

**STATE OF LOUISIANA  
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**CERTIFICATE OF UNDERGROUND STORAGE TANK REGISTRATION**

Expires June 30, 2018

**FY  
2018**

Certificate No. REG20160001

Act 336 of the 1995 Regular Session of the Legislature amended the Louisiana Revised Statutes, Section 30:2194.1 to read: "On or after January 1, 1996, no person shall place or dispense a regulated substance into an underground storage tank that has not been registered with the Louisiana Department of Environmental Quality."

This certificate shall serve as proof of registration for the owner, facility, and number of underground storage tanks as specified below:

<u>FACILITY INFORMATION</u>	<u>NO. OF TANKS</u>	<u>OWNER INFORMATION</u>
Agency Interest No. 78516	<b>3</b>	Owner Identification No. 4327
RT #492 Essen Lane 4665 Essen Ln		RaceTrac Petroleum Inc 3225 Cumberland Blvd Ste 100
Baton Rouge  LA 70809		Atlanta  GA 30339

**THIS CERTIFICATE DOES NOT CERTIFY COMPLIANCE  
WITH THE 1998 UST UPGRADE REQUIREMENTS**

  
 \_\_\_\_\_  
 Environmental Scientist Manager  
 Underground Storage Tank & Remediation Division

**THIS CERTIFICATE SHALL BE PROMINENTLY DISPLAYED AT THE SPECIFIED FACILITY.**

Any deviation from the information provided on this certificate, including the number of tanks, shall make this certificate null and void.

AI#1429



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06

Site Name: Clearwater Fluid Recycling, Inc. CERCLIS ID#: LA0000383075

Alias Site Names: \_\_\_\_\_

Address: 1001 South First Street(a.k.a.Brickyard Lane) N Lat 30 degrees,26',20",W Long 91 degrees,11',22"

City/County or Parish/State/Zip Code: Baton Rouge/East Baton Rouge/LA

Report Type, Date, and Author: Expanded Site Inspection, July 13, 2000, EPA(E&E)

**RECOMMENDATION:**

<input checked="" type="checkbox"/> 1. No Further Remedial Action Planned under Superfund (NFRAP)	<input type="checkbox"/> 2. Further Investigation Needed Under Superfund		
	<input type="checkbox"/> PA	<input type="checkbox"/> HRS	Priority: <input type="checkbox"/> High
	<input type="checkbox"/> SSI	<input type="checkbox"/> RA	<input type="checkbox"/> Medium
	<input type="checkbox"/> ESI	<input type="checkbox"/> RI/FS	<input type="checkbox"/> Low
	<input type="checkbox"/> Other: _____		
	To be performed by: _____		
<input type="checkbox"/> 3. Action Deferred to:			
<input type="checkbox"/> RCRA <input type="checkbox"/> NRC			

**NOTIFY AUTHORITY:**

<input type="checkbox"/> Removal	<input type="checkbox"/> RCRA	<input type="checkbox"/> TSCA	<input type="checkbox"/> CAA	<input type="checkbox"/> SMCRA
<input type="checkbox"/> Remedial	<input type="checkbox"/> State	<input type="checkbox"/> NPDES	<input type="checkbox"/> NRC	<input type="checkbox"/> Resource Trustee:
<input type="checkbox"/> CERCLA Enforcement	<input type="checkbox"/> Federal Facility	<input type="checkbox"/> UIC		<input type="checkbox"/> SPCC
				<input type="checkbox"/> Other:
SEND SSSR COPIES TO:	<input type="checkbox"/> 6SF-AC	<input type="checkbox"/> 6WQ-SP	<input type="checkbox"/> ATSDR	<input checked="" type="checkbox"/> State Agency

**DISCUSSION:** This site is an inactive plant that was a hazardous waste treatment and storage facility that operated from 1990-1992. Various chemicals were managed at this site. Some of the chemicals that have been identified are as follows: methylene chloride, acetone, benzyl alcohol, 4-methyl phenol, bis(2-ethyl)phthalate, ethyl benzene, styrene, xylene, barium, chromium, lead, zinc, mercury, toluene, 2-methyl phenol, naphthalene, n-nitrosodiphenylamine, phenanthrene, di-n-octylphthalate, 2-butanone, trichloroethene, tetrachloroethene, 2-methyl naphthalene, and benzoic acid.

There are 14 above ground storage tanks, nine mixing tanks, and approximately 30 drums at the site. The tanks were in poor condition with some holes in the tanks from which leaks have occurred.

An EPA removal action was conducted in 1994 at the plant. This action involved the removal and disposal of 302,340 gallons. This waste was transported to the Rollins Bayou Sorrell deep well injection facility located in Plaquemine, Louisiana.

The entire site is enclosed within a 6-foot-high, chain-link fence with locked gates on the northwest and northeast sections (there is an 18-inch gap in the northeast gate). An inactive railroad spur is located on site and railroad tracks positioned north to south are adjacent to the west property boundary. The site is situated adjacent to the Baton Rouge Central Business District, approximately 500 feet south of the Interstate 10 Mississippi River Bridge and approximately 500 feet east of the Mississippi River east bank levee. The site is located three blocks south of the Baton Rouge Riverpark Complex which is utilized as a boarding dock by a local gaming boat concern. The facility is bordered to the south by Terrace Street and a large (greater than 100 units) low-income housing project. The housing project represents the nearest residents and is located less than 0.25 mile from the site. Drainage from the site flows south towards the apartment complex. The site is bordered to the east by vacant property (sometimes used for parking), South First, the Louisiana Division of Administration office/warehouse complex, and the Louisiana Property Assistance Agency. Louisiana Department of Transportation (LDOTD) stores equipment just north of the site.

Five temporary monitor wells were installed on the site. Soil samples and groundwater samples were taken from these boring and they were analyzed for the presence of chemical constituents. The chemicals of concern are benzene and petroleum hydrocarbons. TPH-D and TPH-O was present in significant concentrations in all on-site samples.

Based upon currently available information, this site fails to meet the minimum criteria required to be included, or proposed, at this time on the NPL by the EPA. The NPL is the EPA's list of sites that are priorities for further investigation and, if necessary, response action under CERCLA, 42 USC 960001, et seq. Other actions maybe appropriate under State Authorities or a Removal Action under federal authority.

**APPROVALS:**

Report Reviewed by: Jon Rinehart  
(Site Assessment Manager 6SF-RA)

Signature: Jon Rinehart Date: 3-2-01

Disposition Recommended by: Susan Webster *for*  
(Team Leader 6SF-RA)

Signature: Susan Webster Date: 6-7-02

Disposition Recommended by: Ragan Broyles *for*  
(Deputy Branch Chief 6SF-RR)

Signature: Susan Webster Date: 6-7-02



CERCLIS No.: LA0000383075

**SITE ASSESSMENT REPORT  
FOR  
CLEARWATER FLUIDS RECYCLING, INC.  
Baton Rouge, East Baton Rouge Parish, Louisiana**

**July 13, 2000**

**Prepared for:**

**Henry Thompson, Jr.  
Project Officer  
Program Management Branch  
EPA - Region 6**

**Contract No.: 68-W6-0013**



**ecology and environment, inc.**

International Specialists in the Environment

11550 NEWCASTLE AVENUE, BATON ROUGE, LOUISIANA 70816, TEL. (225) 298-5080, FAX. (225) 298-5081



# ecology and environment, inc.

International Specialists in the Environment

11550 NEWCASTLE AVENUE, BATON ROUGE, LOUISIANA 70816  
TEL: (225)298-5080, FAX: (225)298-5081

CERCLIS No.: LA0000383075

**Date:** July 13, 2000

**To:** Jon Rinehart, TM  
EPA Region 6, Site Assessment Branch

**Thru:** Henry Thompson, Jr., PO  
EPA Region 6, Program Management Branch

**Thru:** Christopher Quina, START Leader  
Region 6, Superfund Technical Assessment and Response Team

**From:** Sarah L. Phillippi  
Region 6, Superfund Technical Assessment and Response Team

**Subject:** Site Assessment Report: Clearwater Fluids Recycling, Inc.  
Baton Rouge, East Baton Rouge Parish, Louisiana  
TDD No.: S06-00-02-0004  
PAN: 108101SIXX  
LAT 30° 26' 20" North, LONG 91° 11' 22" West

**PRP:** Clearwater Fluids Recycling, Inc.

**PRP Representative:** Henrietta McCrary, Acting President  
15410 Chickamauga Ave.  
Baker, Louisiana  
(225) 755-2106

## I. INTRODUCTION

The Clearwater Fluids Recycling, Inc. (Clearwater) site is situated on an approximately 1.74-acre tract of land located at 1001 South First Street (a.k.a. Brickyard Lane) in Baton Rouge, East Baton Rouge Parish, Louisiana (Attachment A). The geographic center of the site is Latitude 30° 26' 20" North and Longitude 91° 11' 22" West, as scaled from the United States Geological

S06-00-02-0004

Survey (USGS) Baton Rouge West Quadrangle, 7.5 minute series topographic map. The map scale is 1:24,000 and is in the North American Datum of 1927 (NAD-27).

On February 3, 2000, the EPA Region 6 Site Assessment Branch (SAB) tasked the Superfund Technical Assessment and Response Team (START) contractor to conduct a site inspection at the Clearwater site. START was specifically tasked to: conduct a site inspection, limiting the inspection to the groundwater pathway. In a letter dated February 14, 2000, James H. Brent, LDEQ Assistant Secretary, requested EPA assistance in determining the lateral and vertical extent of contamination at the Clearwater site, including assessment of both soil and groundwater. On February 24, 2000, the EPA Task Monitor (TM) verbally requested that START not conduct a pathway assessment. The EPA TM later amended the Technical Direction Document (TDD) to include funds for subcontracting analytical services.

## II. BACKGROUND

Background information was derived from the following sources: the Removal Funded Report submitted to EPA by the Technical Assistance Team (TAT) contractor on August 30, 1995, under TDD No. T06-9410-083; the Louisiana Department of Environmental Quality (LDEQ) site assessment and investigation records (previously submitted to EPA by TAT as enforcement confidential site file documents); the Site Discovery Summary Report submitted to EPA by START on December 18, 1997, under TDD No. S06-97-01-0003; the Removal Assessment Report submitted to EPA by START on January 22, 1998, under TDD No. S06-97-10-0019; and the Removal Support Report submitted to EPA by START on January 29, 1999.

### Site Description

The Clearwater site is an inactive hazardous waste treatment and storage facility that was in operation from 1990 through 1992. The site is situated on approximately 1.74 acres at 1001 South First Street in Baton Rouge, East Baton Rouge Parish, Louisiana (Attachment A). Prior to the 1998 removal action, the site consisted of a multi-room warehouse with loading dock, a tank farm, and concrete slabs from former structures. The warehouse was divided into three rooms and contained thirteen 55-gallon drums containing auger cuttings, three 85-gallon salvage drums, 11 various sized drums containing personal protective equipment (PPE) and site-derived waste (SDW), five 55-gallon drums containing sludge, two empty drums, one cut drum, a boiler, and a vat (V-7) (Attachment B-2). The warehouse had previously contained two tanks and five vats which had been removed by the responsible party (RP) in 1995 in violation of LDEQ compliance orders. A total of six drums were staged on the loading dock: one 85-gallon salvage drum; two drums containing PPE and SDW; and three 55-gallon drums staged in open areas. Adjacent to the southwest corner of the warehouse was a sealed pressure tank (P-1), a vat (V-8), and a sump. The tank farm was divided into two areas. One area consisted of six above ground storage tanks (ASTs) (T-5 through T-8, T-13, and T-22) contained within a 2- to 3-foot high concrete

secondary containment wall. The second area was surrounded by an earthen berm with two underflow pipes, on the east side only, and contained six ASTs (T-16, T-18, and T-23 through T-25) and a heater unit. Tank capacities ranged from 5,000 to 420,000 gallons. Transfer lines with possible asbestos containing insulation were also present. Concrete slabs from a former laboratory and former scales, as well as a dumpster, are located on the northern portion of the property. A former office was also located in this area during past operations.

The entire site is enclosed within a 6-foot-high, chain-link fence with locked gates on the northwest and northeast sections (there is an 18-inch gap in the northeast gate). An inactive railroad spur is located on site and railroad tracks positioned north to south are adjacent to the west property boundary. The site is situated adjacent to the Baton Rouge Central Business District, approximately 500 feet south of the Interstate 10 Mississippi River Bridge and approximately 500 feet east of the Mississippi River east bank levee. The site is located three blocks south of the Baton Rouge Riverpark Complex which is utilized as a boarding dock by a local gaming boat concern. The facility is bordered to the south by Terrace Street and a large (greater than 100 units) low-income housing project. The housing project represents the nearest residents and is located less than 0.25 mile from the site. Drainage from the site flows south towards the apartment complex. The site is bordered to the east by vacant property (sometimes used for parking), South First Street, the Louisiana Division of Administration office/warehouse complex, and the Louisiana Property Assistance Agency. The Louisiana Department of Transportation (LDOTD) stores equipment just north of the site.

### **Ownership and Operational Information**

The Clearwater facility was operated from 1990 through 1992 as a hazardous waste treatment and storage facility that was owned by Mr. Edward McCrary. Little information is available concerning the nature and quantity of wastes received and shipped from this facility. Inspection reports generated by LDEQ indicate that Clearwater would accept waste liquid and waste oil for resale as fuel for cement kilns. It was also reported that material was routinely received from Louisiana Oil Recycle and Reuse (LA Oil), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) No. LAD985219591, the second of several unpermitted hazardous waste facilities operated by Mr. McCrary.

Clearwater purchased the property from Chevron U.S.A. on October 29, 1990. Chevron U.S.A. operated an asphalt plant at this location from 1940 until sometime in the late 1980s. Prior to 1940, the property was used as a brickyard. Mr. McCrary stated to LDEQ that Recycling Limited purchased the facility from Chevron U.S.A. prior to October 1990. He also stated that Recycling Limited was operating at this facility and was the cause of pollution on the facility grounds until they underwent bankruptcy proceedings and the property ownership reverted back to Chevron U.S.A. There was no record of this sale in the East Baton Rouge Parish records.

### LDEQ Investigation

LDEQ conducted a preliminary assessment in May 1991. Sample results indicated that Tank T-16 exceeded the Regulatory Threshold Limits (RTL) for Toxicity Characteristic Leaching Procedure (TCLP) for benzene and tetrachloroethylene. A surface soil sample collected from the northwest corner of the property by LDEQ in 1991 indicated that some contaminants were present (organics, herbicides, and heavy metals) but at concentrations well below the RTL. LDEQ also collected a grab sample from the on-site dumpster. Results of this sample closely correlated with the soil sample data. LDEQ conducted an additional assessment in April 1992. Free liquid was visible inside the concrete containment wall, indicating the containment was being utilized to decant the material. Sample analysis of the liquid also exceeded the TCLP benzene and tetrachloroethylene RTLs. A sample from Tank 16 (identified by LDEQ as Tank 1) exceeded the RTLs for TCLP benzene, tetrachloroethylene, and 4-chloro-3-methyl phenol.

LDEQ issued Compliance Order EI-C-91-0018 on February 18, 1992, which required Clearwater to immediately cease accepting hazardous waste for treatment, storage, or disposal; to submit to LDEQ a closure/clean-up plan which would address all hazardous waste at the facility, including but not limited to hazardous waste stored in tanks/containers, spilled hazardous waste, waste oils, and all contaminated soil and water to be completed by May 1, 1992; to implement the closure/clean-up plan within 30 days after LDEQ approval; and to notify LDEQ three days prior to implementing the closure/clean-up plan to allow LDEQ representatives to witness these activities. Clearwater failed to comply with LDEQ orders and leased the facility to Chem-Rail Tank Cleaners (Chem-Rail) from April 23 to December 23, 1993 for use as a hazardous waste transfer facility. At the time, Chem-Rail executives stated they were unaware of LDEQ Compliance Order EI-C-91-0018 that barred any handling of hazardous wastes at the Clearwater facility. LDEQ met with Chem-Rail and Clearwater representatives and informed them that no hazardous waste operations could occur at the facility until the Compliance Order requirements were met.

### Emergency Response Action

On June 27, 1994, LDEQ conducted an emergency response action at the site after receiving reports of a leaking on-site storage tank. The tank of concern was T-16, a 400,000 gallon capacity steel-bolted bulk storage tank containing an estimated 337,000 gallons of hazardous waste, verified through analytical data collected by LDEQ on May 24, 1991. LDEQ attempted to stop the leak which had developed along the upper third of the bolted tank section. LDEQ pumped down the tank and evacuated approximately 40,000 gallons of material to lower the level of the liquid below the leak line. The material was placed into two 20,000 gallon fractionation (frac) tanks rented by LDEQ and staged at the site. This action brought the liquid level below the "worst" leak line and lowered the head pressure; however, the tank still had numerous leaks from which material was seeping. Due to the poor integrity of the tank, the probability of a catastrophic tank failure and material release was significant. Due to the magnitude of the threat, LDEQ referred the Clearwater site to the EPA-RPB for action.



An Action Memorandum was signed by the EPA Region 6 Administrator on July 8, 1994 and access to the site was obtained from the LDEQ Enforcement Division. The TAT contractor inventoried containers and containment and sampled remaining containers and surface soil (TDD No. T06-9410-083). Removal actions commenced on August 1, 1994 and were completed on August 8, 1994, with an additional visit on July 10, 1995 to monitor disposal of PPE and SDW. During this action, approximately 302,340 gallons of manifested hazardous waste were transported in 59 loads to the Rollins Bayou Sorrel deep well injection facility located in Plaquemine, West Baton Rouge Parish, Louisiana. Load 60 was rejected by the deep well facility for excessive solids. The material was returned to Tank T-16 and disposal operations were halted. Approximately 2 feet of material, 34,310 gallons consisting of bottom sludges and oil, remained on-site in Tank T-16. Other materials remaining on site included: 41,828 gallons of liquid/sludge in Tank T-6; 2,992 gallons of liquid/sludge in Tank T-8; 13,649 gallons of liquid/sludge in Tank T-18; 56,808 gallons of liquid/sludge in Tank T-24; 42,606 gallons of liquid/sludge in Tank T-25; thirteen 55-gallon drums of auger cuttings; and ten drums of spent sorbent material from LDEQ contractors. All potentially asbestos laden insulation as well as contaminated soils were also left on site (TDD No. T06-9410-083).

### **Removal Assessment**

On October 16, 1997, START, accompanied by LDEQ-Inactive and Abandoned Sites Division (IASD), conducted a site discovery drive-by survey of the Clearwater site under TDD No. S06-97-01-0003. START reported the results of this visit to EPA who in turn tasked the START contractor to conduct additional site assessment activities.

