qualifiers:

- ٠ Value exceeds Maximum Contaminant Level
- Ę Estimated value
- J Analyte detected below quantitation limits
- Non-Chlorinated NC
- PQL Practical Quantitation Limit

EPA METHOD 418.1: TPH

Petroleum Hydrocarbons, TR

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
 - Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- 3

ND

Date: 16-Jun-11 Analytical Report

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Lab Order:	XTO Energy 1105695	Client Sample ID: D Collection Date: 5/13/2011 11:15:00 AM									
Project: Lab ID:	Coronado Pond #1 1105695-04	Date Received: 5/17/2011 Matrix: SOIL									
Analyses		Result	PQL	Qual Units	DF	Date Analyzed					
EPA METHOD Uranium	6010B: SOIL METALS	ND	25	mg/Kg	5	Analyst: ELS 5/31/2011 12:24:55 PM					
EPA METHOD Petroleum Hydr		ND	20	mg/Kg	1	Analyst: LRW 5/20/2011					

Qualifiers:

J

- Value exceeds Maximum Contaminant Level
- E Estimated value
 - Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- 4

Page 4 of 11

.

CLIENT: XTO Energy Client Sample ID: F Lab Order: 1105695 Collection Date: 5/13/2011 10:49:00 AM **Project:** Coronado Pond #1 Date Received: 5/17/2011 Matrix: SOIL Lab ID: 1105695-05 Analyses Result PQL Qual Units DF **Date Analyzed** EPA METHOD 6010B: SOIL METALS Analyst: ELS 5/31/2011 12:26:50 PM ND 5 Uranium 25 mg/Kg EPA METHOD 418.1: TPH Analyst: LRW 5/20/2011 Petroleum Hydrocarbons, TR 20 1 35 mg/Kg

Qualifiers:

- Value exceeds Maximum Contaminant Level ٠
- Ε Estimated value
- Analyte detected below quantitation limits J
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits 5
- Page 5 of 11

Date: 16-Jun-11 Analytical Report

CLIENT:	XTO Energy			Clier	it Sample II): G	
Lab Order:	1105695			Co	llection Date	: 5/13/2011	11:46:00 AM
Project: Lab ID:	Coronado Pond #1 1105695-06			D		I: 5/17/2011 :: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD Uranium	6010B: SOIL METALS	ND	25		mg/Kg	5	Analyst: ELS 5/31/2011 12:28:50 PM
EPA METHOD	418.1: TPH						Anaiyst: LRW
Petroleum Hydr	rocarbons, TR	ND	20		mg/Kg	1	5/20/2011

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND
 Not Detected at the Reporting Limit

 S
 Spike recovery outside accepted recovery limits
- 6

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Date: 16-Jun-11 Anaiytical Report

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	XTO Energy			D: H			
Lab Order:	1105695			Co	llection Da	te: 5/13/2011	11:42:00 AM
Project: Lab ID:	Coronado Pond #1 1105695-07			D		ed: 5/17/2011 ix: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD Uranium	6010B: SOIL METALS	ND	25		mg/Kg	5	Analyst: ELS 5/31/2011 12:30:44 PM
EPA METHOD Petroleum Hydr		46	20	۰	mg/Kg	1	Analyst: LRW 5/20/2011

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits 7

Page 7 of 11

Date: 16-Jun-11 Analytical Report

CLIENT:	XTO Energy	Client Sample ID: I												
Lab Order:	1105695			Col	lection Da	te: 5/13/2011	11:57:00 AM							
Project: Lab ID:	Coronado Pond #1 1105695-08			Da		d: 5/17/2011 ix: SOIL								
Analyses	-	Result	PQL	Qual	Units	DF	Date Analyzed							
EPA METHOD Uranium	6010B: SOIL METALS	ND	25		mg/Kg	5	Analyst: ELS 5/31/2011 12:34:24 PM							
EPA METHOD	418.1: TPH rocarbons, TR	39	20		mg/Kg		Analyst: LRW 5/20/2011							

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- 8

Page 8 of 11

Date: 16-Jun-11 Analytical Report

CLIENT:	XTO Energy			D: J			
Lab Order:	1105695			Col	lection Da	te: 5/13/2011	11:51:00 AM
Project: Lab ID:	Coronado Pond #1 1105695-09			Da		d: 5/17/2011 ix: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD	6010B: SOIL METALS						Analyst: ELS
Uranium		ND	25		mg/Kg	5	5/31/2011 12:36:24 PM
EPÅ METHOD	418.1: TPH						Analyst: LRW
Petroleum Hydi	rocarbons. TR	ND	20		mg/Kg	1	5/20/2011

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

B Analyte detected in the associated Method Blank

1

Page 9 of 11

- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- 9

Date: 16-Jun-11 Analytical Report

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Hall Environmental Analysis Laboratory, Inc.