On November 12 and 13, 1997, START conducted an additional assessment at the Clearwater site (TDD No. S06-97-10-0019). The objective of this assessment was to conduct a container inventory and gauge tank contents; no sampling was to be performed. During the reconnaissance visit, START observed that the fence on the northeastern side provided an entry-way for potential trespassers due to an 18-inch gap in the locked gate. All doors on the east side of the warehouse were removed, as well as portions of the tin roof. Graffiti on Tank T-16 and on the interior and exterior walls inside the warehouse provided evidence of trespassers. Staining and areas of oily, black liquid were present within the concrete containment area. The tanks and warehouse were interconnected via transfer lines with possible contents.

In addition to tanks and containers, insulation potentially containing asbestos was present at the site. A warning placard labeled "ASBESTOS" was attached to the boiler in the warehouse. A dumpster full of construction debris, which measured approximately 3 feet by 6 feet by 4 feet deep, was also present at the site, located near the west gate just north of the loading dock.

### **Removal Action**

The EPA TM utilized this information in his development of an Action Memorandum, and on March 27, 1998, tasked the START contractor to provide technical assistance during a second

EPA response action to be conducted at the site. On March 31, 1998, the Action Memorandum authorizing a Time-Critical Removal Action at the Clearwater site was approved by Myron Knudson, Region 6 Superfund Division Director.

On April 9, 1998, EPA, START, and the ERRS contractor mobilized to the site to conduct an emergency stabilization action, which consisted of overpacking drums in poor condition, sealing a hole in the roof of Tank T-16, securing all drums in the loading dock room, securing the boiler and loading dock rooms by sealing broken windows and doors with plywood, and clearing the site of brush and debris. The emergency stabilization action was completed on April 11, 1998 and ERRS demobilized on April 13, 1998.

On May 1, 1998, START mobilized to the Clearwater site to sample all piping, tank, boiler, and vat insulation for asbestos containing material (ACM). A total of 38 samples were collected and analyzed for ACM. Approximately 200 linear feet of piping insulation and all boiler insulation was determined to be ACM, containing either Amosite or Chrysotile fibers. On May 26 and 27, 1998, the asbestos removal contractor, Gordon Gill and Associates, removed approximately 4 cubic yards (cy) of ACM insulation from approximately 200 linear feet of piping and the boiler at the Clearwater site. All ACM was disposed of at Reliable Landfill in Livonia, Louisiana.

On June 1, 1998, EPA, START, and the ERRS contractor mobilized to the site to conduct the remaining removal actions. These actions consisted of removing containerized waste and contaminated structures. During the eight week removal action, 215,500 gallons of hazardous waste liquids, which carried waste codes D002, D004, D005, D006, D007, D008, D018, D039, and D040, were transported off-site in vacuum trucks. Forty truck loads of hazardous waste liquids were shipped to Re-Claim Environmental in Shreveport, Louisiana, for fuel blending, seven truck loads of waste water were shipped to Laidlaw Environmental in Plaquemine, Louisiana, for deep-well injection, and 14 loads (238 tons) of non-hazardous solids were transported by Waste Management to the Woodside Landfill in Walker, Louisiana, for landfilling. These consisted of PPE and solidified drum and tank contents. A total of 220 tons of scrap metal was sent to Superior Scrap in Baker, Louisiana.

On July 13, 1998, START collected bulk samples of floor tiles in the former laboratory location for asbestos analysis. Tile mastic on all samples collected was found to contain asbestos and, on July 25, 1998, Gordon Gill and Associates returned to the Clearwater site and removed the tiles. Approximately 0.5 cy of ACM was disposed of at Reliable Landfill in Livonia, Louisiana.

On July 29, 1998, EPA, START, and ERRS demobilized from the Clearwater site. All waste had been shipped off site and all tanks and the warehouse had been demolished. The warehouse slab, laboratory slab, and railroad tracks remain on site.

Upon demobilization, EPA TM Sullivan requested that confirmation samples be collected at the site to determine if contamination was present in site soils and a geophysical survey be performed to evaluate the potential for the existence of underground storage tanks (USTs).



**Post-Removal Sampling and Geophysical Survey**

On August 31, 1998, START mobilized to the site to conduct a total station survey to pre-establish grids for soil sampling and magnetometer and conductivity surveys. START divided the area most likely to contain contaminated soil into four grids. Three of the grids were 75 feet by 100 feet and one was 50 feet by 125 feet, all in the area of the former tank farm.

On September 1, 1998, START mobilized to the site to collect the soil samples and conduct the geophysical survey. START collected one 0- to 6-inch (A), one 6- to 12-inch (B), and one 12- to 24-inch (C), five-point composite soil sample from each of the four grids. In addition, a duplicate composite surface soil (0- to 6-inch) sample was collected from Grid CFG01 (identified as CFG05A) and one grab surface soil (0- to 6-inch) sample was collected from an off-site grass-covered area, north of the office/warehouse complex, for use as a background (CFB01). In the deeper samples, START observed noticeable dark staining in the soil and the presence of brick-like material. All samples were analyzed for Target Compound List (TCL) VOCs, SVOCs, and Pest/PCBs; Target Analyte List (TAL) metals; and Total Petroleum Hydrocarbons (TPH) by infrared spectroscopy (IR). Several TCL organic and TAL inorganic analytes were detected in at least one sample, however, only carcinogenic polynuclear aromatic hydrocarbons (CPAHs) and arsenic exceeded the EPA Region 6 Human Health Medium-Specific Screening Levels for industrial soils, integrated pathways, in any sample (October 1998 update). TPH was present in significant concentrations in all three depth levels that were sampled, but comparison to state screening levels (EPA Region 6 has none) could not be made since differentiation between selected carbon ranges was not achieved through IR analysis. For additional details concerning this sampling mission, see TDD No.: S06-98-03-0003.

On that same day, START also conducted electromagnetic and conductivity surveys to non-intrusively assess the potential for the presence of USTs. The surveys were conducted using a Geonics EM-31 Ground Conductivity Meter and an EG&G Geometrics G-856 proton-precession magnetometer. Readings for both surveys were collected at each node of a 275-foot by 425-foot grid with 25-foot by 25-foot transect spacing. This grid encompassed the entire site. The grid origin was approximately 10 feet east of the northeastern corner of the warehouse slab and is marked by a steel rod driven vertically into the ground.

Conductivity data were collected using the EM-31 in both the vertical (deep) and horizontal (shallow) orientation. In the vertical orientation, the EM-31 has an effective depth of 20 feet. In the horizontal orientation, the effective depth is 12 feet. In addition, data were collected at each station with a north-south and east-west boom orientation. The two boom orientation readings were averaged for the grid node value for the deep and shallow investigation. Anomalies were noted in the areas of the warehouse, laboratory, and scale slabs, and the former area of concrete secondary containment on both the EM-31 horizontal and vertical dipole data plots.

During the magnetic survey at the Clearwater site, multiple readings were taken at each grid station to confirm the validity of the magnetic reading. The average value for the station

normalized to the background value was used for interpretation. This procedure results in metallic objects exhibiting a dipolar (+/-) anomaly. With respect to the magnetic survey, a dual peak anomaly with contours ranging from 1,500 to 6,500 gammas was noted southeast of the warehouse slab.

In general, there were no geophysical anomalies present at the Clearwater site that conclusively indicate the presence of a UST. The majority of the anomalies in both the conductivity and magnetic surveys can be attributed to surface structures and/or near surface site conditions. Magnetic and conductivity anomalies in the vicinity of the warehouse, laboratory, and scale slabs can easily be attributed to those structures. The dual peaked anomaly east of the warehouse slab has a shape consistent with a UST, but lacks corresponding conductivity anomaly to allow a UST interpretation. The origin of this anomaly is unclear, but is most likely related to near surface soil conditions. Additional site investigation (i.e., ground truthing) would be required for a more certain interpretation. The bipolar magnetic anomaly in the southern portion of the site also lacks corresponding conductivity anomalies. This anomaly is most likely related to near surface metal debris. With respect to the deep conductivity investigation (Attachment E-3) there are numerous alternating high and low anomalies, especially along the southwest border of the survey. Again, these anomalies lack supporting shallow conductivity and magnetic data to suggest the presence of a UST. These features are probably related to deep subsurface geologic conditions.

Interpretation of the geophysical data from the Clearwater site is difficult because of cultural interferences associated with the site. Based on the available data, the possibility of USTs at the site are low. Only ground truthing activities could conclusively determine the presence or absence of USTs.

### III. ACTIONS TAKEN

On February 24, 2000, START members Phillippi and Jim Dellinger; LDEQ representative Edwin Akujobi, and EPA TM Rinehart met to discuss the sampling procedures. It was determined that the scope of the investigation would be limited to five borings, one in each of the four grids (CFG1, CFG2, CFG3, and CFG4) established in the area of the former tank farm during the 1998 post-removal sampling mission and one background location (Attachment C-1 and C-2). Three soil samples would be collected from each boring. One sample collected over the 0- to 24-inch depth interval, one from a two foot depth interval in the area of highest suspected contamination, and one sample from a two foot depth interval extending one foot above and one foot below the vadose zone. A temporary monitoring well (TMW) would be installed in each of the five borings. During this meeting, EPA TM Rinehart verbally requested that START not conduct a pathway assessment.

Based on discussions with EPA TM Rinehart, START prepared a Sampling Quality Assurance/Quality Control (QA/QC) Work Plan to evaluate the vertical and horizontal extent of

contamination (Attachment G). START arranged for analytical services to be provided by Pace Analytical, located in St. Rose, Louisiana (Attachment I). Prior to mobilizing, START contacted LDEQ representative Akujobi and arranged for an LDEQ representative to be on site during the sampling mission.

On March 29, 2000, START members Sarah Phillippi, Jay Donoho, and Alan Noell; and EPA TM Rinehart mobilized to the Clearwater site to conduct soil and groundwater sampling in order to assist LDEQ with an assessment of the site. One boring was completed in each of the four previously established grids using a Geoprobe™ coring device and a TMW was installed in each borehole. The exact location of each borehole was field determined based on areas of visual contamination, such as stained soil and denuded vegetation. Two borings were also completed on Louisiana Property Assistance Agency (LPAA) property northeast of the site and a TMW installed in both boreholes. The first TMW failed to produce any water, therefore the second boring was completed for groundwater sample collection. Soil samples were collected from the first background boring and the groundwater sample was collected from the second. All TMW locations were surveyed using a Sokkia Total Station.

Well Identification and Location		
Well ID	Latitude	Longitude
CFG1W	30°26' 15.24" N	91°11' 20.91" W
CFG2W	30°26' 14.34" N	91°11' 20.84" W
CFG3W	30°26' 13.56" N	91°11' 21.04" W
CFG4W	30°26' 13.16" N	91°11' 21.80" W
CFB1W (background)	30°26' 18.64" N	91°11' 16.18" W
CFB2W (background)	30°26' 18.22" N	91°11' 18.22" W

**Soil Sampling**

The borings ranged in depth from 7 feet to 15 feet below ground surface (BGS) due to variations in water table level. One core was collected from each grid, logged to determine soil type and depth of the water saturated zone (Attachment K), and screened for organic vapors using a Foxboro Model T-1000 Toxic Vapor Analyzer (TVA). Cores were cut into 2-foot sections corresponding with the desired sampling depth interval. The following number scheme was used to name all samples. The first two letters of the sample identifier represent the site name (CF), the next letter and corresponding numeral represent the grid from which the sample was collected

(i.e. G1), and the next letter represents the depth interval from which the sample was collected (i.e. A[CFG1A]). The letter W used as the last letter of a sample identifier indicates a water sample. The letter and corresponding depth interval are as follows: (A) 0- to 24-inches BGS; (B) most contaminated depth between 24-inches BGS and the vadose zone, and (C) one-foot above and one-foot in the vadose zone. The most contaminated depth was determined using the TVA screening results and visual inspection of the core. The sections were homogenized with a stainless steel spoon in an aluminum pie pan and placed into a pre-cleaned glass sample jar. While collecting the on-site cores, at approximately 2 feet in depth, START observed noticeable dark staining in the soil and the presence of brick-like debris.

A total of 16 soil samples, including three background samples (CFBA, CFBB, CFBC) from the off-site grass-covered area north of LPAA, and one duplicate sample (CFG5A) were collected. One rinsate (CFR01), and one trip blank (CFTB01) were also collected. Samples were submitted to Pace Analytical for TAL Metals and Cyanide, VOCs, SVOCs, and TPH fraction (TPH-Diesel Range Organics [TPH-D], TPH-Gasoline Range Organics [TPH-G], TPH-Oil Range Organics [TPH-O]) analysis.

**Groundwater Sampling**

During this sampling mission, START installed six temporary monitoring wells using a Geoprobe™ coring device. One well was installed in each of the grid borings and the two background boring locations on LPAA property (Attachment C-1 and C-2). All wells consisted of 1-inch diameter, schedule 40, polyvinylchloride (PVC) casing. Well screens with 0.010-inch slots were used for each well and the screening depth was from approximately 2 feet BGS to 10 feet BGS. After installation, the wells were packed with No. 3 silica sand and then sealed with approximately one to two linear feet of bentonite. Specific well screening details are as follows:

Monitoring Well Construction				
Well ID	Total	Depth to	Screen Interval	Elevation
CFG1W	13 feet	9 feet 6 inches	8 to 13 feet	50.01 feet
CFG2W	7 feet	4 inches	2 to 7 feet	49.83 feet
CFG3W	13 feet	8 feet 3 inches	8 to 13 feet	49.65 feet
CFG4W	14 feet	8 feet 6 inches	9 to 14 feet	49.63 feet
CFB2W (background)	14 feet	8 feet	5 to 15 feet	51.05 feet

The wells were developed and allowed to recharge overnight. Water column measurements were recorded after recharge. Based on the water column measurements a triple volume of water was



purged from the wells using a peristaltic pump and moderating the flow so as not to disturb the annular space.

On March 30 and 31, 2000, five groundwater samples and one duplicate sample were collected from the wells using a peristaltic pump. The duplicate water sample (CFG5W) was collected from background well CFB2W installed on LPAA property. A water sample was not collected from background well CFB1W due to lack of recharge. All samples were submitted to Pace Analytical for total metals and cyanide, dissolved metals and cyanide, VOCs, SVOCs, and TPH fraction (TPH-D, TPH-G, TPH-O) analysis. The only exception being metals and cyanide fractions were not collected from CFG2W and CFG4W due to slow recharge. VOC, SVOC, TPH-D, TPH-G, and TPH-O fractions were pumped directly into glass containers. The VOC and TPH-G fractions were preserved with hydrochloric acid. Fractions analyzed for total metals and total cyanide were pumped directly into plastic containers and preserved with nitric acid and sodium hydroxide, respectively. Samples analyzed for dissolved metals and dissolved cyanide were pumped, through a 0.45 micron filter directly into plastic containers and preserved with nitric acid and sodium hydroxide, respectively. After all water samples were collected, the well screens and casings were removed, the boreholes were plugged with drill cuttings from the hole, and a concrete cylinder was inserted to form a permanent seal at the surface. All plugging and abandoning procedures were performed in accordance with Louisiana Administrative Code Title 70:XIII.105, Section P, Item 17, Plugging of Abandoned Geotechnical Boreholes.

### Soil Sample Results

Several TCL organic and TAL inorganic analytes were detected in at least one sample, however, only arsenic exceeded the screening levels established for industrial soil by the federal and state guidance documents entitled *EPA Region 6 Human Health Medium-Specific Screening Levels* (July 1999 update) and *LDEQ Risk Evaluation/Corrective Action Program (RECAP)*. Arsenic concentrations ranged from 2.7 mg/kg in CFG2A to 15.7 mg/kg in CFG4C. The EPA Region 6 arsenic cancer endpoint screening level (2.3 mg/kg) was exceeded in all soil samples, but the noncancer endpoint screening level (360 mg/kg) was not exceeded in any sample. The LDEQ *RECAP* screening level (3.0 mg/kg) was exceeded in all soil samples with the exception of CFG2A. Background arsenic levels ranged from 6.3 mg/kg to 9.4 mg/kg. These arsenic concentrations are within the naturally occurring background arsenic concentration range for the EPA Region 6 area, reported to be within a range of 1.1 to 16.7 mg/kg according to the EPA guidance document. The EPA-RPB has historically used 20 to 50 mg/kg as an action level for removal actions, depending upon land use, surrounding area, population, and other pertinent factors. Action levels for removal actions are reviewed and approved by the Agency for Toxic Substances and Disease Registry (ATSDR) prior to commencing removal actions. ATSDR's Environmental Media Contamination Guide (EMEG) for arsenic in soil is 20 mg/kg. The concentrations of arsenic detected in all soil samples were less than this conservative, health-based value.

TPH-D and TPH-O were present in significant concentrations in both the 0- to 24-inch and worst case depth intervals. Screening levels for TPH are not available in the EPA Region 6 guidance, but do exist in the LDEQ *RECAP* document. TPH fractions were detected in exceedance of LDEQ *RECAP* screening standards for industrial soil in the surface depth interval in borings CFG1, CFG2, and CFG4, and the most contaminated and vadose zone depth interval samples in boring CFG2 only. TPH-O results for samples CFG1A and CFG2A all carried a JH qualifier which indicates that the results are biased high and the actual TPH concentrations are possibly lower than the actual result. There were no exceedances of LDEQ *RECAP* screening standards for TPH-G. In order to use the values from the LDEQ document, indicator compounds are used in conjunction with TPH fractions. No indicator compounds were detected in any of the samples.

Analytical results sheets and validation reports are provided as Attachment I and the complete analytical data package was provided to EPA under separate cover. Results for all soil samples are summarized in Table 1. TPH fraction results for soil samples are represented graphically in Attachments D-1 through D-6.

### Groundwater Sample Results

Inorganic results indicated concentrations of total arsenic up to 59.4 micrograms per liter ( $\mu\text{g/L}$ ) and concentrations of dissolved arsenic up 49.3  $\mu\text{g/L}$  in sample CFG1W. Both total and dissolved arsenic results exceed *EPA Region 6 Human Health Medium Specific Screening Levels* for Tap Water. Only total arsenic concentrations exceeded LDEQ *RECAP* screening standards for groundwater. CFG1W was the only well with any arsenic detected.

Organic results indicated the presence of benzene, TPH-D, TPH-G, and TPH-O. Benzene was detected only in CFG4W at a concentration of 8.5  $\mu\text{g/L}$ . This concentration exceeded both EPA Region 6 Human Health Medium Specific Screening Levels for Tap Water and LDEQ *RECAP* screening standards for groundwater. TPH-D and TPH-O was present in significant concentrations in all on-site samples with the highest concentrations detected in samples collected from CFG2 and CFG4. All on-site water samples exceeded LDEQ *RECAP* screening standards for groundwater for TPH-D and TPH-O. TPH-G was detected in sample CFG2W only at a concentration of 354  $\mu\text{g/L}$  exceeding LDEQ *RECAP* screening standards for groundwater. No organic compounds were detected in the background water sample, CFB2W. Organic and inorganic analytical results of the shallow water monitoring wells are summarized in Tables 2 and 3, respectively.

### Summary

Based on the limited available data the contaminants of concern at the Clearwater site are benzene and petroleum hydrocarbons. The highest detected soil contamination was in boring CFG2 and the highest groundwater contamination was in boring CFG4. While soil results indicate that overall contaminant levels decrease toward the west side of the site it is possible that

concentrations increase towards the east side of the site, and may even extend beyond the eastern site boundary.

While the highest groundwater contaminant concentrations were detected in samples collected from wells installed in grids G2 and G4, little is known about the direction of groundwater flow or the direction of petroleum hydrocarbon migration. Therefore, concentrations of contaminants in areas outside of those sampled may be greater than or less than those detected, and the horizontal extent of contaminant migration in or on the groundwater table is unknown.

**ATTACHMENTS:**

- A. Site Location Map
- B. Site Sketch
- C. Soil Boring/Monitoring Well Location Maps (2 figures)
- D. Concentration Maps (6 figures)
- E. Photographs (8 pages)
- F. Negatives (Located in Baton Rouge Office File Copy Only)
- G. Sampling Quality Assurance/Quality Control Work Plan (14 pages)
- H. Cost Estimate for Monitoring Wells
- I. Analytical Procurement Documentation for Pace Analytical (57 pages)
- J. Data Validation Reports, Results Summary Sheets and Chain of Custody Forms for Data Analyzed by Pace Analytical (261 pages)
- K. Geoprobe Coring Soil Classification Logs (34 pages)
- L. LDEQ Letter Requesting EPA Assistance
- M. Access Agreements (2 pages)
- N. Letter from Contracting Officer Allowing Release of Information
- O. Records of Communication (6 pages)
- P. Copy of Logbook 1 Pages (1-20) and Logbook 2 - Survey Notes Pages (1-9)
- Q. Copy of TDD No. S06-00-02-0004 and Amendments A, B, and C (7 pages)

**DELIVERED TO THE EPA FILES UNDER SEPARATE COVER:**

Analytical Data Package - Pace Analytical (1 box)



CERCLIS No.: LA0000383075

(This page intentionally left blank)

**Table 1**  
**Summary of Detected Organic and Inorganic**  
**Analytes in Soil Samples**  
**Clearwater Fluids Recycling, Inc.**  
**Baton Rouge, East Baton Rouge Parish, Louisiana**  
**(concentrations in mg/kg, dry weight)**

Analyte <sup>(1)</sup>	Sample ID	CFG1A	CFG2A	CFG3A	CFG4A	CFG5A <sup>(2)</sup>	CFBA <sup>(3)</sup>	EPA Region 6 Soil Screening Levels <sup>(4)</sup>	LDEQ RECAP Soil Screening Levels <sup>(5)</sup>
	Collection Date	3/29/00	3/29/00	3/29/00	3/29/00	3/29/00	3/29/00		
	Depth Interval	0-2'	0-2'	0-2'	0-2'	0-2'	0-2'		
<b>TCL Volatile Organics</b>									
Acetone		2.43	0.575 JK	0.023	0.0443	0.0629	ND	5,800	1,400
2-Butanone		0.0564	ND	ND	ND	ND	ND	NL	NL
Carbon disulfide		ND	0.0142	ND	ND	ND	ND	720	260
Methylene chloride		ND	0.0127	ND	ND	0.0106	ND	19	44
<b>TCL Semivolatile Organics</b>									
2-Methylnaphthalene		ND	2.08	ND	ND	ND	ND	NL	NL
Bis(2-ethylhexyl)phthalate		ND	2.61	ND	0.582	ND	ND	120	210
<b>TAL Metals</b>									
Aluminum		2,430 JL	434 JL	6,970 JL	5,480	10,800 JL	9,070 JL	100,000	NL
Arsenic		3.4	2.7	7.5	6	6	9.4	2.3 <sup>(6)</sup>	3
Barium		55.1	28	156	147	194	172	100,000	13,000
Beryllium		ND	ND	0.77	ND	0.88	0.6	2,200	370
Cadmium		ND	ND	0.9	0.84	0.85	1.0	1,000	94
Calcium		3,990	1,660	3,300	4,970	4,400	5,390	NL	NL
Chromium		8.1	43.2	23.9	77.4	16.7	28.2	450	NL
Cobalt		ND	ND	8	ND	8.7	7.8	29,000	11,000
Copper		7.3	5.1	30.9	45.2	19.8	712	76,000	660,000
Iron		7,100	3,320	20,500	10,200	17,700	22,500	100,000	NL
Lead		24.1	27.1	149	168	15	234	2,000	1,700
Magnesium		ND	ND	1,980	1,550	4,210	2,330	NL	NL
Manganese		72.8	41.6	505	246	451	585	47,000	NL
Nickel		ND	ND	16.8	14.3	24.3	26.1	41,000	3,700
Potassium		ND	ND	1,810	916	1,740	840	NL	NL
Vanadium		11.6	7.2	21.4	20.6	29.6	24.1	14,000	1,300
Zinc		47.6	62	140	1,280	65.6	389	100,000	56,000
<b>Total Petroleum Hydrocarbon Fractions</b>									
Diesel (C <sub>10</sub> -C <sub>20</sub> )		4,400	5,130 JH	85.1 JH	229	17.8	ND	NL	500
Grease (C <sub>6</sub> -C <sub>12</sub> )		33.6	311	7.7	8.08	ND	ND	NL	500
Oil (C <sub>20</sub> -C <sub>28</sub> )		1,360	1,540 JH	164 JH	1,010	ND	ND	NL	1000

Key at end of table.

Table 1 (continued) Summary of Detected Organic and Inorganic Analytes in Soil Samples Clearwater Fluids Recycling, Inc. Baton Rouge, East Baton Rouge Parish, Louisiana (concentrations in mg/kg, dry weight)									
Analyte <sup>(1)</sup>	Sample ID	CFG1B	CFG2B	CFG3B	CFG4B	CFG5A <sup>(7)</sup>	CFBB <sup>(3)</sup>	EPA Region 6 Soil Screening Levels <sup>(4)</sup>	LDEQ RECAP Soil Screening Levels <sup>(5)</sup>
	Collection	3/29/00	3/29/00	3/29/00	3/29/00	3/29/00	3/29/00		
	Depth Interval	8-10'	3-5'	6-8'	8-10'	NA	5-7'		
<b>TCL Volatile Organics</b>									
Acetone		0.0565	0.295	0.0362	0.0909	NA	0.019	5,800	1,400
Methylene chloride		ND	ND	0.0121	0.0077	NA	ND	19	44
<b>TCL Semivolatile Organics</b>									
2-Methylnaphthalene		ND	4.6	ND	ND	NA	ND	NL	NL
Bis(2-ethylhexyl)phthalate		ND	3.12	0.8	ND	NA	ND	120	210
<b>TAL Metals</b>									
Aluminum		12,100 JL	5,390 JL	9,180 JL	11,000 JL	NA	10,900 JL	100,000	NL
Arsenic		13.1	7.1	7.4	9.2	NA	6.3	2.3 <sup>(6)</sup>	3
Barium		292	193	175	221	NA	93.4	100,000	13,000
Beryllium		1	ND	0.72	0.88	NA	0.94	2,200	370
Cadmium		0.83	0.83	0.73	1.1	NA	ND	1,000	94
Calcium		7,050	5,630	3,970	5,707	NA	4,550	NL	NL
Chromium		19.2	10.3	15.1	20	NA	14.6	450	NL
Cobalt		10.9	ND	ND	8.7	NA	ND	29,000	11,000
Copper		26	25	17.7	24.5	NA	15	76,000	660,000
Iron		22,600	14,300	15,400	19,300	NA	15,400	100,000	NL
Lead		20.3	30.7	18.5	16.8	NA	10.8	2,000	1,700
Magnesium		6,420	1,890	3,780	4,780	NA	3,380	NL	NL
Manganese		639	389	514	484	NA	105	47,000	NL
Nickel		40.3	12.6	28.8	24.7	NA	18.7	41,000	3,700
Potassium		2,390	1,600	1,510	2,170	NA	1,140	NL	NL
Thallium		ND	ND	1.5	ND	NA	ND	NL	1.5
Vanadium		34	23.6	23.8	30.8	NA	19.4	14,000	1,300
Zinc		80.5	64.1	67.9	75.4	NA	48.8	100,000	56,000
<b>Total Petroleum Hydrocarbon Fractions</b>									
Diesel (C <sub>10</sub> -C <sub>20</sub> )		25.7	2,130 JH	ND	23.2	NA	ND	NL	500
Grease (C <sub>6</sub> -C <sub>12</sub> )		ND	486	ND	ND	NA	ND	NL	500
Oil (C <sub>20</sub> -C <sub>28</sub> )		150	396 JH	ND	78.5	NA	ND	NL	1000

Key at end of table.

Table 1 (continued) Summary of Detected Organic and Inorganic Analytes in Soil Samples Clearwater Fluids Recycling, Inc. Baton Rouge, East Baton Rouge Parish, Louisiana (concentrations in mg/kg, dry weight)									
Analyte <sup>(1)</sup>	Sample ID	CFG1C	CFG2C	CFG3C	CFG4C	CFG5A <sup>(7)</sup>	CFBC <sup>(3)</sup>	EPA Region 6 Soil Screening Levels <sup>(4)</sup>	LDEQ RECAP Soil Screening Levels <sup>(5)</sup>
	Collection Date	3/29/00	3/29/00	3/29/00	3/29/00	3/29/00	3/29/00		
	Depth Interval	10-12'	5-7'	11-13'	12-14'	NA	14-16'		
<i>TCL Volatile Organics</i>									
Acetone		0.0755	0.0529	0.126	0.07	NA	0.0186	5,800	1,400
Methylene chloride		0.0124	ND	0.0067	0.0063	NA	0.0089	19	44
<i>TCL Semivolatile Organics</i>									
Bis(2-ethylhexyl)phthalate		ND	0.589	3.31	ND	NA	ND	120	210
<i>TAL Metals</i>									
Aluminum		11,600 JL	10,900 JL	9,800 JL	11,100 JL	NA	16,000 JL	100,000	NL
Arsenic		9.6	4.7	7	15.7	NA	7.7	2.3 <sup>(6)</sup>	3
Barium		326	191	190	216	NA	202	100,000	13,000
Beryllium		1	0.95	0.81	1.1	NA	1.6	2,200	370
Cadmium		0.99	0.93	0.78	0.94	NA	0.88	1,000	94
Calcium		5,880	5,120	6,070	4,180	NA	8,240	NL	NL
Chromium		16.7	23.4	16.4	15.9	NA	21.7	450	NL
Cobalt		15.6	9	9.1	10.9	NA	11.5	29,000	11,000
Copper		25.3	23.1	21	23.6	NA	31.8	76,000	660,000
Iron		18,700	17,600	17,700	23,400	NA	24,700	100,000	NL
Lead		19.9	18.4	15.6	16.2	NA	20.2	2,000	1,700
Magnesium		4,730	4,660	5,670	3,290	NA	4,850	NL	NL
Manganese		1,620	569	672	779	NA	398	47,000	NL
Nickel		32	27.3	33.4	29.5	NA	27.9	41,000	3,700
Potassium		2,000	2,510	2,210	1,450	NA	1,860	NL	NL
Vanadium		28	29.4	27.1	35.4	NA	37.8	14,000	1,300
Zinc		74.5	76.7	68.4	62.9	NA	73.5	100,000	56,000
<i>Total Petroleum Hydrocarbon Fractions</i>									
Diesel (C <sub>10</sub> -C <sub>20</sub> )		17.6	1370	ND	16.6	NA	ND	NL	500
Grease (C <sub>6</sub> -C <sub>12</sub> )		ND	84.1	ND	ND	NA	ND	NL	500
Oil (C <sub>20</sub> -C <sub>28</sub> )		73.1	747	ND	ND	NA	ND	NL	1000

Key at end of table.

**Table 1 - Key**  
**Summary of Detected Organic and Inorganic**  
**Analytes in Soil Samples**  
**Clearwater Fluids Recycling, Inc.**  
**Baton Rouge, East Baton Rouge Parish, Louisiana**

**Notes:**

- (1) = Analyses included all 23 TAL metals and 124 TCL organics in addition to TPH; however, only those analytes with at least one detection are reported in this table. Refer to Attachment C for a graphical representation of sample locations.
- (2) = Sample CFG5A is a duplicate of CFG4B.
- (3) = Sample CFBA is a background soil sample taken from an off-site location just north of the office/warehouse complex located off South First Street, east of the site.
- (4) = Screening levels represent EPA Region 6 *Human Health Medium-Specific Screening Levels* (June 1999) for industrial soils. These numbers are based on dry weight.
- (5) = Screening levels represent Louisiana Department of Environmental Quality *Risk Evaluation/Corrective Action Program (RECAP)* (December 20, 1998) screening standards for industrial soil. These numbers are based on wet weight.
- (6) = The more conservative cancer endpoint screening level was used for this table. The non-cancer endpoint screening level is 360 mg/kg.
- (7) = Only the 0-2 foot depth interval was collected to serve as a Quality Assurance/Quality Control sample.

**Key:**

- ' = Foot.
- EPA = Environmental Protection Agency.
- ID = Identification.
- LDEQ = Louisiana Department of Environmental Quality.
- mg/kg = Milligrams per kilogram.
- NA = Not applicable.
- ND = Not detected.
- NL = Not listed.
- TAL = Target Analyte List.
- TCL = Target Compound List.
- TPH = Total Petroleum Hydrocarbon.

**Data Qualifiers:**

- J = Result qualified due to a detected bias (error). Result represents an approximate level-of-contamination, not an actual concentration. The "J" qualifier may be followed by an additional qualifier indicating direction of bias.
- H = Nature of bias is sufficiently known to indicate that the stated value is higher than the actual value.
- L = Nature of bias is sufficiently known to indicate that the stated value is lower than the actual value.

Source: Ecology and Environment, Inc., 2000.

**Table 2**  
**Summary of Detected Organic**  
**Analytes in Groundwater Samples**  
**Clearwater Fluids Recycling, Inc. Baton Rouge, East Baton Rouge Parish, Louisiana**  
**(concentrations in µg/L)**

Analyte <sup>(1)</sup>	Sample ID	CFG1W	CFG2W	CFG3W	CFG4W	CFG5W <sup>(2)</sup>	CFB2W <sup>(3)</sup>	EPA Region 6	LDEQ RECAP
	Collection Date	3/30/00	3/30/00	3/30/00	3/31/00	3/31/00	3/31/00	Water Screening	Water Screening
	Screen Depth	8-13'	2-7'	8-13'	9-14'	5-15'	5-15'	Levels <sup>(4)</sup>	Levels <sup>(5)</sup>
<b>TCL Volatile Organics</b>									
Acetone		16.6	59.4	22.9	46.3	ND	ND	610	61
Benzene		ND	ND	ND	8.5	ND	ND	0.42	5
2-Butanone		ND	15.1	ND	ND	ND	ND	NL	NL
<b>TCL Semivolatile Organics</b>									
4-Chloro-3-methylphenol		ND	ND	ND	50.1	ND	ND	NL	NL
<b>Total Petroleum Hydrocarbon Fractions<sup>(6)</sup></b>									
Diesel (C <sub>10</sub> -C <sub>20</sub> )		390	3,200	190	8,000	ND	ND	NL	150
Grease (C <sub>6</sub> -C <sub>12</sub> )		ND	354	ND	ND	ND	ND	NL	150
Oil (C <sub>30</sub> -C <sub>28</sub> )		610	1,700	230	1,300	ND	ND	NL	150

**Table 2 - Key**  
**Summary of Detected Organic**  
**Analytes in Groundwater Samples**  
**Clearwater Fluids Recycling, Inc.**  
**Baton Rouge, East Baton Rouge Parish, Louisiana**

**Notes:**

- (1) = Analyses included 124 TCL Organics and TPH; however, only those analytes with at least one detection are reported on this table. Refer to Attachment C for a graphical representation of sample locations.
- (2) = Sample CFG5W is a duplicate of CFG4W.
- (3) = Sample CFB2W is a groundwater sample, representative of background, taken from an off-site location just northwest of the office/warehouse complex located off South First Street, east of the site.
- (4) = Screening levels used in this table, represent EPA Region 6 Human Health Medium-Specific Screening Levels for Tap Water (Residential Scenario: Ingestion and Inhalation) (June 1999). Analytes exceeding these screening levels are shaded grey on this table.
- (5) = Screening levels represent Louisiana Department of Environmental Quality *Risk Evaluation/Corrective Action Program (RECAP)* (December 20, 1998) screening standards for groundwater. Analytes exceeding these screening levels are shaded grey on this table.
- (6) = Screening levels for TPH are not available in the EPA Region 6 guidance, but do exist in the Louisiana Department of Environmental Quality screening document entitled, *Risk Evaluation/Corrective Action Program (RECAP)*, finalized December 20, 1998.

**Key:**

- ' = Feet.
- µg/L = Micrograms per Liter.
- ND = Not detected.
- NL = Not listed.
- TCL = Target Compound List.
- TPH = Total Petroleum Hydrocarbon.

**Source:** Ecology and Environment, Inc., 2000.



<p align="center"><b>Table 3</b>  <b>Summary of Detected Inorganic Analytes in Groundwater Samples</b>  <b>Clearwater Fluids Recycling, Inc.</b>  <b>Baton Rouge, East Baton Rouge Parish, Louisiana</b>  <b>(concentrations in µg/L)</b></p>											
Analyte <sup>(1)</sup>	Sample ID	CFG1W		CFG3W		CFG5W		CFB2W <sup>(2)</sup>		EPA Region 6 Water Screening Levels <sup>(3)</sup>	LDEQ RECAP Water Screening Levels <sup>(4)</sup>
		3/30/00		3/30/00		3/31/00		3/31/00			
		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved		
<b>TAL Metals</b>											
Aluminum		2,790	ND	4,890	ND	3,800	ND	9,330	ND	37,000	NL
Arsenic		59.4	49.3	ND	ND	ND	ND	ND	ND	0.045	50
Barium		268	ND	437	ND	327	256	389	254	2,600	2,000
Calcium		116,000	97,200	71,100	62,900	72,500	65,800	72,800	64,800	NL	NL
Iron		3,540	2,220	3,780	520	3,570	ND	9,150	ND	11,000	NL
Lead		3.1	ND	6	ND	4.4	ND	9.8	ND	15	15
Magnesium		37,000	32,400	24,500	21,600	21,700	19,000	23,000	18,800	NL	NL
Nickel		41.4	ND	ND	ND	ND	ND	ND	ND	730	100
Potassium		4,730	4,060	5,300	4,030	26,400	23,300	27,000	22,900	NL	NL
Selenium		5 JK	8.8 JK	5.3 JK	ND	9 JK	10.8 JK	6.4 JK	5.7 JK	180	50
Sodium		32,100	28,700	35,000	30,400	4,090	3,260	3,700	3,210	NL	NL
Zinc		ND	ND	ND	ND	ND	ND	32.1	ND	11,000	1,100

Key at end of table.