CLIENT:	XTO Energy			Client	Sample ID	: Backgrou	nd
Lab Order:	1105695			Colle	ection Date	: 5/13/2011	1:16:00 PM
Project: Lab ID:	Coronado Pond #1 1105695-10			Dat		: 5/17/2011 : SOIL	
Analyses		Result	PQL (Qual I	Jnits	DF	Date Analyzed
EPA METHOD Uranium	6010B: SOIL METALS	ND	25 ,	'n	ng/Kg	5	Analyst: ELS 5/31/2011 12:45:35 PM
EPA METHOD	418.1: TPH						Analyst: LRW
Petroleum Hydr	ocarbons, TR	ND	20	n	ng/Kg	. 1	5/20/2011

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- 10

Date: 16-Jun-11 Analytical Report

CLIENT:	XTO Energy			Clien	t Sample l	ID: E	
Lab Order:	1105695			Col	lection Da	te: 5/13/2011	12:28:00 PM
Project: Lab ID:	Coronado Pond #1 1105695-11			Da		ed: 5/17/2011 ix: SOIL	
Analyses		Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD Uranium	6010B: SOIL METALS	ND	25		mg/Kg	5	Analyst: ELS 5/31/2011 12:47:37 PM
EPA METHOD							Analyst: LRV
Petroleum Hyd	rocarbons, TR	ND	20		mg/Kg	1	5/20/2011

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
 - S Spike recovery outside accepted recovery limits
 - 11

Page 11 of 11

ace Analytical

Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15801 (724)850-5600

ANALYTICAL RESULTS

Project: 1105695 Pace Project No.: 3047003						
Sample: 1105695-01B PWS:	Lab ID: 30470030 Site ID:	01 Collected: 05/13/11 11:2 Sample Type:	3 Received:	05/20/11 10:00	Matrix: Solid	
Results reported on a "dry-w	veight" basis					
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228		1.06 ± 0.237 (0.188) D.871 ± 0.330 (0.437)	pCi/g pCi/g	06/14/11 09:28 06/14/11 09:28		
Sample: 1105695-02B PWS:	Lab ID: 30470030 Site ID:	Collected: 05/13/11 11:3 Sample Type:	7 Received:	05/20/11 10:00	Matrix: Solid	
Results reported on a "dry-w	-					. .
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228		0.793 ± 0.191 (0.181) 0.878 ± 0.259 (0.467)	pCi/g pCi/g	06/14/11 10:25 06/14/11 10:25		
Sample: 1105695-03B PWS:	Lab ID: 304700300 Site ID:	Collected: 05/13/11 11:30 Sample Type:	0 Received:	05/20/11 10:00	Matrix: Solid	
Results reported on a "dry-w	-				0404	0
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228		1.08 ± 0.251 (0.207) 1.41 ± 0.337 (0.261)	pCi/g pCi/g	06/14/11 11:09 06/14/11 11:09		
Sample: 1105695-04B	Lab ID: 304700300	4 Collected: 05/13/11 11:15	5 Received:	05/20/11 10:00	Matrix: Solid	
PWS:	Site ID:	Sample Type:				
Resuits reported on a "dry-w	elght" basis					
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-228 Radium-228		0.933 ± 0.190 (0.156) 1.34 ± 0.320 (0.291)	pCi/g pCi/g	06/14/11 11:40 06/14/11 11:40		
Sample: 1105695-05B PWS:	Lab ID: 304700300 Site ID:	5 Collected: 05/13/11 10:49 Sample Type:	9 Received:	05/20/11 10:00	Matrix: Solid	
Results reported on a "dry-w	eight" basis					
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228		.911 ± 0.196 (0.195) .10 ± 0.346 (0.362)	pCi/g pCi/g	06/14/11 12:57 06/14/11 12:57		
Sample: 1105695-06B PWS:	Lab ID: 304700300 Site ID:	6 Collected: 05/13/11 11:46 Sample Type:	Received:	05/20/11 10:00	Matrix: Solid	
Results reported on a "dry-w	eight" basis					
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228		.842 ± 0.216 (0.262) .01 ± 0.494 (0.280)	pCi/g pCi/g	06/14/11 14:08 06/14/11 14:08		

Date: 06/16/2011 02:32 PM

REPORT OF LABORATORY ANALYSIS

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Pace Analytical www.pacelets.com

Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15601 (724)850-5600

ANALYTICAL RESULTS

Project: 1105 Pace Project No.: 3047						
Pace Project No.: 3047 Sample: 1105695-07B PWS:	Lab ID: 3047003 Site ID:	007 Collected: 05/13/11 11:4 Sample Type:	12 Received:	05/20/11 10:00 M	fatrix: Solid	<u> </u>
Results reported on a "d	lry-weight" basis				. •	
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228	EPA 901.1m EPA 901.1m	0.849 ± 0.232 (0.173) 0.801 ± 0.267 (0.437)	pCi/g pCi/g	06/14/11 14:40 06/14/11 14:40	•	,
Sample: 1105695-08B PWS:	Lab ID: 3047003 Site ID:	008 Collected: 05/13/11 11:5 Sample Type:	7 Received:	05/20/11 10:00 N	latrix: Solid	
Results reported on a "d	ry-weight" basis					
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228	EPA 901.1m EPA 901.1m	0.934 ± 0.240 (0.178) 1.42 ± 0.332 (0.179)	pCi/g pCi/g	06/14/11 15:11 06/14/11 15:11	13982-63-3 15262-20-1	
Sample: 1105695-09B PWS:	Lab ID: 3047003 Site ID:	Collected: 05/13/11 11:5 Sample Type:	i1 Received:	05/20/11 10:00 N	latrix: Solid	
Results reported on a "d Parameters	ry-weight" basis Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 901.1m	0.865 ± 0.183 (0.151)	pCi/g	06/14/11 15:42		
Radium-228	EPA 901.1m	0.953 ± 0.370 (0.458)	pCi/g	06/14/11 15:42		
Sample: 1105695-10B	Lab ID: 3047003		6 Received:	05/20/11 10:00 M	latrix: Solid	
PWS: Results reported on a "d	Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228	EPA 901.1m EPA 901.1m	0.889 ± 0.218 (0.223) 0.905 ± 0.301 (0.498)	pCi/g pCi/g	06/14/11 16:13 06/14/11 16:13		
Sample: 1105695-11B PWS:	Lab ID: 30470030 Site ID:	011 Collected: 05/13/11 12:2 Sample Type:	8 Received:	05/20/11 10:00 M	atrix: Solid	
Results reported on a "di	• •					
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Radium-226 Radium-228	EPA 901.1m EPA 901.1m	1.000 ± 0.258 (0.186) 0.967 ± 0.267 (0.292)	pCi/g pCi/g	06/14/11 16:45 06/14/11 16:45		

Date: 06/16/2011 02:32 PM

REPORT OF LABORATORY ANALYSIS

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nelac:

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Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4 Greensburg, PA 15801 (724)850-5600

QUALITY CONTROL DATA

Project:	110569	5					
Pace Project No.:	304700	3					<u>с.</u>
QC Batch:	RADO	/8455	Analys	is Method:	EPA 901	.1m	
QC Batch Method:	EPA 9	01.1m	Analys	is Description:	901.1 Ga	mma Spec	
Associated Lab San	nples;		3047003002, 3047003003 3047003010, 3047003011	, 3047003004,	3047003005,	3047003006, 304700	3007, 3047003008,
METHOD BLANK:	302759		N	Aatrix: Solid			
Associated Lab San	nples:		3047003002, 3047003003 3047003010, 3047003011	, 3047003004,	3047003005,	3047003006, 304700	3007, 3047003008,
Paran	neter		Act ± Unc (MDC))	Units	Analyzed	Qualifiers
Radium-226		0.0)710 ± 0.140 (0.244)		pCi/g	06/16/11 08:50)
Radium-228		-0.	041 ± 1.06 (0.407)		pCi/g	06/16/11 08:50)

Date: 06/16/2011 02:32 PM

REPORT OF LABORATORY ANALYSIS

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nelac:

Client: XTO Energy Project: Coronado F	•								Work	Order:	1105695
Analyte	Result	Units	PQL	SPK Va	a SPK ref	%Rec L	owLimit Hi	ghLlmit	%RPD	RPDLim	it Qual
Method: EPA Method 418.1: T Sample ID: MB-26872	PH	MBLK				Batch ID;	26872	Analysis	s Date:		5/20/2011
Petroleum Hydrocarbons, TR Sample ID: LCS-26872	ND	mg/Kg LCS	20			Batch ID:	26872	Analysis	s Date:		5/20/2011
Petroleum Hydrocarbons, TR Sample ID: LCSD-26872	94.20	mg/Kg LCSD	20	100	0	94.2 Batch ID:	81.4 26872	118 Analysis	s Date:		5/20/2011
Petroleum Hydrocarbons, TR	95.54	mg/Kg	20	100	0	95.5	81.4	118	1.41	8.58	·
Method: EPA Method 6010B: Sample ID: 1105695-01AMSD	Soil Metals	MSD				Batch ID:	26997	Analysis	s Date:	5/31/2011	12:19:10 PM
Uranium Sample ID: MB-26997	ND	mg/Kg MBLK	25	24.95	0	82.0 Batch ID:	75 26997	125 Analysis	0	20 5/31/2011	11:52:18 AM
Uranium Sample ID: LCS-26997	ND	mg/Kg LCS	5.0			Batch ID:	26997	Analysis	s Date:	5/31/2011	11:54:15 AM
Uranium Sample ID: 1105695-01AMS	25.49	mg/Kg MS	5.0	25	0.6564	99.3 Batch ID:	80 26997	120 Analysis	a Date:	5/31/2011	12:17:13 PM
Uranium	ND	mg/Kg	25	24.95	0	96.1	75	125			

QA/QC SUMMARY REPORT

Qualifiers:

E Estimated value

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

- H Holding times for preparation or analysis exceeded
- NC Non-Chlorinated
- R RPD outside accepted recovery limits

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Corrective Action

	Sample	Rec	eipt Ch	necklist					
Client Name XTO ENERGY				Date I	Received:			5/17/2011	
Work Order Number 1105695	Λ			Rece	eived by:	MM	IG	1	
	A		A 1944	Sam	ple ID lab	els check	ed by:	MA	-
Checklist completed by:	i m	<u> </u>	Date	[]]]				Initials	
Matrix:	Carrier name:	Grey	/hound						
Shipping container/cooler in good condition?		Yes		No [Not Prese	ent 🗆		
Custody seals intact on shipping container/coold	er?	Yes		No [Not Prese	ent 🗆	Not Shipped	
Custody seals intact on sample bottles?		Yes	\checkmark	No [N/A			
Chain of custody present?		Yes		No [
Chain of custody signed when relinquished and	received?	Yes		No [
Chain of custody agrees with sample labels?		Yes		No [
Samples in proper container/bottle?		Yes		No [
Sample containers intact?		Yes		No []				
Sufficient sample volume for indicated test?		Yes		No [
All samples received within holding time?		Yes		No [f preserved
Water - VOA vials have zero headspace?	No VOA vials subm	nitted		Yes [No		bottl es ch pH:	ecked for
Water - Preservation labels on bottle and cap m	atch?	Yes		No E		N/A	\checkmark		
Water - pH acceptable upon receipt?		Yes		No [N/A	Y	<2 >12 un	less noted
Container/Temp Blank temperature?		1.	0°	<6° C A	cceptable			below.	
COMMENTS:				lf given s	ufficient ti	me to coo	ol.		
Client contacted	Date contacted:				Person	contacte	d		
Contacted by:	Regarding:								
Comments:									
commonto.									
· · · · · · · · · · · · · · · · · · ·									