Table 3 - Key  
 Summary of Detected Inorganic  
 Analytes in Groundwater Samples  
 Clearwater Fluids Recycling, Inc.  
 Baton Rouge, East Baton Rouge Parish, Louisiana

Notes:

- (1) = Analyses included all 23 TAL metals however, only those analytes with at least one detection are reported on this table. Refer to Attachment C for a graphical representation of sample locations.
- (2) = Sample CFB2W is a water sample collected from an off-site location northwest of the office/warehouse complex located off South First Street, east of the site.
- (3) = Screening levels represent EPA Region 6 Human Health Medium-Specific Screening Levels for Tap Water (Residential Scenario: Ingestion and Inhalation) (June 1999). Analytes exceeding these screening levels are shaded grey on this table.
- (4) = Screening levels represent Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP) (December 20, 1998) screening standards groundwater. Analytes exceeding these screening levels are shaded grey on this table.

Key:

- $\mu\text{g/L}$  = Micrograms per Liter.
- ND = Not detected.
- NL = Not listed.
- TAL = Target Analyte List.

Data Qualifiers:

- J = Result qualified due to a detected bias (error). Result represents an approximate level-of-contamination, not an actual concentration. The "J" qualifier may be followed by an additional qualifier indicating direction of bias.

K = Nature of bias is unknown and stated value may be higher or lower than that of the actual value.

Source: Ecology and Environment, Inc., 2000.

<p align="center"><b>Table 4</b>  <b>Summary of Detected Analytes for Trip Blank, Field Blank, and Rinsate Samples</b>  <b>Clearwater Fluids Recycling, Inc.</b>  <b>Baton Rouge, East Baton Rouge Parish, Louisiana</b>  <b>(concentrations in <math>\mu\text{L}</math>)</b></p>					
Analyte	Sample ID	CFTB01	CFTB2	CFR01	CFFB01
	Collection Date	----- <sup>(1)</sup>	----- <sup>(1)</sup>	3/29/00	3/30/00
<b><i>TCL Volatile Organics</i></b>					
Toluene		ND	ND	7.4	6.5
Total Xylene		ND	ND	6.2	6
<b><i>TCL Semivolatile Organics</i></b>					
bis (2-Ethylhexyl) phthalate		NA	NA	12.6	ND
<b><i>TAL Metals</i></b>					
Selenium		NA	NA	ND	8.7 JK
<b><i>Total Petroleum Hydrocarbon Fractions</i></b>					
Diesel (C <sub>10</sub> -C <sub>20</sub> )		NA	NA	ND	ND
Grease (C <sub>6</sub> -C <sub>12</sub> )		NA	NA	59.8	64.1
Oil (C <sub>20</sub> -C <sub>28</sub> )		NA	NA	1.2	ND

**Notes:**

- <sup>(1)</sup> = Sample CFTB01 and CFTB2 were prepared by the lab prior to conducting sampling activities, therefore the collection date is not known.

**Key:**

- $\mu\text{g/L}$  = Micrograms per liter.  
 NA = Not analyzed.  
 ND = Not detected.  
 TAL = Target Analyte List.  
 TCL = Target Compound List.

**Data Qualifiers:**

- J = Result qualified due to a detected bias (error). Result represents an approximate level of contamination, not an actual concentration. The "J" qualifier may be followed by an additional qualifier indicating direction of bias.
- K = Nature of bias is unknown and stated value may be higher or lower than that of the actual value.

Source: Ecology and Environment, Inc., 2000.



State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

MIKE D. McDANIEL, Ph.D.  
SECRETARY

January 26, 2005

Mr. Steve Bice, Assistant Director  
Louisiana Property Assistance Agency  
1059 Brickyard Lane  
Baton Rouge, LA 70804

Re: Brickyard Lane Site Comments  
Former Clearwater Fluids; Agency Interest (AI) No. 1429  
1001 First Street (aka Brickyard Lane), Baton Rouge, East Baton Rouge Parish

Dear Mr. Bice:

The Louisiana Department of Environmental Quality-Remediation Services Division (LDEQ-RSD) has reviewed your request for converting the former Clearwater Fluids site into a parking lot. Thank you for providing this information.

The LDEQ-RSD requires that a Risk Evaluation/Corrective Action Program (RECAP) evaluation be conducted in the location of former tank farm area. The RECAP evaluation is required to determine the extent and concentration of Total Petroleum Hydrocarbons fractions (i.e., TPH-Gasoline, TPH-Diesel, and TPH-Oil) within the subsurface soils and groundwater. Pursuant to our meeting today at your facility, please use the materials handed to you to assist with obtaining the evaluation.

Please contact this office at (225) 219-3227 with any questions.

Sincerely,

Michael T. Picou  
Staff Scientist

c: LDEQ File Scanning Room





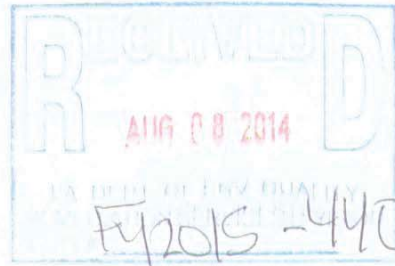
**CONESTOGA-ROVERS  
& ASSOCIATES**

5551 Corporate Boulevard, Suite 200  
Baton Rouge, Louisiana 70808  
Telephone: (225) 292-9007 Fax: (225) 952-2978  
[www.CRAworld.com](http://www.CRAworld.com)

August 7, 2014

Reference No. 085733-00

Mr. Gary A. Fulton, Jr.  
Administrator, Remedial Services Division  
Louisiana Department of Environmental Quality  
Remediation Services Division  
P.O. Box 4312  
Baton Rouge, Louisiana 70821-4312



Dear Mr. Fulton:

Re: Risk Evaluation/Corrective Action Program Report  
Brick Yard Site  
Baton Rouge, Louisiana

On behalf of Commercial Properties Realty Trust (CPRT), Conestoga-Rovers & Associates (CRA) is herein submits this Risk Evaluation/Corrective Action Program (RECAP) Report for the Brick Yard Site located on Highway 30 in Baton Rouge, Louisiana (Site).

If you have any questions regarding this submittal or need additional information, please contact us at 225-292-9007.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Charles E. Jones

CST/cms/1  
Encl.

Remedial Services Division	
Manager	<i>Wiley</i>
Team Leader	<i>Doran</i>
AI#	<i>1429</i>
TEMPO Task #	
<input type="checkbox"/> Desk Copy File Room	<i>IAS</i>

Equal  
Employment Opportunity  
Employer

REGISTERED COMPANY FOR  
**ISO 9001**  
ENGINEERING DESIGN





**CONESTOGA-ROVERS  
& ASSOCIATES**

[www.CRAworld.com](http://www.CRAworld.com)



## **Risk Evaluation/Corrective Action Program**

Brick Yard Site  
1059 Brick Yard Lane  
Baton Rouge, East Baton Rouge Parish, Louisiana  
Agency Interest No. 76922

Prepared for: Commercial Properties Realty Trust

### **Conestoga-Rovers & Associates**

5551 Corporate Boulevard, Suite 200  
Baton Rouge, Louisiana 70808

August 2014 • 085733-00 (2)



**RECAP FORM 1**  
**RECAP SUBMITTAL SUMMARY**

1. Agency Interest Name: Brick Yard Site
2. AI No.: 76922
3. Name of Area of Investigation: AOI
4. Facility Owner Name: Office of Facility Planning
5. Facility Owner Mailing Address: N/A
6. Facility Operator Name: N/A
7. Facility Operator Mailing Address: N/A
8. Facility Physical Address: 1059 Brick Yard Lane  
Baton Rouge, Louisiana
9. Parish: East Baton Rouge Parish
10. Latitude/Longitude of Primary Facility Entrance: 30°26'19.48"N/ 91°11'19.68"W
11. Latitude/Longitude Method: Topographic Mapping Software
12. Responsible Party Contact Person: Mark A. Moses for Office of Facility Planning
13. Responsible Party Contact Person's Phone Number: 225-342-0820
14. Responsible Party Contact Person's Mailing Address: Office of Facility Planning  
P.O. Box 94095  
Baton Rouge, Louisiana 70804-9095
15. Responsible Party Contact Person's E-mail Address: Mark.Moses@la.gov
16. Area of Investigation Location: The location of AOI is shown on Figure 4 and is discussed in the text
17. Area of Investigation Size: The location of AOI is shown on Figure 4 and is discussed in the text
18. Horizontal and Vertical Extent of the Area of Investigation has been identified? [ X ] Yes [ ] No
19. Describe the Current and Historical Uses of the Property on which the AOC is located and the Time:  
Site history is included in Section 1.0 Site History. The site is currently a vacant lot.
20. Indicate How Release Occurred (if known): Previous above ground storage tank use



21. List Constituents Released (if known): Unknown
22. RECAP Submittal Date: July 2014
23. RECAP Submittal Prepared by: Daniel D. Wascom, Charles Jones, and Brian L. Carter, PhD, PG
24. RECAP Submittal Preparer's Employer: Conestoga-Rovers & Associates
25. RECAP Submittal Preparer's Phone Number: (225) 292-9007
26. Site Ranking:  Class 1  Class 2  Class 3  Class 4
27. Media Impacted:
- |  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Surface Soil | <input type="checkbox"/> Groundwater 1A             | <input type="checkbox"/> Surface water |
| <input type="checkbox"/> Subsurface Soil         | <input type="checkbox"/> Groundwater 1B             | <input type="checkbox"/> Sediment      |
|  | <input type="checkbox"/> Groundwater 2A             | <input type="checkbox"/> Biota         |
|  | <input type="checkbox"/> Groundwater 2B             |  |
|  | <input type="checkbox"/> Groundwater 2C             |  |
|  | <input checked="" type="checkbox"/> Groundwater 3A  |  |
|  | <input type="checkbox"/> Groundwater 3B             |  |
|  | <input type="checkbox"/> Groundwater Classification |  |
|  | Unknown   |  |
28. Is soil present at 0-3 ft bgs impacted?  Yes  No
29. Release volume: Unknown
30. Is NAPL Present?  Yes  No
31. Aquifer: 112SESC: Southeast Louisiana Aquifer Surficial Confining Unit
- (a) Distance from AOC/AOI to the nearest downgradient property boundary: < 10 feet
- (b) Distance from AOC/AOI to the nearest downgradient surface water body: ≈ 800 feet
- (c) Depth from known contamination to the nearest Groundwater Classification 1 aquifer: N/A
- (d) If a GW 1 or 2 aquifer, distance from POC to nearest downgradient drinking water wells: N/A
32. Distance from known contamination to nearest enclosed occupied structure: > 2,000 feet
33. Depth Groundwater First Encountered: ≈ 12 - 15 feet below ground surface
34. Distance from POC to POE: ≈ 800 feet
35. Dilution Factor Applied: 63 (MO-1)
36. Fractional Organic Carbon Content: 0.025
37. Current Land Use:  Non-Industrial  Industrial NAICS: \_\_\_\_\_
38. Potential Future Land Use:  Non-Industrial  Industrial NAICS: \_\_\_\_\_
39. Is There Offsite Contamination?  Yes  No

(a) If Yes, Land Use Offsite:  Non-Industrial  Industrial NAICS: \_\_\_\_\_

(b) If Yes, Identify the Landowner(s), Lessee(s), and/or Servitude Holder(s): \_\_\_\_\_

40. Management Option(s) Applied at the AOI:  SO  MO-1  MO-2/Appendix I  MO-3

41. Provide documentation that the AOI meets the criteria for the Option implemented: \_\_\_\_\_  
See Section 5.1.2 of this submittal

42. Current Status of AOI-I: N/A

(a) The AOI will be further evaluated under:  MO-1  MO-2  MO-3.

(b) Medium for further evaluation: \_\_\_\_\_

(c) Exceedances:

43.  The AOI will be remediated under: N/A

44. Exceedances and Corrective Action Standards to be applied: N/A

45. All constituent concentrations in all impacted media at all the AOCs:

- comply with the applicable RECAP standards; or
- have been remediated to the applicable RECAP; or
- alternate remediation standards and a NFA-ATT determination is being requested and:

(a) RECAP Standards Applied:  Non-industrial  Industrial

(b) There are institutional controls on this property:  Yes  No

(c) If yes, type of institutional control employed: \_\_\_\_\_

(d) If applicable, the conveyance notice has been filed with the \_\_\_\_\_ (parish) Clerk of Court noting that the AOI was closed under industrial standards.

46. RECAP Standards Applied at the AOI:

Medium: Surface Soil

COC	<input checked="" type="checkbox"/> AOIC	<input type="checkbox"/> LSS <input checked="" type="checkbox"/> MO-1 LRS <input type="checkbox"/> MO-2 LRS <input type="checkbox"/> MO-3 LRS <input type="checkbox"/> Alternate Standards
Extractable Petroleum Hydrocarbons (>C <sub>21</sub> -C <sub>35</sub> ) Aromatics	340	1,800

Medium: Groundwater

COC	[X] CC	[ ] LSS [X] MO-1 LRS [ ] MO-2 LRS [ ] MO-3 LRS [ ] Alternate Standards
Acetone	0.11	208
Arsenic	0.037	3.2
Barium	3.90	126
bis-(2-ethylhexyl)phthalate	0.011	0.34
Cadmium	0.01	6.3
Chromium	0.13	3.2
EPH (>C <sub>16</sub> -C <sub>21</sub> ) Aromatics	0.17	63
Lead	0.39	3.2

Medium: Surface Soil (Enclosed Structure)

COC	[X] AOIC	[ ] LSS [X] MO-1 LRS [ ] MO-2 LRS [ ] MO-3 LRS [ ] Alternate Standards
Acetone	0.095	165
2-Butanone (Methyl ethyl ketone) (MEK)	0.017	1,400
EPH (>C <sub>10</sub> -C <sub>12</sub> ) Aliphatics	4.2	115
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aliphatics	54	525
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aromatics	26	2,050

Medium: Groundwater (Enclosed Structure)

COC	[X] CC	[ ] LSS [X] MO-1 LRS [X] MO-2 LRS [ ] MO-3 LRS [ ] Alternate Standards
Acenaphthylene	0.000066	900
Acetone	0.11	1,450
Anthracene	0.000067	37,000
2-Butanone (Methyl ethyl ketone) (MEK)	0.0037	120,000
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aromatics	0.054	28
Fluorene	0.000038	2,250
2-Methylnaphthalene	0.000078	84
Naphthalene	0.0046	1.7
Phenanthrene	0.00015	73,000
Pyrene	0.00048	3,000
Xylenes (total)	0.0017	4.3



47. Provide documentation that the AOIC and/or CC will continue to comply with the applicable standard. \_\_\_\_\_  
See RECAP Evaluation presented herein.

48. If groundwater was impacted, provide a description of aquifer use and list the locations and depths of the nearest drinking water supply wells: \_\_\_\_\_  
There is no known use of the shallow impacted water-bearing zone.  
There are 6 domestic water wells located within a one-mile radius of the site that are screened in the same stratum as the aquifer of concern, see Figure 3, Appendix A.

49. Provide: (a) a description of the remedial actions implemented; (b) verification that the source has been removed/mitigated and that residual constituent concentrations comply with the LSS or LRS; and (c) a discussion on the offsite disposal of investigation and remediation wastes including types, quantities, disposal location, etc.  
a) N/A; b) See 47 above; c) all investigation-derived waste from the investigation was removed on May 29, 2014, and disposed at an LDEQ-permitted facility.

50. If applicable, discuss monitoring well plugging and abandonment: N/A

51. Is There a Current or Potential Ecological Impact? [ ] Yes [X] No

## Executive Summary

A Site investigation was completed in May 2014 for Commercial Properties Realty Trust (Commercial Properties) at the Brick Yard Site (Site) located at 1059 Brick Yard Lane in Baton Rouge, East Baton Rouge Parish, Louisiana (Agency Interest No. 76922). The investigation was conducted to assess the potential impacts associated with historical operations at the Site and to provide Site-specific data for a Louisiana Department of Environmental Quality (LDEQ) Risk Evaluation/Corrective Action Program (RECAP) evaluation. Soil and borehole water samples were collected during the Site investigation for analyses of parameters specified in RECAP. A summary of Conestoga-Rovers & Associates (CRA) work and findings follows:

**Reason for Investigation:** CRA was retained by Commercial Properties to conduct a surface investigation to assess the potential impacts associated with historical operations conducted at the Site and collect data for conducting a RECAP evaluation.

**Site Characteristics/Status:** The Site is situated northwest of the intersection of Louisiana Highway 30 and Terrace Avenue. The Site consists of five buildings comprising a total of approximately 250,000 square feet located on an approximately 13-acre parcel of land in the western portion of Baton Rouge, Louisiana.

**Release Source:** The source(s) of the subsurface impact are the previous use of the Site as a hazardous waste transfer facility.

**Soil Type:** The soils encountered at the Site during the investigation activities are predominantly fill material and reddish sand overlying silty clay/clay from the ground surface to the maximum depth of exploration (15 feet below ground surface [ft bgs]).

**Highest Concentrations in All Impacted Media:** One Area of Interest (AOI) was identified and investigated at the Site. Analytical results obtained during the current investigation were compared with LDEQ RECAP-derived Screening Option (SO) Screening Standards (SS). The AOI exhibited potential constituent of concern (COC) concentrations or sample quantitation limits (SQLs) above the SO SS.

Analyses of surface soil samples collected during the investigation identified two COCs in soil that were detected at concentrations above the RECAP SO SS – arsenic and extractable petroleum hydrocarbons (EPH) (>C<sub>21</sub>-C<sub>35</sub>) aromatics. The maximum COC concentrations in surface soil samples were an arsenic concentration of 15 milligrams per kilogram (mg/kg) and EPH (>C<sub>21</sub>-C<sub>35</sub>) aromatics concentration of 340 mg/kg. The surface soil constituents detected at concentrations above the SO SS were evaluated under the RECAP Management Option (MO)-1, as necessary.



Analyses of borehole water samples collected during the investigation identified eight COCs in water detected or SQLs above the RECAP SO SS – arsenic, barium, cadmium, chromium, lead, bis(2-ethylhexyl)phthalate, acetone, and EPH (>C<sub>16</sub>-C<sub>21</sub>) aromatics. The maximum COC concentrations in borehole water samples were as follows: arsenic concentration of 0.037 milligrams per liter (mg/L); barium concentration of 3.90 mg/L; cadmium concentration of 0.01 mg/L; chromium concentration of 0.13 mg/L; lead concentration of 0.39 mg/L; EPH (>C<sub>16</sub>-C<sub>21</sub>) aromatics concentration of 0.17 mg/L; bis(2-ethylhexyl)phthalate of 0.011 mg/L; and acetone concentration of 0.11 mg/L. The borehole water constituents detected at concentrations above the SO SS were evaluated under the RECAP MO-1.

**Free Product Conditions:** Light non-aqueous phase liquids (LNAPL) were not encountered in any of the soil borings or temporary monitor wells during the Site investigation.

**Potential and/or Affected Receptors:** Potential receptors identified in the immediate vicinity of the Site include underground utilities adjacent to the Site and potential future residents.

**Problem Evaluation:** Based on the findings of this RECAP evaluation, CRA and Commercial Properties recommend No Further Action – At This Time (NFA-ATT) status for the Site. Soil and borehole water results did not exhibit COC concentrations in excess of the final Limiting non-industrial RECAP Standard (RS) developed for the Site.



## Table of Contents

		Page
<b>Section 1.0</b>	<b>Site History .....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Previous Land Use .....	1
1.3	Current Land Use .....	1
1.4	Storage Vessels .....	1
1.5	Future Land Use .....	2
1.6	Zoning of Site .....	2
1.7	Description of Release and Previous Site Investigation Activities..	2
<b>Section 2.0</b>	<b>Emergency/Interim Corrective Action.....</b>	<b>3</b>
<b>Section 3.0</b>	<b>Investigation Description.....</b>	<b>3</b>
3.1	Sample Collection and Screening Rationale .....	3
3.2	Soil Boring and Temporary Monitor Well Placement.....	4
3.2.1	Soil Boring Drilling and Sampling .....	4
3.2.2	Temporary Monitor Well Construction and Development.....	5
3.2.3	Water Conditions and Sampling.....	6
3.2.4	Investigation-Derived Waste.....	6
3.3	Topography/Geology/Hydrology .....	6
3.3.1	Regional Groundwater Characteristics .....	7
3.3.2	Area of Investigation (AOI) Soil and Groundwater Characteristics.....	8
3.3.3	Aquifer Test Results.....	8
3.3.4	Groundwater Classification .....	8
3.4	Constituents of Concern Distribution .....	8
3.5	Off-Site Impact .....	9
3.6	Off-Site Sources.....	9
3.7	Unusual Conditions or Findings .....	9
<b>Section 4.0</b>	<b>Migration Pathways and Sensitive Receptors.....</b>	<b>9</b>
4.1	Contaminant Migration Pathways.....	9
4.2	Biological Receptors.....	10
4.3	Natural Receptors .....	10
4.4	Man-Made Receptors .....	10

## Table of Contents (Continued)

		Page
<b>Section 5.0</b>	<b>RECAP Evaluation Results .....</b>	<b>10</b>
5.1	General.....	10
5.1.1	Site Ranking and Justification.....	10
5.1.2	RECAP Option(s) Identification.....	11
5.1.3	Previous RECAP Assessment Results.....	12
5.2	Data Evaluation/Usability .....	12
5.3	AOI Identification .....	12
5.4	POE and POC .....	12
5.5	Development of a Conceptual Model.....	12
5.5.1	Estimation of Area of Investigation and Compliance Concentrations .....	13
5.6	Identification of the RECAP Standards for Each Impacted Medium.....	13
5.6.1	Screening Option.....	13
5.6.2	Identification of the MO-1 RECAP Standards for Each Impacted Medium .....	14
5.6.3	Identification of the MO-1 Enclosed Structure Standards for Each Impacted Medium .....	16
5.6.4	Adjustment of Risk-Based RS .....	16
5.6.5	Identification of the LRS .....	16
5.6.6	Comparison of the LRS to the Site Concentrations .....	17
5.7	Ecological Evaluation .....	17
<b>Section 6.0</b>	<b>Summary of Findings.....</b>	<b>17</b>
6.1	Release Sources .....	17
6.2	Soil Type .....	17
6.3	High Concentrations .....	17
6.4	Free-Product Conditions .....	18
6.5	Potential and/or Affected Receptors.....	18
6.6	Off-Site Impact .....	18
6.7	Off-Site Sources.....	18
6.8	Groundwater Conditions .....	18
<b>Section 7.0</b>	<b>Recommendations .....</b>	<b>19</b>



## List of Appendices

Appendix A	Figures
	Figure 1 Vicinity Map
	Figure 2 Surrounding Land Use Map
	Figure 3 Sensitive Receptor Map
	Figure 4 Site Plan
	Figure 5 Soil Cross Sections
	Figure 6 Conceptual Site Model
Appendix B	Tables
	Table 1 Soil Sample Analytical Laboratory Results
	Table 2 Borehole Water Sample Analytical Laboratory Results
	Table 3A Listing of Soil AOIC and Borehole Water CC With a Comparison to Limiting Screening Standards
	Table 3B Listing of Soil AOIC and Borehole Water CC - Enclosed Structure
	Table 4 List of Limiting MO-1 RS for Soil
	Table 5 List of Limiting MO-1 RS for Borehole Water
	Table 6 List of Limiting MO-1 Enclosed Structure RS for Soil and Borehole Water
	Table 7 Comparison of Limiting RS with Soil AOIC and Borehole Water CC
	Table 8 Comparison of Enclosed Structure RS with Soil AOIC and Borehole Water CC
Appendix C	Certification of Compliance with QA/QC, TS&A and H&S Plans
Appendix D	Soil Boring Logs (SB-1 through SB-10)
Appendix E	Laboratory Analytical Reports and Chain-of-Custody Records
Appendix F	Waste Manifests
Appendix G	LDNR Water Well Survey
Appendix H	Groundwater Classification Documentation
Appendix I	Analytical Data Evaluation (RECAP Form 3)
Appendix J	Pro UCL Calculations
Appendix K	Ecological Checklist (RECAP Form 18)

## **Section 1.0 Site History**

### **1.1 Introduction**

Conestoga-Rovers & Associates (CRA) conducted a Site investigation for Commercial Properties Realty Trust (Commercial Properties) at the Brick Yard property located at 1059 Brickyard Lane in Baton Rouge, Louisiana (Site) in May 2014. The Site investigation was conducted to assess the potential impacts associated with historical operations at the Site and to provide Site-specific data for a Louisiana Department of Environmental Quality (LDEQ) Risk Evaluation/Corrective Action Program (RECAP) evaluation.

### **1.2 Previous Land Use**

The Site was operated as a brick yard from prior to 1885 until sometime between 1923 and 1946. The portion of the Site that is currently a gravel lot has a history as an industrial site used from the 1920s until 1990. From 1990 until 1993, the same area of the Site was operated as a hazardous waste recycling facility and a hazardous waste transfer facility.

### **1.3 Current Land Use**

The Site is located at 1059 Brickyard Lane in Baton Rouge, Louisiana. A vicinity map showing the location of the Site is presented as Figure 1, Appendix A. The Site is situated northwest of the intersection of Louisiana Highway 30 and Terrace Avenue. The Site consists of five buildings comprising a total of approximately 250,000 square feet located on an approximately 13-acre parcel of land in the western portion of Baton Rouge, Louisiana. The Site is used by the State for the property assistance facility, mail sorting, and printing operations

The Site is located in an area with commercial and residential properties. The Site is bordered to the north by Interstate 10, to the south by Terrace Avenue, to the west by River Road, and to the east by Louisiana Highway 30. A surrounding land use map is included as Figure 2, Appendix A. Surrounding sensitive receptors, including registered water wells within a one-mile radius of the Site, are included on Figure 3, Appendix A. A Site plan is presented as Figure 4, Appendix A.

### **1.4 Storage Vessels**

The Site does not currently contain underground storage tanks (USTs) or aboveground storage tanks (ASTs). However, multiple ASTs were associated with historical operations.



### 1.5 Future Land Use

The Site will be used as light commercial property. However, the Site is being evaluated under a non-industrial (residential) scenario for unrestricted future use of the property.

### 1.6 Zoning of Site

According to the City of Baton Rouge, the Site is zoned M1 (Light Industrial). The land use in the area is commercial and residential properties. The surrounding area land use is depicted on Figure 2, Appendix A.

### 1.7 Description of Release and Previous Site Investigation Activities

Numerous Site investigations were conducted between 1989 and 2000. A summary of the Site investigations and are summarized below:

- Monitoring Well Installation, Sampling, and Waste Removal, September 1989
- Soils Investigation, June 1999
- Expanded Site Inspection, July 2000

The *September 1989 Monitoring Well Installation, Sampling, and Waste Removal Report* conducted by Harding Lawson Associates identified the following during sampling activities.

- Total petroleum hydrocarbons (TPH) were detected in soil samples from monitor well MW-4 from 40 to 100 milligrams per liter (mg/L)
- Benzene was detected in groundwater samples from monitor well MW-4 at 0.009 mg/L
- Oily, phase-separated hydrocarbon was observed on the groundwater in the excavation of oil-stained soils

A Soils Investigation conducted by Eagle Environmental Services (Eagle) in June 1999 and identified the following concerns for the Site:

- Laboratory analysis revealed detectable concentrations of soil contaminants
- The detectable concentrations of metals in the soil samples were determined to be below the industrial screening standard and for RECAP standard protective of groundwater quality
- Arsenic was detected in sample EBY-01 at a level higher than the industrial screening standard

- Results of laboratory analysis of the groundwater samples collected indicate detectable concentrations of metals parameters, one volatile organic compound (VOC) parameter, and two semi volatile organic compounds (SVOC) parameters.

In July 2010 an Expanded Site Inspection was conducted by United States Environmental Protection Agency (USEPA) and identified the following for the Site:

- TPH–Diesel range organics (DRO) and TPH–Oil range organics (ORO) were reported above RECAP screening levels at three of sixteen soil sample locations
- Benzene was reported in one of five groundwater sample locations
- All five groundwater sampling locations exceeded RECAP levels for TPH-DRO and TPH-ORO, and one location exceeded RECAP levels for TPH-Gasoline range organics (GRO)
- USEPA recommended No Further Remedial Action Planned under Superfund (NFRAP) for the Site

## **Section 2.0 Emergency/Interim Corrective Action**

The potential soil and groundwater impact at the Site did not create an immediate threat to human health or the environment. Therefore, no emergency conditions existed and no interim corrective actions were warranted.

## **Section 3.0 Investigation Description**

### **3.1 Sample Collection and Screening Rationale**

The Site Investigation activities were conducted by CRA in May 2014. Ten soil borings (SB-1 through SB-10) were installed and sampled for analyses to assess the potential presence of soil and groundwater impact and to gather data to evaluate the Site in accordance with LDEQ RECAP, dated October 20, 2003. In addition, based on previous land use as a brick yard, two brick samples were collected to be analyzed for asbestos.

Soil and borehole water analytical laboratory results from this investigation are utilized in this evaluation. The May 2014 Site investigation activities are summarized below.



### 3.2 Soil Boring and Temporary Monitor Well Placement

Ten soil borings, all of which were converted to temporary monitor wells, were installed at the Site from May 27 through 29, 2014. All work was conducted in accordance with the project specific Quality Assurance/Quality Control Plan, Technical Sampling and Analyses Plan, and Health and Safety Plan. These plans are maintained in CRA's project file. A signed certification of compliance is included as Appendix C.

The soil borings and temporary monitor well locations are identified on the Site Plan on Figure 4, Appendix A.

#### 3.2.1 Soil Boring Drilling and Sampling

Prior to installation of the soil borings SB-1 through SB-10 and SB6-GEO, each boring location was checked and cleared of utilities to a depth of 5 feet below ground surface (ft bgs) using a steel probe. Soil borings were installed by CRA's subcontractor, Walker-Hill Environmental of Columbia, Mississippi. The borings were advanced using a track-mounted, hydraulically-advanced sampling probe. Prior to the initiation of the borings, the drilling and sampling equipment were cleaned.

Soil samples collected in 2-foot intervals from the ground surface to the completion depth of each boring (15 ft bgs) using a hydraulically-advanced barrel sampler with new, clean, disposable acetate liners. Details of the soils encountered during the May 2014 sampling activities, along with initial groundwater measurements, are included on soil boring logs in Appendix D.

Upon collection, the soil samples were visually and manually inspected. Using new, clean, Nitrile gloves, CRA personnel examined the samples for soil characteristics. No visible evidence of light non-aqueous phase liquids (LNAPL) was observed during the installation and sampling of the borings.

A portion of each soil sample from the borings was collected for organic vapor screening using glass jars covered with aluminum foil. These samples were allowed to stabilize at ambient air temperature for at least 15 minutes, and the headspace in each container was then analyzed with a photoionization detector (PID) (MiniRae Model 2000). Prior to use, the PID was calibrated in accordance with the manufacturer's specifications. The results of the PID screening of the soil samples from the borings are included on the boring logs in Appendix D.

Immediately upon collection, a portion of the soil sample from each boring was placed in laboratory-supplied containers and stored on ice for possible analytical laboratory testing. Soil



samples to be analyzed for volatile organic constituents were collected in accordance with USEPA "Test Methods for Evaluation of Solid Waste" (SW-846) Method 5035. Soil samples were submitted for laboratory analyses based on the following: (1) highest PID measurement; (2) at the interface of first encountered borehole water; (3) at the termination depth of the boring; and (4) at all significant lithology changes.

The soil sampling procedures and documentation were performed in compliance with CRA's standard sampling protocol, which is based upon EPA and LDEQ guidelines applicable to this type of project.

The soil samples selected for laboratory analyses were preserved on ice, and subsequently transported via lab courier, and submitted to TestAmerica Laboratories, Inc. (TestAmerica), of Pensacola, Florida, following proper chain-of-custody procedures. Soil and borehole water samples were analyzed for VOCs listed in the LDEQ October 2003 RECAP by the EPA SW-846 Method 8260; SVOCs listed in RECAP by SW-846 Method 8270 Selected Ion Monitoring; the Resource Conservation and Recovery Act (RCRA) metals by SW-846 Method 6010 and 7471 (mercury only); and extractable petroleum hydrocarbons/volatile petroleum hydrocarbons (EPH/VPH) listed in RECAP by the Massachusetts Department of Environmental Protection (MADEP) Method. Due to laboratory sample preparation error, additional soil samples were collected at sample locations SB-1 through SB-6 to be analyzed for VOCs and VPH only on May 29, 2014, by installing soil borings adjacent to the original soil boring location. In addition, limited recovery was available due to the presence of limestone in the initial four foot sample interval at sample location SB-3; therefore, the 0 to 4 ft sample interval was collected as one sample. The laboratory reports and chain-of-custody records are included in Appendix E.

Brick samples collected from locations SB-5 and SB-6 samples were analyzed for asbestos Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy by EMSL Analytical, Inc. (EMSL) in Baton Rouge, Louisiana. The asbestos laboratory report and chain-of-custody record are included in Appendix E.

A soil sample representative of the lithologies across the Site was collected from the boring SB6-GEO (12 to 15 ft bgs) and submitted to TestAmerica. The geotechnical laboratory report and chain-of-custody record are included in Appendix E.

### **3.2.2 Temporary Monitor Well Construction and Development**

Upon reaching the total depth, a 1.0-inch diameter temporary monitor well was installed in soil borings SB-1 through SB-10 for the collection of borehole water samples. Each temporary monitor well was constructed of a Schedule 40 PVC threaded casing, 10-foot-long well screen complete with a sand filter pack. The wells were screened from approximately 5 to 15 ft bgs.



Following sample collection, the temporary wells were removed from the ground and the resulting boreholes were plugged/abandoned by grouting with a thick, cement-bentonite mixture from total depth to the ground surface in accordance with the Louisiana Department of Transportation and Development (LDOTD) *Handbook for Construction of Geotechnical Boreholes and Borehole water Monitoring Systems, December 2000.*

### 3.2.3 Water Conditions and Sampling

Borehole water samples were collected from temporary monitor wells SB-1 through SB-10 on May 29 and 30, 2014. The temporary wells in each borehole were purged and water samples were collected using a peristaltic pump and clean, disposable bailers. The samples were placed in appropriate laboratory-supplied sample containers, preserved on ice, and subsequently transported via lab courier, to TestAmerica following proper chain-of-custody procedures. The borehole water samples were analyzed for the constituents and by the same analytical methods as specified for the soil samples. Due to laboratory error, borehole water collected from SB-7 was analyzed from low level SVOCs one day out of hold time. A summary of analytical results for these borehole water samples is presented in Table 2, Appendix B. The laboratory analytical reports and chain-of-custody records are provided in Appendix E.

The borehole water sampling procedures and documentation were performed in compliance with CRA's standard sampling protocol, which is based upon EPA and LDEQ guidelines applicable to this type of project.

### 3.2.4 Investigation-Derived Waste

Soil cuttings and fluids generated during the Site investigation activities were stored in drums for subsequent disposal. All investigation-derived waste drums have been removed from the Site and properly disposed of at an LDEQ-permitted facility. Copies of the Waste Manifests can be found in Appendix F.

## 3.3 Topography/Geology/Hydrology

**Topography:** The Site is located on the modern (Holocene) floodplain along the Mississippi River including the natural levee and backswamp, between the edge of the (Pleistocene) Prairie Terrace to the east and the Mississippi River to the west. Based on USGS topographic maps, the surface elevations of at the Site are approximately 30 feet relative to the National Geodetic Vertical Datum (NGVD). Local natural drainage is to the south through Corporation Canal to Bayou Duplantier.



### 3.3.1 Regional Groundwater Characteristics

**Regional Geology:** Surface deposits of the Mississippi River floodplain are commonly fine-grained clays and clayey silts with lenses of fine sands. These shallow deposits typically overlay coarser sands deposited within the river channel. The surface deposits overlay several thousand feet of earlier Pleistocene to Miocene alluvium and deltaic deposits generally composed of 20- to 200-foot-thick, relatively continuous and interconnected sand strata, separated by clay horizons. These are in turn, underlain by many thousand feet of Tertiary and older fluvial, deltaic and marine sediments.