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Chain-of-Custody Record Turn-Around Time:										_						-		رب معر م					
Client:			c Daniel	∦∕ si	andard		Rush			┢╍┥												TAL DR	
			-		ct Name		•															<i>7</i> 12	•
Mailing	Address:	Ener 382	<u>JO</u>	\sim		1	-D	_ #					~~~~	/.hall	envi	ronn	nenta	al.co	m				
	A	382	CR 3100	<u> </u>)Y Or	ado	54	ond #1		490)1 Ha	awki	ns N	IE -	Alb	uque	erque	e, NM	M 87	10 9			
	A7	fec.		Proje	Ct #:					Те	I. 50	5-34	5-39	975	F	ax :	505-:	345-	4107	,			
Phone #	#: 505	5-78	7-0519											A	naly	sis	Requ	uest					
email o		•		Proje	ct Mana	ger:			<u> </u>	<u>Ş</u>	sel)					5						3	$ \rightarrow 1 $
	Package:					. /			s (8021)	o st	(Gas/Diesel)					N, S	PCB's				$ \rightarrow $	122	398
_ ∑x \$tan	dard		Level 4 (Full Validation)	30	imes	$\sim P$		iniel	3) s,	ର୍	3as/					D Q	2 PC				2	'IN'	
Accredi				James McDaniel Sampler: Brooke Herb				TMB'	TPH (Gas only)		,	,	,		NO2 NO2	308;				11	Radium.	オテ	
		□ Othe	r	On Ic	e	LAC	N 76 678	EINO.	+	+	015	418.1)	504.1)	or PAH)	ő	°°	s / s		Â	Ч	47 1		د د
	(Type)							E	8 p	8	ğ	p	etal	Z T	cide	Æ	Ž	NA A	2	Je g	Σ		
Date	Time	Matrix	Sample Request ID	Container Type and # Type				BTEX + MTBE	BTEX + MTBE	TPH Method 8015B	TPH (Method	EDB (Method	8310 (PNA	RCRA 8 Metals	Anions (F,Cl,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	WRANIUM	Radioact	Combined	Air Bubbles (Y or N)	
5/13/11	11:23	Soil	A	400	2/2	NO	NE	- [·	$\overline{\mathbf{V}}$								$\overline{\mathbf{A}}$	$\overline{\mathbf{A}}$		
1	11:37		B			1		2												V	\checkmark		
	11:30		C					3				\checkmark								\checkmark	\checkmark		
	11:15		D					-4				\checkmark											_
	10:49		F					-5				√]									\bigvee		
	11:40		6					-6												$\overline{\checkmark}$	$\overline{\mathbf{A}}$		
	11:42		H					-1				V								\mathbf{V}	\checkmark		
	11:57	•	1					-8				\checkmark	,							\checkmark		<u> </u>	
×.	11:51		5					_9				$ \mathbf{V} $	~					7	×x				
13/11	13:10		Background		6			-10				\checkmark							Ī	\checkmark	$\overline{\checkmark}$		
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Date:	Time:	Relinguishe	ed by:	Receiv	ved by:	I,	``	Date Time	Ren	nark] S:		-				L.,]		1[<u> </u>	
1311 Date:	14:53	Bro		Musthe Walts 113/11 1455																			
Date: Time: Refinquished by: Received by:					Date Time																		
5/14/11 1812 (prestulicele.				$\left[\right]$	<u>Mi</u>	Juli	Lai	5/17/11 10:00															

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record				Turn-Around Time:																NT	A I	
Client: James McDaniel				Standard 🗆 Rush				HALL ENVIRONMENTAL														
XTO Frenzis				Project Name:				www.hallenvironmental.com														
Mailing Address: 350 (R ZIDC)				Coronado Pond #1				4901 Hawkins NE - Albuquerque, NM 87109														
XTO Energy Mailing Address: 382 CR 3100 Artec NM				Project #:				Tel. 505-345-3975 Fax 505-345-4107														
Phone #: 505 - 757 - 0519									10			0.00					uest					
email or Fax#:				Project Manager:					only)	sel)					5					~	$\overline{\Lambda}$	\square
QA/QC Package:								3021	as or	Die					⁴ ,S(PCB's				Compile	2 2 2 2 2 2	
Standard Level 4 (Full Validation)				James McDaniel				3's (8	Ő	(Gas/Diesel)					PC	2 P(Jer 1	-	
				James McDunicl Sampler: Brooke Herb Onlices Prooke Herb				TMB's (8021)	TPH (Gas	5B (.1)	Ê.	Î		2	808			•	5	ner	Î
NELAP Other EDD (Type)				On Ices States To Di Nosser States Sample Temperature				+	+	801	418	504	8310 (PNA or PAH)	als	Ŝ	les /		٩	c			Yor
	(Type)_			Oatilpicsterin				MTBE	MTB	por	thod	thoc	No No	Met	<u> </u>	sticic	(AO)	-imi-	<u></u>	ACK	N N	les (
Date	Time	Matrix	Sample Request ID		Preservative	HEAL	Noten	+	+	Met	(Me	(Me	đ	A 8	ns (F	Pe	2	(Se	UN NW	1,00	adi a m	qŋ
				Type and #	Туре	nasia	* 5	BTEX +	BTEX + MTBE	TPH Method 8015B	TPH (Method 418.1)	EDB (Method 504.1)	3310	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	21 D	3°	-	Air Bubbles (Y or N)
5/16/1	nins	Shil	E	402/2	NONE		-11			-						~		~	\mathcal{T}	7		
211641	D.DO	2011	0	100 10						\neg	*					-			*	* †		
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Date:	Time: Relinquished by:		Received by: Date Time				Remarks:															
	1417	1417 South to		Charte Waster 5/11/11 11/27																		
5/16/11/422 ANOW TO J Date: Time: Relinquished by:		Received by: Date Time																				
5/16/11 1012 / Wester Libeter			Muluili Ciaria 5/17/11 10:00																			

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