**Hydrogeology and Water Use:** The borehole water resources in the Baton Rouge area are divided into a shallow zone composed of Holocene and Pleistocene alluvial deposits within 200 feet of the ground surface, and a deeper zone composed of older Pleistocene to Miocene sand strata. The water-bearing units of the shallow zone consist of discontinuous sandy strata that are often less than 10 feet thick and are confined by clay layers. They exhibit low potential for borehole water production because of low yield, small areal extent, and variable water quality. The deeper borehole water zone consists of numerous productive aquifers developed in the Pleistocene through Miocene sand strata, beginning with the "400-Foot" aquifer and continuing at intervals down to 2,800 feet. The "400-Foot" aquifer, as defined in the Baton Rouge industrial area, is within approximately 450 feet of the ground surface in the Site vicinity. The aquifers generally deeper than 1,000 feet are sources for municipal drinking water and industrial uses, with the intermediate aquifers used primarily for industrial purposes.

The above information has been derived from Morgan, C.O., 1961, Ground-water Conditions in the Baton Rouge Area, 1954-1959, with Special Reference to Increased Pumpage, Louisiana Geological Survey, Water Resources Bulletin No. 2; E.L. Kuniandy et al., (1989), Maps of the "400-foot," "600-Foot," Adjacent Aquifers and Confining Beds, Baton Rouge Area, Louisiana, Louisiana Geological Survey, Water Resources Technical Report No. 48; and the Geologic Map of Louisiana, by the Louisiana Geological Survey, 1984.

A survey of registered water wells within a one-mile radius of the Site identified 25 registered, active water wells. Of those wells identified, one was registered as cathodic protection, one was registered as domestic, one is registered as inactive public supply, one is registered as industrial, one is registered as institution public supply, 14 are registered as monitor wells, 4 are registered as municipal public supply, and 2 are registered as piezometer. A 7.5-minute quadrangle map showing the locations of the registered active water wells within a one-mile radius of the Site is included on Figure 3, Appendix A. All water supply wells are 8 feet deep or greater near the Site. The LDNR water well survey is included in Appendix G.



### 3.3.2 Area of Investigation (AOI) Soil and Groundwater Characteristics

The soils encountered at the Site during the investigation activities consist as predominantly fill material and reddish sand overlying clayey silt and clay to the maximum depth of the exploration (15 ft bgs). The soil conditions are shown on the soil profile cross-section on Figure 5, Appendix A. Based on conditions encountered during the soil boring installations, the depth that groundwater was first encountered was typically 12 to 15 ft bgs. The first-encountered depths to groundwater at the Site are presented on the boring logs in Appendix D.

No permanent monitor wells were installed during the investigations. Therefore, the nearest water body to the Site was presumed to be the Mississippi, located approximately 800 feet west of the Site.

### 3.3.3 Aquifer Test Results

Hydraulic conductivity test data from the Advocate Building Sites (Advocate) located 523, 525, and 545 Lafayette Street in Baton Rouge, Louisiana, was used in order to classify groundwater at the Site. The Advocate is located approximately 1 mile north of the Site.

The test was performed at the Advocate in two monitor wells (MW-1 and MW-2). The tests were conducted to provide information about the hydraulic conductivity conditions of the soil for the potential well yield calculation. The results from the test show a well yield of approximately 108 gallons per day (gpd) can be expected from the unit.

The data and interpretations are shown in Appendix H and are from CRA's report titled *Phase II Environmental Site Assessment*, which was submitted to the LDEQ in March 2009.

### 3.3.4 Groundwater Classification

In accordance with the 2003 LDEQ RECAP document, and to be conservative, groundwater at the Site is designated as Classification 3A Drinking Water based on the following: there is no current or potential use of the shallow groundwater at the Site based on water use in the area from the LDOTD water well survey; the maximum attainable yield from the stratum is less than 800 gpd based on the well yield calculation (see Appendix H); and groundwater would potentially discharge to a water body that is not used as a drinking water supply.

## 3.4 Constituents of Concern Distribution

LNAPL was not detected during the May 2014 investigation. The specific list of COCs developed for the Site is based on historical knowledge and the activities that occurred on the Site. The



potential COCs for soil and borehole water are identified in Table 1 and Table 2, Appendix B, respectively. The constituents were compared to the RECAP Screening Option Screening Standards (SO SS) to determine which COCs would be carried forward to the next tier of evaluation. The SO evaluation for the Site is presented in Section 5.6.1. A summary of COC concentrations and/or sample quantitation limits (SQLs) that exceeded the RECAP SO SS for soil and borehole water is provided in Table 3A, Appendix B.

Analyses of soil samples collected during the investigation (see Table 1, Appendix B) identified two COCs in soil that were detected above the RECAP SO SS – EPH (>C<sub>21</sub>-C<sub>35</sub>) aromatics and arsenic.

Analyses of borehole water samples collected during the investigations (see Table 2, Appendix B) identified eight COCs in water that were detected above the RECAP SO SS - acetone, bis(2-Ethylhexyl)phthalate, EPH (>C<sub>16</sub>-C<sub>21</sub>) aromatics, and five metals.

Asbestos was not detected in the brick samples collected during the investigation.

### 3.5 Off-Site Impact

Off-Site impact is not suspected based on the potential COC concentrations encountered and is *unlikely due to the limited areas of impact and low soil hydraulic conductivity.*

### 3.6 Off-Site Sources

A survey of the area immediately surrounding the Site indicated no potential off-Site source of petroleum hydrocarbon compounds in soil or borehole water.

### 3.7 Unusual Conditions or Findings

*No unusual conditions or findings were noted during the investigation activities.*

## Section 4.0 Migration Pathways and Sensitive Receptors

### 4.1 Contaminant Migration Pathways

Potential impacted areas at the Site are considered surface soils and groundwater. Possible man-made pathways for exposure to COCs include underground utilities adjacent to the Site. Potential natural pathways for exposure include air, surface soil, and groundwater. Exposure routes from soils and groundwater include dermal contact, ingestion, and inhalation of indoor and outdoor vapors.

#### 4.2 Biological Receptors

Plant and animal life in the area consist of native species common to the area. Potential human receptors at the Site were projected to be residents and Site workers.

#### 4.3 Natural Receptors

The nearest perennial surface water body is the Mississippi River located approximately 800 feet west of the Site. The potential for discharge of COCs to this surface water body is virtually non-existent due to the low hydraulic conductivity of soils at the Site and the distance from the Site to the waterway.

#### 4.4 Man-Made Receptors

Based on a review of the water well database maintained by LDNR there are 7 active water wells registered within a 1-mile radius of the Site. The well locations are shown on the Sensitive Receptor Map included on Figure 3, Appendix A.

### Section 5.0 RECAP Evaluation Results

#### 5.1 General

This RECAP Evaluation utilized data gathered during the May 2014 Site investigation. The RECAP Evaluation was used to evaluate the Site for compliance with calculated RECAP Standards (RS) and the potential need for remedial activities. The evaluation was conducted in accordance with the LDEQ RECAP document dated October 20, 2003. A summary of the pertinent Site RECAP information is presented in the RECAP submittal summary (RECAP Form 1) which is included as Page i of this submittal. One Area of Interest (AOI) has been identified at the Site based on Site conditions. The AOI is shown on the Site plan included on Figure 4, Appendix A.

##### 5.1.1 Site Ranking and Justification

In accordance with the RECAP, the Site ranking was selected based on the ranking system in *Standard Guide for Risk-Based Corrective Action at Petroleum Release Sites* (ASTM E 1739-95). On the scale of one to four, with four being the lowest in urgency of response action required to protect human health and the environment, the Site receives a ranking of four as it presents no long-term threat to human health, safety or sensitive environmental receptors. The ranking is justified on the basis of:



- (1) Shallow impacted soils and shallow groundwater are not present at concentrations above RECAP standards
- (2) The shallow impacted groundwater is not used for potable water

### 5.1.2 RECAP Option(s) Identification

Factors used under the RECAP guidance for Site screening under the SO SS and Management Option - 1 (MO-1) were considered in evaluation of the AOI. The following information is furnished to demonstrate appropriate applicability for evaluation of the AOI utilizing the SS and/or MO-1 options:

- The AOI is within a commercial and residential area, and a non-industrial (unrestricted) land use scenario is being proposed.
- The same receptor is not exposed to a COC via soil and groundwater.
- The potential for human exposure within the area is limited to exposure pathways via ingestion, inhalation from volatilization from emissions emanating from the soil and groundwater, and dermal contact with impacted soil. Based on the extent of the impact, the potential for impact to any surface water runoff is virtually non-existent. Furthermore, the distance to the nearest drainage feature would preclude any impact to sediments associated with any surface water runoff from the AOI. Similarly, the potential to impact biota is virtually non-existent.
- The area of potential impact from organic constituents in the soil is less than 0.5 acre.
- LNAPL was not observed at the Site.
- High fugitive dust emissions are not a concern due to the presence of concrete and limestone cover over the Site.
- The COCs are not discharging via groundwater to a surface water body. The potential for discharge of COCs to surface water via a groundwater discharge from the AOI is virtually non-existent due to the limited size of the potential area of impact and the distance to the nearest surface water body.
- There are no known current or future Site conditions that may affect exposure potential at the Site.

Buildings are currently located on the Site and future land use is assumed to be light industrial. To address potential future enclosed structures on the Site, MO-1 RS were applied to evaluate the pathway of soil and groundwater vapor to possible enclosed structure pathways.

### 5.1.3 Previous RECAP Assessment Results

There have been no previous RECAP assessments of the Site. Data collected during the current investigation activities were used in this RECAP evaluation.

### 5.2 Data Evaluation/Usability

The analytical laboratory data generated during CRA's May 2014 Site investigation has been evaluated to determine if the data could be used for risk assessment purposes. In accordance with RECAP investigation requirements, laboratory data was generated using EPA-approved analytical methods, SQLs were within acceptable limits, and blank Quality Assurance/Quality Control (QA/QC) samples were provided periodically to assess field and/or laboratory contamination. Based on this review, the data is considered acceptable for use in this RECAP evaluation. An analytical data evaluation (RECAP Form 3) is included as Appendix I.

### 5.3 AOI Identification

One AOI was identified for investigation at the Site for evaluation of potential impact from historical operations. The surface area of the AOI is approximately 150,000 ft<sup>2</sup> and includes all boring locations (SB-1 through SB-10). A figure showing the proposed boundaries of the AOI is presented on *Figure 4, Appendix A*.

A summary of the areas of soil that exceed the Limiting SS (LSS) in the AOI follows. A comparison of the COC concentrations to the Limiting RS (LRS) is discussed in Section 5.6.5.

### 5.4 POE and POC

The point of exposure (POE) is defined as the point of discharge from the aquifer to the nearest permanent surface water body in the downgradient direction of groundwater flow. No permanent monitor wells were installed during the investigation, so the nearest surface water body to the Site was presumed to be the nearest perennial water body to the Site, Mississippi River, located approximately 800 feet west of the Site.

The point of compliance (POC) is a sampling location where the groundwater protection standard is enforced and at which reproducible and representative samples can be withdrawn. The POC at the Site is proposed to be temporary monitor well SB-1.

### 5.5 Development of a Conceptual Model

The conceptual Site model (CSM) developed for the Site is presented on *Figure 6, Appendix A*. The model includes identification of all sources, source media, migration pathways, exposure



media, exposure points/pathways, and receptors. Current and future land use at the Site was considered in developing the CSM. In addition, all applicable standard non-industrial exposure criteria were used, based on the Screening and Appendix H MO-1 option.

### 5.5.1 Estimation of Area of Investigation and Compliance Concentrations

The area of investigation concentration (AOIC) for soils in the AOI that have COCs above the SO SS have been determined in accordance with RECAP requirements and are presented in Table 3A, Appendix B. The AOICs for soils represent the highest measured concentrations of the COCs in soil samples collected from each the AOI during the May 2014 investigation, except for arsenic as noted. The Site-wide AOIC for arsenic in soil was calculated as the 95 percent Adjusted Gamma Upper Confidence Limit (UCL) in accordance with the RECAP Section 2.8.2. The UCL was calculated through the use of the EPA ProUCL (Version 5.0) software program. The program recommended the use of the 95 percent Adjusted Gamma UCL for the arsenic data. The UCL value for arsenic is 6.5 milligrams per kilogram (mg/kg), and the UCL calculation documentation for this constituent is presented in Appendix J. Analytical results for soil samples indicate the zone of potential petroleum hydrocarbon impact is within the zone of surface soils (0 to 15 ft bgs).

The compliance concentration (CC) is the concentration of each COC in the borehole water at the POC. The CCs for the AOI that have COCs above the SO SS are presented in Table 3A, Appendix B. The CCs for the borehole water COCs were determined as the highest measured concentrations of the COCs in the temporary monitor well water samples collected during the May 2014 investigation.

The AOICs and CCs for the evaluation of a potential pathway for vapor from soil and groundwater to an enclosed structure were determined as the highest concentrations of all volatile constituents detected in soil and borehole water during the May 2014 investigation. The soil AOICs and borehole water CCs for the enclosed structure evaluation are presented in Table 3B, Appendix B.

## 5.6 Identification of the RECAP Standards for Each Impacted Medium

The LDEQ RECAP SO SS and MO-1, as applicable, were considered in the evaluation of all exposure pathways at the AOI. The RS derived for each RECAP management option were determined in the following sections.

### 5.6.1 Screening Option

The RECAP SO SS for soil and borehole water at the AOI have been determined based on the Site land use scenario and a determination of risk-based parameters in accordance with the

SO SS of the RECAP guidance. The Site was evaluated for unrestricted use; therefore, non-industrial SO SS values were used as applicable for the soil (Soil\_SS<sub>ni</sub>) that are protective of human health for contact with surface soil. The Soil\_SS<sub>ni</sub> were compared with the SS protective of groundwater (Soil\_SSGW) and the lowest value was selected as the LSS. The SO SS for soil and the SS for groundwater (GW\_SS) were taken directly from Table 1 of the RECAP document.

**Soil SS and AOICs:** The constituent concentrations in the soil samples from the AOI were compared to their applicable LSS in Table 1, Appendix B. The constituent concentrations that exceeded the LSS are shaded and shown in bold in the table.

A comparison of the LSS with the AOICs for soil in the AOI is presented in Table 3A, Appendix B, and indicates the following:

- EPH (>C<sub>21</sub>-C<sub>35</sub>) aromatics was detected in SB-3 (0-4) at a concentration of 340 mg/kg above the RECAP SO SS (180 mg/kg)

**Borehole Water SS and CCs:** Borehole water samples were collected from the temporary monitor wells in the AOI. The constituent concentrations in the borehole water samples were compared to their applicable GW\_SS in Table 2, Appendix B. The constituent concentrations that exceeded the GW\_SS are shaded and shown in bold in the table.

A comparison of the GW\_SS with the CCs for borehole water in the AOI is presented in Table 3A, Appendix B, and indicates the following:

- Acetone was detected at a concentration of 0.11 mg/L above the RECAP SO SS (0.1 mg/L)
- Bis(2-ethylhexyl)phthalate was detected at a concentration of 0.011 mg/L above the RECAP SO SS (0.006 mg/L)
- EPH (>C<sub>16</sub>-C<sub>21</sub>) aromatics was detected at a concentration of 0.17 mg/L above the RECAP SO SS (0.15)
- Five metals were detected at concentrations above the RECAP SO SS

The COCs whose AOICs and CCs were greater than the respective LSS values were carried forward to the next tier of evaluation in RECAP (MO-1).

### 5.6.2 Identification of the MO-1 RECAP Standards for Each Impacted Medium

The RS protective of potential exposure to vapors from groundwater to outdoor air in an unrestricted non-industrial setting (GW<sub>airmi</sub>) were determined from the MO-1 option for the volatile constituents. The RS protective of contact with soil in an unrestricted non-industrial



setting ( $Soil_{ni}$ ) and protective of groundwater ( $Soil_{GW3DW}$ ,  $Soil_{sat}$ ,  $GW_{3DW}$ , and water solubility) for each impacted medium (soil and groundwater) were determined with the MO-1 option. The RS are based on the Site land use scenario and Site groundwater classification.

$Soil_{ni}$ : The non-industrial RS ( $Soil_{ni}$ ) that are protective of human health for contact with surface soil were applied to the Site. The initial values for  $Soil_{ni}$  were selected from Table 2 in the RECAP document. The  $Soil_{ni}$  standards for each COC are listed in Table 4, Appendix B.

$Soil_{GW3DW}$ : The RS for soil concentrations protective of groundwater discharging to surface water,  $Soil_{GW3DW}$ , were determined from the Table 2 in the RECAP document and are shown in Table 4, Appendix B. The  $Soil_{GW3DW}$  RS were calculated using the following criteria:

- The distance from the POC to the POE of approximately 800 feet
- A source depth ( $S_d$ ) of <5 feet

The distance from the POC to the POE and the  $S_d$  were used to determine a dilution attenuation factor (DAF) of 63 from Appendix H in the RECAP. The DAF was applied to the  $Soil_{GW3DW}$  RS values, as applicable, to calculate an Adjusted  $Soil_{GW3DW}$  RS for each COC as listed in Table 4, Appendix B.

$Soil_{sat}$ : The standard that limits a constituent to its saturation limit in soil ( $Soil_{sat}$ ) was determined using MO-1. The MO-1  $Soil_{sat}$  value was not applicable for the COC as shown in Table 4, Appendix B.

$GW_{3DW}$ : The MO-1 RS for groundwater protective of potential discharge of COCs to surface water ( $GW_{3DW}$ ) were determined with the same parameters as the soil evaluation.

Based on the same POC to POE distances and the  $S_d$  as determined for the soil RS, a DAF of 63 was determined from Appendix H in the RECAP document. The DAF was applied to the initial  $GW_{3DW}$  values to calculate an Adjusted  $GW_{3DW}$  RS for each COC as listed in Table 5, Appendix B.

$GW_{Solubility}$ : The MO-1 standards that limit a constituent to its solubility in water were determined from Table 3 of the RECAP document. The MO-1 standards for solubility for each COC are not applicable for any of the COCs as shown in Table 5, Appendix B.

$GW_{airni}$ : The MO-1 standards protective of vapor from groundwater to outdoor air in a non-industrial setting were taken from RECAP Table 3, where applicable. The MO-1  $GW_{airni}$  RS are listed in Table 5, Appendix B.

### 5.6.3 Identification of the MO-1 Enclosed Structure Standards for Each Impacted Medium

Soil<sub>esni</sub>: The AOICs for all volatile constituents detected in soil for the Site were determined from the entire AOI as presented in Table 3B, Appendix B. The detected volatile AOICs were evaluated by the MO-1 for a potential pathway for vapor from soil to the potential enclosed structures. The MO-1 soil RS for the enclosed structure evaluation of volatile constituents at non-industrial Sites (Soil<sub>esni</sub>) were derived from Table 2 of the 2003 RECAP document. The MO-1 Soil<sub>esni</sub> RS for these constituents are presented in Table 6, Appendix B.

GW<sub>esni</sub>: The CCs for all volatile constituents detected in groundwater for the entire Site were determined from the entire AOI as presented in Table 3B, Appendix B. The detected volatile CCs were evaluated by the MO-1 for a potential pathway for vapor from groundwater to the potential enclosed structures. The MO-1 groundwater RS for the enclosed structure evaluation of volatile constituents at non-industrial Sites (GW<sub>esni</sub>) were derived from Table 3 of the 2003 RECAP document. The MO-1 GW<sub>esni</sub> RS for these constituents are presented in Table 6, Appendix B.

### 5.6.4 Adjustment of Risk-Based RS

Adjustments to the applicable RS values identified above (Soil<sub>ni</sub>, GW<sub>airni</sub>, Soil<sub>esni</sub>, and GW<sub>esni</sub>) were applied to account for additivity where more than one constituent present in the soil or borehole water elicits non-carcinogenic effects on the same target organ/system. It was not necessary to adjust the Soil<sub>ni</sub> RS for additivity due to only one COC being evaluated for this pathway (see Table 4, Appendix B). The GW<sub>airni</sub> pathway RS were divided by the number of target organs/systems affected by the COCs as listed in Table 5, Appendix B.

The MO-1 enclosed structure RS, the Soil<sub>esni</sub> and GW<sub>esni</sub>, were divided by the number of COCs that affected the same target organ/systems and divided by 2 when COCs in both soil and borehole water affected the same target organ/system as listed in Table 6, Appendix B.

### 5.6.5 Identification of the LRS

The LRS for surface soil was determined by comparing the Adjusted Soil<sub>ni</sub> and Adjusted Soil<sub>GW3DW</sub> and selecting the lower of these RS values as the LRS. The LRS for surface soil is presented in Table 4, Appendix B.

The LRS for borehole water were determined by comparing the Adjusted GW<sub>3DW</sub>, the water solubility, and the Adjusted GW<sub>airni</sub> RS, and selecting the lowest of these RS values as the LRS. The LRS for the borehole water are presented in Table 5, Appendix B.



The LRS for the enclosed structure pathway in soil and borehole water were the Soil<sub>esni</sub> and GW<sub>esni</sub>, respectively and are presented in Table 6, Appendix B.

#### 5.6.6 Comparison of the LRS to the Site Concentrations

A comparison of the LRS concentrations with the AOICs for soil and CCs for borehole water are presented in Tables 7 and 8, Appendix B. Comparisons of the soil and borehole water data to the LRS demonstrate none of the COCs in soil and borehole water exceeded the LRS.

#### 5.7 Ecological Evaluation

In accordance with the RECAP guidance, an Ecological Checklist was completed for the Site in order to make an initial determination of whether an ecological risk assessment would be required. Based on Site conditions and the checklist assessment criteria, it appears that no additional ecological assessment activities will be required at the Site. A copy of the completed Ecological Checklist is included as Appendix K.

### Section 6.0 Summary of Findings

#### 6.1 Release Sources

The source of the potential soil and groundwater impact is due to historical land use.

#### 6.2 Soil Type

The soils encountered at the Site during the investigation activities consist as predominantly fill material and reddish sand overlying clayey silt and clay to the maximum depth of the exploration (15 ft bgs). The soil conditions are shown on the soil profile cross-section on Figure 5, Appendix A.

#### 6.3 High Concentrations

A comparison of the LSS with the AOICs in mg/kg for soil and the CCs in mg/L for borehole water (see Table 3A, Appendix B) indicates the following:

Analyses of surface soil samples collected during the investigation identified two COCs in soil that were detected at concentrations above the RECAP SO SS. The maximum COC concentrations in soil samples were as follows: EPH (>C<sub>21</sub>-C<sub>35</sub>) aromatics at a concentration of 340 mg/kg and arsenic at a concentration of 15 mg/kg. However, a 95% UCL of 6.5 mg/kg for arsenic was used in this evaluation.

Analyses of borehole water samples collected during the investigation identified eight COCs in water that were detected above the RECAP SO SS. The maximum COC concentrations in borehole water samples were as follows: acetone at a concentration of 0.11 mg/L, arsenic at a concentration of 0.037 mg/L, barium at a concentration of 3.90 mg/L, cadmium at a concentration of 0.013 mg/L, chromium at a concentration of 0.13 mg/L, lead at a concentration of 0.39 mg/L, EPH (>C<sub>16</sub>-C<sub>21</sub>) aromatics at a concentration of 0.17 mg/L, and bis(2-ethylhexyl)phthalate at a concentration of 0.011 mg/L.

#### 6.4 Free-Product Conditions

No LNAPL was detected in any of the soil borings or temporary monitor wells installed during the investigation.

#### 6.5 Potential and/or Affected Receptors

The primary potential receptors in the immediate vicinity of the Site include underground utilities adjacent to the Site and Site workers. There are no known *affected receptors*.

#### 6.6 Off-Site Impact

No off-Site investigation has been performed at the Site. Off-Site impact is not suspected based on the potential COC concentrations encountered at the Site. In addition, future migration of residual COCs is unlikely due to the limited areas of impact and low soil hydraulic conductivity.

#### 6.7 Off-Site Sources

No off-Site sources of petroleum compounds in the soils and shallow groundwater beneath the Site have been identified.

#### 6.8 Groundwater Conditions

Groundwater at the Site is conservatively classified as 3A drinking water (GW<sub>3DW</sub>) based on the soil hydraulic conductivity data. The depth to first-encountered groundwater was 12 to 15 ft bgs. The groundwater encountered in the zone of investigation exhibits low potential for groundwater production due to low permeability. The potential for future COC migration via groundwater is low due to the limited area of impact and soil hydraulic conductivity.

## Section 7.0 Recommendations


Based on the findings of the Site investigation and RECAP Evaluation, CRA recommends that a No Further Action-At This Time (NFA-ATT) status be granted for the Site.



### Signature Page

The following Conestoga-Rovers & Associates employees prepared the RECAP Evaluation Report for the property located at 1059 Brickyard Lane in Baton Rouge, Louisiana, dated July 2014.

  
For: Daniel D. Wascom

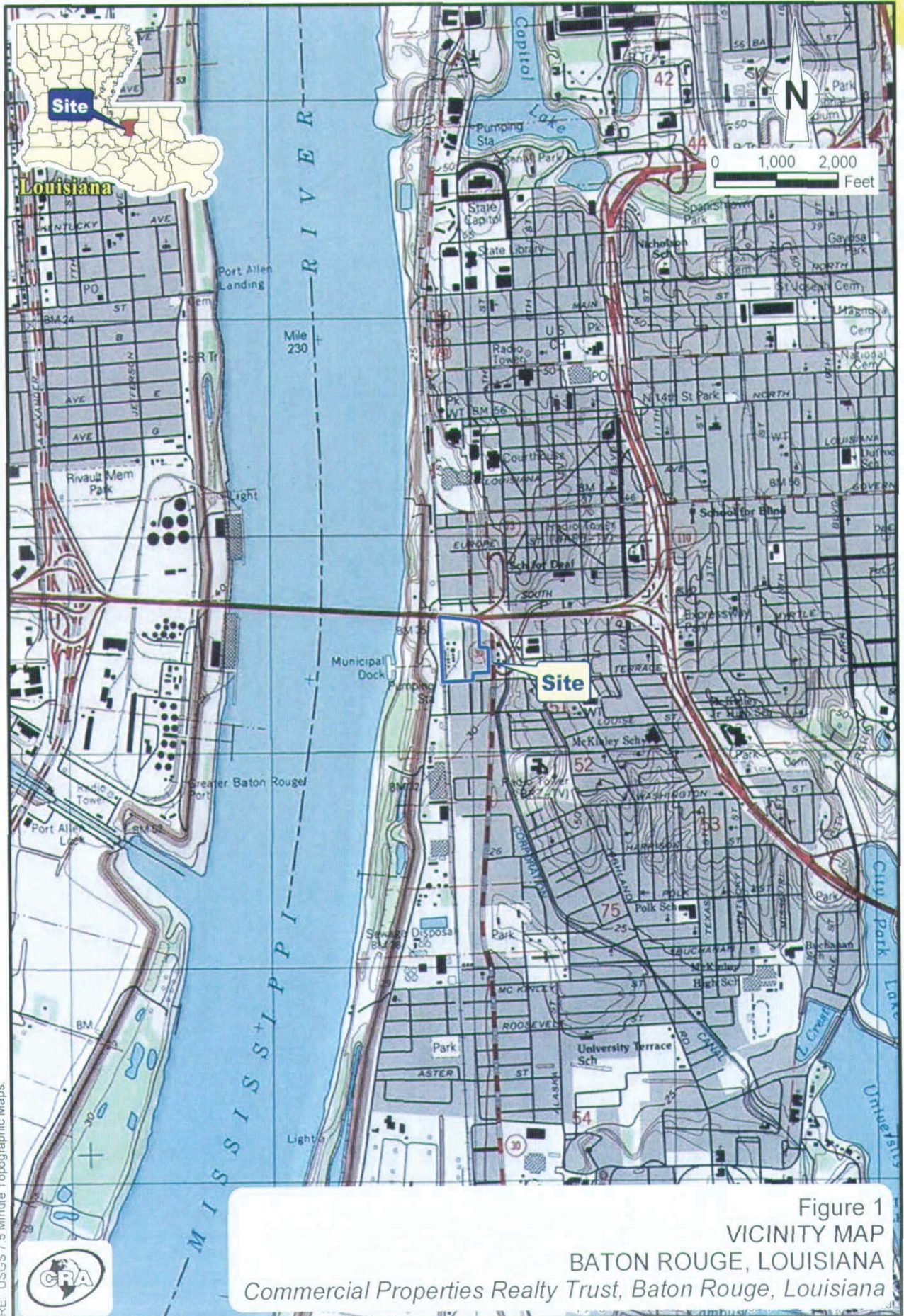
  
Brian L. Carter, PhD, PG

  
Charles E. Jones

## Appendix A

### Figures





RE: USGS 7.5 Minute Topographic Maps.



Figure 1  
VICINITY MAP  
BATON ROUGE, LOUISIANA  
*Commercial Properties Realty Trust, Baton Rouge, Louisiana*













Figure 4  
 SITE PLAN  
 BRICK YARD SITE  
 BATON ROUGE, LOUISIANA  
 Commercial Properties Realty Trust

Legend  
 Soil Boring/Temporary Monitor Well Location  
 Identified Area of Investigation  
 Site Boundary



5/13/2014 10:00 AM - 10:00 AM



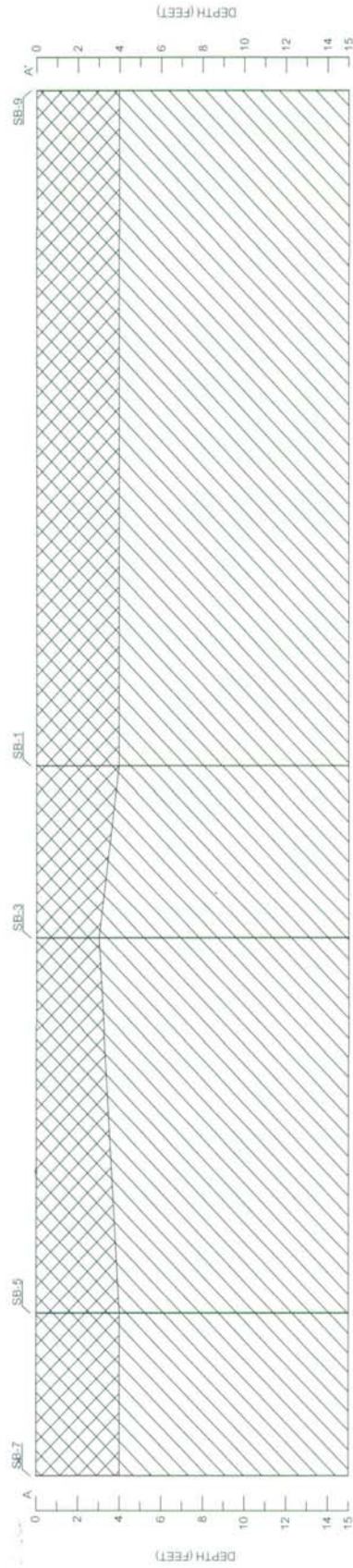


Figure 5  
 CROSS-SECTION A-A'  
 BRICK YARD SITE  
 BATON ROUGE, LOUISIANA  
*Commercial Properties Realty Trust*



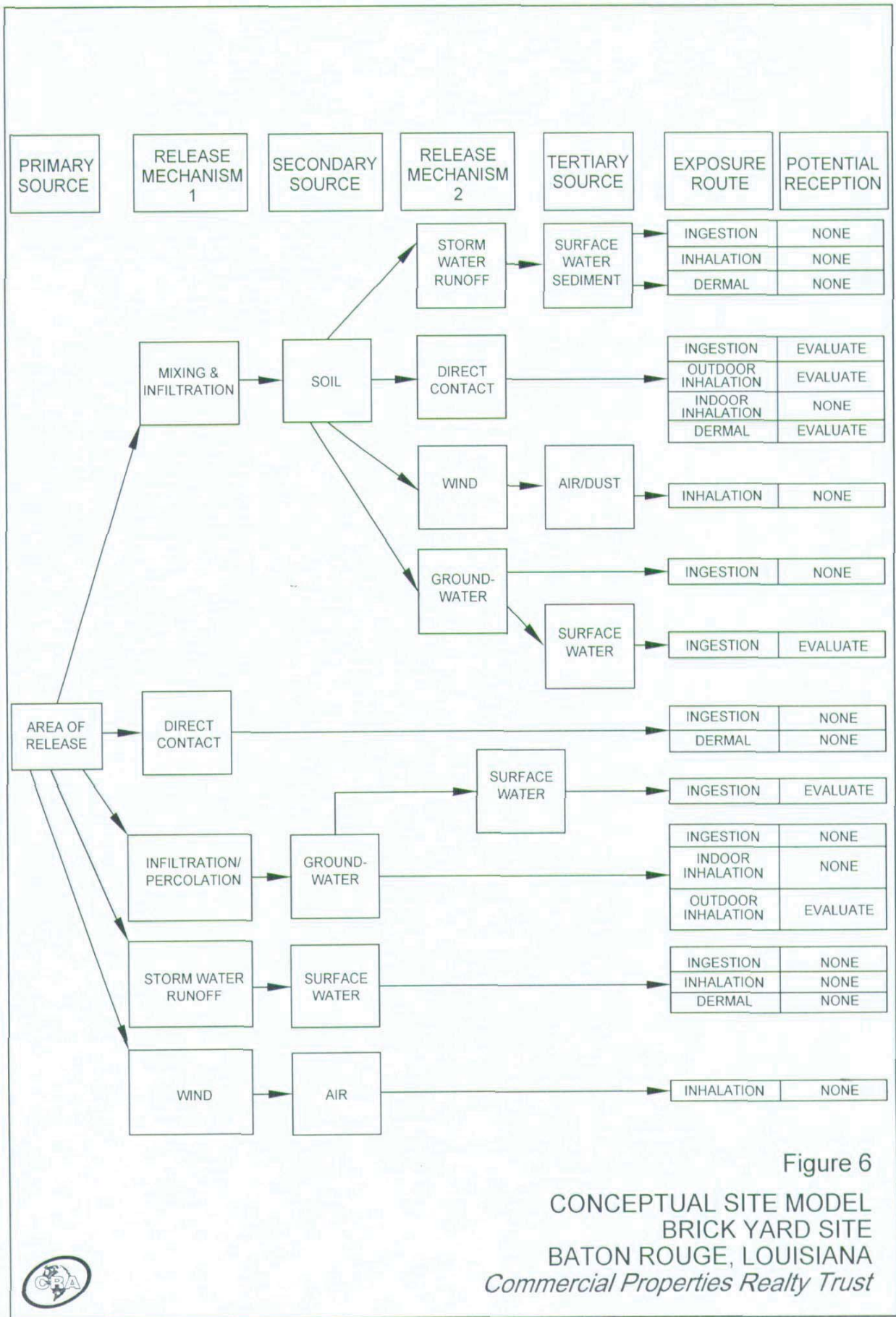


Figure 6  
 CONCEPTUAL SITE MODEL  
 BRICK YARD SITE  
 BATON ROUGE, LOUISIANA  
 Commercial Properties Realty Trust



## Appendix B

### Tables













TABLE 2

BOREHOLE WATER SAMPLE ANALYTICAL LABORATORY RESULTS  
 BRICK YARD SITE  
 1059 BRICK YARD LANE  
 BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA  
 AGENCY INTEREST NO. 16932

Metals	Concentration of Concern	Units	RECAP Screening Standard 5/29/2014													
			5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014				
Arsenic	0.01	mg/L	0.037	0.030	0.025	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028
Barium	2	mg/L	3.9	2.8	0.81	0.37	1.3	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Cadmium	0.005	mg/L	0.013	0.0061	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Chromium	0.1	mg/L	0.13	0.13	0.068	0.063	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Lead	0.015	mg/L	0.19	0.26	0.069	0.048	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
Mercury	0.002	mg/L	0.0066	0.0021	0.000101	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070
Selenium	0.05	mg/L	0.05901	0.00981	0.00040	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021
Silver	0.018	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
<b>Total Petroleum Hydrocarbons (TPH)</b>																
Total Petroleum Hydrocarbons (C<sub>9</sub> Aliphatics)	3.2	mg/L	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Total Petroleum Hydrocarbons (C<sub>9</sub> Aliphatics)	0.15	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Petroleum Hydrocarbons (C<sub>9</sub> Aromatics)	0.15	mg/L	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Extractable Petroleum Hydrocarbons (C<sub>9</sub> Aliphatics)	0.15	mg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048
Extractable Petroleum Hydrocarbons (C<sub>9</sub> Aromatics)	0.15	mg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048
Extractable Petroleum Hydrocarbons (C<sub>9</sub> Aliphatics)	0.15	mg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048
Extractable Petroleum Hydrocarbons (C<sub>9</sub> Aromatics)	0.15	mg/L	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048
<b>Semi-Volatile Organic Compounds (SVOC)</b>																
1,2,4,5-Tetrachlorobenzene	0.0011	mg/L	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018
1,3-Dinitrobenzene	0.01	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
2,2'-Oxybis(1-chloropropanol) (1,1,2-dichloropropanol ether)	0.0057	mg/L	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
2,3,4,6-Tetrachlorophenol	0.11	mg/L	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
2,4,6-Trichlorophenol	0.01	mg/L	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037	<0.0037
2,4,6-Trichlorophenol	0.01	mg/L	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
2,4-Dichlorophenol	0.11	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
2,4-Dimethylphenol	0.073	mg/L	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035
2,4-Dinitrophenol	0.05	mg/L	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034
2,4-Dinitrophenol	0.01	mg/L	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019
2,6-Dinitrophenol	0.01	mg/L	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019
2-Chloronaphthalene	0.049	mg/L	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
2-Chloronaphthalene	0.01	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022
2-Methylnaphthalene	0.00062	mg/L	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033	<0.000033
2-Nitroanisole	0.05	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022
3,3'-Dichlorobenzidine	0.02	mg/L	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026	<0.0026
3-Nitroanisole	0.05	mg/L	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018
4-Chloroanisole	0.05	mg/L	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034
4-Nitroanisole	0.05	mg/L	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
4-Nitrophenol	0.05	mg/L	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
Acenaphthylene	0.037	mg/L	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Acenaphthylene	0.1	mg/L	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021
Aniline	0.012	mg/L	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038
Anthracene	0.043	mg/L	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032	<0.000032
Benz[a]anthracene	0.0078	mg/L	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037	<0.000037
Benz[b]fluoranthene	0.0002	mg/L	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036	<0.000036
Benz[b]fluoranthene	0.0002	mg/L	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034	<0.000034
Benz[b]fluoranthene	0.0025	mg/L	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058







TABLE 2

BOREHOLE WATER SAMPLE ANALYTICAL LABORATORY RESULTS  
 BRICK YARD SITE  
 1059 BRICK YARD LANE  
 BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA  
 AGENCY INTEREST NO. 76922

Constituent of Concern	Units	RECAP Screening Standard GW-35									
		5/29/2014	5/29/2014	5/29/2014	5/30/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/29/2014	5/30/2014
Chlorobenzene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chloroethane	mg/L	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075
Chloroform (Trichloroethane)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060
Chloromethane (Methyl chloride)	mg/L	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083	<0.00083
cis-1,2-Dichloroethene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
cis-1,3-Dichloropropene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dibromochloroethane	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Isobutanol (Isobutyl alcohol)	mg/L	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074
Methyl tert butyl ether (MTBE)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methylene chloride	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Styrene	mg/L	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058	<0.00058
Tetrachloroethene	mg/L	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070	<0.00070
trans-1,2-Dichloroethene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
trans-1,3-Dichloropropene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Trichloroethene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Trichloroethylene (TCE-11)	mg/L	<0.00052	<0.00052	<0.00052	<0.00052	<0.00052	<0.00052	<0.00052	<0.00052	<0.00052	<0.00052
Vinyl chloride	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Xylenes (Total)	mg/L	<0.0016	<0.0016	<0.0016	<0.0017	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016

Notes:  
 < = Not present at or above the associated value  
 mg/L = Milligrams per Liter  
 NA = Not Applicable/Not Available  
 GW-35 = Screening standard (20) specified in DEQ's October 20, 2003, RECAP Table 1: Screening Option Screening Standards, Screening Standard protective of Groundwater  
 B = Compound was found in the data and sample  
 H = Sample was prepared or analyzed beyond the specified holding time  
 J = Estimated concentration

**TABLE 3A**  
**LISTING OF SOIL AOIC AND BOREHOLE WATER CC WITH A COMPARISON TO**  
**TO LIMITING SCREENING STANDARDS**  
**BRICK YARD SITE**  
**1059 BRICK YARD LANE**  
**BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**  
**AGENCY INTEREST NO. 76922**

Constituent of Concern <sup>(1)</sup>	RECAP Limiting Non-Industrial Soil Screening Standard Surface Soil <sup>(2)</sup> (mg/kg)	Soil AOICs <sup>(3)</sup>		RECAP Groundwater Screening Standard <sup>(2)</sup> (mg/L)	Groundwater CCs <sup>(3)</sup> (mg/L)
		Surface Soil (0-15 ft bgs) (mg/kg)			
Acetone	--	--		0.1	0.11
bis(2-Ethylhexyl)phthalate	--	--		0.006	0.011
EPH (>C <sub>16</sub> -C <sub>31</sub> ) Aromatics	--	--		0.15	0.17
EPH (>C <sub>21</sub> -C <sub>35</sub> ) Aromatics	180	340		--	--
Arsenic	12	6.5 <sup>(4)</sup>		0.01	0.037
Barium	--	--		2.00	3.90
Cadmium	--	--		0.01	0.01
Chromium*	--	--		0.1	0.13
Lead	--	--		0.015	0.39

**Notes:**

- mg/kg = Milligrams per kilogram
- mg/L = Milligrams per liter
- AOIC = Area of Investigation Concentration
- CC = Compliance Concentration
- EPH = Extractable Petroleum Hydrocarbons
- ft bgs = feet below ground surface
- UCL = Upper Confidence Limit shown is the 99% UCL calculated using ProUCL 4.0.
- \* Chromium VI RECAP standard was used for comparison to the chromium results.
- = Constituent did not exceed the Limiting Screening Standard (LSS) for this medium.

<sup>(1)</sup> Only constituents that exceeded Limiting SS are shown.  
<sup>(2)</sup> SS specified in the LDEQ's October 20, 2003, RECAP Table 1 - Screening Option Screening Standards for Soil and Groundwater.  
<sup>(3)</sup> The AOIC and CC are the maximum concentrations encountered for each constituent of concern.  
<sup>(4)</sup> The AOIC for arsenic was calculated as the 95% Adjusted Gamma Upper Confidence Limit (UCL) or the arithmetic mean in accordance with RECAP Section 2.8.2 (see Appendix J)  
 Results that exceed the LSS for a constituent are bold and shaded.

**TABLE 3B**  
**LISTING OF SOIL AOIC AND BOREHOLE WATER CC - ENCLOSED STRUCTURE**  
**BRICK YARD SITE**  
**1059 BRICK YARD LANE**  
**BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**  
**AGENCY INTEREST NO. 76922**

<i>Constituent of Concern</i>	<i>Soil AOICs<sup>(1)</sup> (mg/kg)</i>	<i>Groundwater CCs<sup>(1)</sup> (mg/L)</i>
Acetone	0.095	0.11
2-Butanone (Methyl ethyl ketone) (MEK)	0.017	0.0037
Xylenes (total)	--	0.0017
Acenaphthylene	--	0.000066
Anthracene	--	0.000067
Fluorene	--	0.000038
2-Methylnaphthalene	--	0.000078
Naphthalene	--	0.0046
Phenanthrene	--	0.00015
Pyrene	--	0.00048
EPH (>C <sub>10</sub> -C <sub>12</sub> ) Aromatics	4.2	--
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aliphatics	54	--
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aromatics	26	0.054

**Notes:**

- mg/kg = Milligrams per kilogram
  - mg/L = Milligrams per liter
  - AOIC = Area of Investigation Concentration
  - CC = Compliance Concentration
  - EPH = Extractable Petroleum Hydrocarbons
  - = Constituent was not detected in the medium.
- <sup>(1)</sup> The reported soil AOICs and groundwater CCs are the maximum concentrations encountered for each detected volatile constituent of concern from samples collected during the site investigation. These constituents were evaluated for the enclosed structure pathway.



**TABLE 4**  
**LIST OF LIMITING MO-1 RS FOR SOIL**  
**BRICK YARD SITE**  
**1059 BRICK YARD LANE**  
**BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**  
**AGENCY INTEREST NO. 76922**

Constituents of Concern <sup>(1)</sup> (refer to Table 3A)	MO-1 Soil RS (mg/kg)							Limiting RS	
	Soil <sub>nl</sub> <sup>(2)</sup>	Target Organ(s)	Additivity Factor	Adjusted Soil <sub>nl</sub>	Soil <sub>GW3DW</sub> <sup>(2)</sup>	Dilution Factor	Adjusted Soil <sub>GW3DW</sub>		Soil <sub>sat</sub> <sup>(2)</sup>
EPH (>C <sub>21</sub> -C <sub>33</sub> ) Aromatics	A 1,800	K	B 1	C=A/B 1,800	D 10,000	E 63	F=D*E 10,000 <sup>(3)</sup>	G NA	MIN(C,F,G) 1,800

MO-1 Parameters  
 Sd: <5ft  
 DAF: 63  
 POC to POE : ~ 800 ft

Notes:  
 mg/kg = Milligrams per kilogram  
 DAF = Dilution attenuation factor  
 EPH = Extractable Petroleum Hydrocarbons  
 MO-1 = Management Option 1  
 NA = Not Applicable  
 POC = Point of Compliance  
 POE = Point of Exposure  
 RS = RECAP Standard  
 Sd = Source depth  
 Soil<sub>nl</sub> = Non-Industrial RECAP Standard applicable to surface soil  
 Soil<sub>GW3DW</sub> = RECAP Standard for soil protective of Groundwater Classification 3 classified as a drinking water source  
 Soil<sub>sat</sub> = Soil saturation concentration  
 Target Organs : K=Kidney

<sup>(1)</sup> Only constituents that exceeded the Limiting Screening Standards are shown.  
<sup>(2)</sup> Standards were obtained in LDEQ's October 20, 2003, RECAP Document Table 2 - Management Option 1 Standards for Soil.  
<sup>(3)</sup> Concentrations shall not exceed the aesthetic standard of 10,000 ppm.

**TABLE 5**  
**LIST OF LIMITING MO-1 RS FOR BOREHOLE WATER**  
**BRICK YARD SITE**  
**1059 BRICK YARD LANE**  
**BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**  
**AGENCY INTEREST NO. 76922**

Constituents of Concern <sup>(1)</sup>	MO-1 Groundwater RS (mg/L)							Limiting RS	
	GW <sub>airnl</sub> <sup>(2)</sup>	Target Organs	Additivity Factor	Adjusted GW <sub>airnl</sub> after Additivity	GW <sub>30W</sub> <sup>(2)</sup>	Dilution Factor	Adjusted GW <sub>30W</sub>		GW Solubility
Acetone	A		B	C=A/B	D	E	F=D*E	G	MIN(C,F,G)
Arsenic	350,000	L,K	4	87,500	3.3	63	208	1,000,000	208
Barium	NA	S,V	1	NA	0.05	63	3.2	NA	3.2
bis-(2-ethylhexyl) phthalate	NA	K	4	NA	2	63	126	NA	126
Cadmium	NA	L	2	NA	0.006	63	0.38	0.34	0.34
Chromium	NA	K	4	NA	0.10	63	6.3	NA	6.3
EPH (>C <sub>16</sub> -C <sub>31</sub> ) Aromatics	NA	N,R	1	NA	0.05	63	3.2	NA	3.2
Lead	NA	K	4	NA	1.0	63	63	NA	63
	NA	NA	1	NA	0.05	63	3.2	NA	3.2

**MO-1 Parameters**  
 Sd: < 5 ft  
 DAF: 63  
 POC to POE : ~ 800 ft

Notes:  
 mg/L = Milligrams per liter  
 DAF = Dilution attenuation factor  
 NA = Not Applicable  
 EPH = Extractable Petroleum Hydrocarbons  
 MO-1 = Management Option 1  
 POC = Point of Compliance  
 POE = Point of Exposure  
 RS = RECAP Standard  
 Sd = Source depth  
 GW <sub>airnl</sub> = Non-Industrial RECAP Standard for volatile emissions from groundwater to ambient air  
 GW <sub>30W</sub> = RECAP Standard for Groundwater Classification 3 classified as a drinking water source

Target Organs = L=Liver, S=Skin effects, V=Vascular Effects, K=Kidney, R= Lower Respiratory effects, N=Nasal Epithelium  
 (1) Only constituents that exceeded the Limiting Screening Standards are shown.  
 (2) Standards were obtained in LDEQ's October 20, 2003, RECAP Document Table 3 - Management Option 1 Standards for Groundwater.

**TABLE 6**  
**LIST OF LIMITING MO-1 ENCLOSED STRUCTURE RS FOR SOIL AND BOREHOLE WATER**  
**BRICK YARD SITE**  
**1059 BRICK YARD LANE**  
**BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**  
**AGENCY INTEREST NO. 76922**

Volatile Constituents of Concern (refer to Table 3B)	MO-1 Soil Enclosed Structure RS (mg/kg)						Adjusted Soil $_{encl}$ after Additivity	Exceeds MO-1 RS?
	Soil $_{encl}$ (1)	AOI Concentration	Target Organ(s)	Additivity Factors	Adjusted Soil $_{encl}$ after Additivity	Exceeds MO-1 RS?		
Acetone	A 660	B 0.095	L, K	C 4	D=A/C 165	No	No	
2-Butanone (Methyl ethyl ketone) (MEK)	2,800	0.017	F	2	1,400	No	No	
EPH (>C <sub>10</sub> -C <sub>13</sub> ) Aromatics	460	4.2	N/A	4	115	No	No	
EPH (>C <sub>13</sub> -C <sub>18</sub> ) Aliphatics	2,100	54	L, H	4	525	No	No	
EPH (>C <sub>13</sub> -C <sub>18</sub> ) Aromatics	4,100	26	DBW	2	2,050	No	No	

Volatile Constituents of Concern (refer to Table 3B)	MO-1 Groundwater Enclosed Structure RECAP Standards (mg/L)						Adjusted GW $_{encl}$ after Additivity	Exceeds MO-1 RS?
	GW $_{encl}$ (2)	Compliance Concentration	Target Organ(s)	Additivity Factors	Adjusted GW $_{encl}$ after Additivity	Exceeds MO-1 RS?		
Acenaphthylene	H 3,600	I 0.000066	L	J 4	K=H/J 900	No	No	
Acetone	5,800	0.11	L, K	4	1,450	No	No	
Anthracene	37,000	0.000067	NA	NA	37,000	No	No	
2-Butanone (Methyl ethyl ketone) (MEK)	240,000	0.0037	F	2	120,000	No	No	
EPH (>C <sub>12</sub> -C <sub>18</sub> ) Aromatics	170	0.054	DBW	6	28	No	No	
Fluorene	4,500	0.000038	H	2	2,250	No	No	
2-Methylnaphthalene	84	0.000078	LU	1	84	No	No	
Naphthalene	10	0.0046	DBW, N	6	1.7	No	No	
Phenanthrene	73,000	0.00015	N/A	NA	73,000	No	No	
Pyrene	12,000	0.00048	K	4	3,000	No	No	
Xylenes (total)	26	0.0017	CNS, DBW, DL	6	4.3	No	No	

**Notes:**

- mg/kg = Milligrams per kilogram
- mg/L = Milligrams per liter
- MO-1 = Management Option 1
- NA = Not Applicable
- RS = RECAP Standard

Soil $_{encl}$  = Non-Industrial RECAP Standard for soil impacted with volatile constituents beneath an enclosed structure  
 GW $_{encl}$  = Non-Industrial RECAP Standard for groundwater impacted with volatile constituents beneath an enclosed structure

Target Organs = DBW=Decreased Body Weight, F=Fetal, H=Hematological System, K=Kidney, L=Liver, N=Nasal Cavity, R=Respiratory, CNS = Central Nervous System, DL = Decreased Longevity, LU= Lungs

(1) Standards were obtained in LDEQ's October 20, 2003, RECAP Document Table 2 - Management Option 1 Standards for Soil.

(2) Standards were obtained in LDEQ's October 20, 2003, RECAP Document Table 3 - Management Option 1 Standards for Groundwater.



**TABLE 7**  
**COMPARISON OF LIMITING RS WITH SOIL AOIC AND BOREHOLE WATER CC**  
**BRICK YARD SITE**  
**1059 BRICK YARD LANE**  
**BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**  
**AGENCY INTEREST NO. 76922**

Constituent of Concern	Soil Limiting MO-1 RS	Source for Soil Limiting RS	Surface Soil Limiting MO-1 RS (mg/kg)	Surface Soil AOICs (mg/kg)	Exceeds Limiting RS?
EPH (>C <sub>21</sub> -C <sub>35</sub> ) Aromatics	Dermal Contact	RECAP Table 2	1,800	340	No

Constituent of Concern	Groundwater Limiting MO-1 RS	Source for Groundwater Limiting RS	Groundwater Limiting MO-1 RS (mg/L)	Groundwater CCs (mg/L)	Exceeds Limiting RS?
Acetone	Groundwater	RECAP Table 3	208	0.11	No
Arsenic	Groundwater	RECAP Table 3	3.2	0.037	No
bis- (2-ethylhexyl) phthalate	Groundwater	RECAP Table 3	0.34	0.011	No
Barium	Groundwater	RECAP Table 3	126	3.90	No
Cadmium	Groundwater	RECAP Table 3	6.3	0.01	No
Chromium	Groundwater	RECAP Table 3	3.2	0.13	No
EPH (>C <sub>16</sub> -C <sub>21</sub> ) Aromatics	Groundwater	RECAP Table 3	63	0.17	No
Lead	Groundwater	RECAP Table 3	3.2	0.39	No

Notes:

- mg/kg = milligrams per kilogram
- mg/L = milligrams per liter
- AOIC = Area of Investigation Concentration
- CC = Compliance Concentration
- EPH = Extractable Petroleum Hydrocarbons
- MO-1 = Management Option 1
- RECAP = Risk Evaluation/Corrective Action Program
- RS = RECAP Standard

**TABLE 8**  
**COMPARISON OF ENCLOSED STRUCTURE RS WITH SOIL AOIC AND BOREHOLE WATER CC**  
**BRICK YARD SITE**  
**1059 BRICK YARD LANE**  
**BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA**  
**AGENCY INTEREST NO. 76922**

<i>Volatile Constituent of Concern</i>	<i>Source for Soil Enclosed Structure MO-1/MO-2 RS</i>	<i>Soil Enclosed Structure MO-1 RS (mg/kg)</i>	<i>Soil AOICs (mg/kg)</i>	<i>Exceeds Enclosed Structure MO-1 RS?</i>
Acetone	RECAP Table 2	165	0.095	No
2-Butanone (Methyl ethyl ketone) (MEK)	RECAP Table 2	1,400	0.017	No
EPH (>C <sub>10</sub> -C <sub>12</sub> ) Aromatics	RECAP Table 2	115	4.2	No
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aliphatics	RECAP Table 2	525	54	No
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aromatics	RECAP Table 2	2,050	26	No

<i>Volatile Constituent of Concern</i>	<i>Source for Groundwater Enclosed Structure MO-1/MO-2 RS</i>	<i>Groundwater Enclosed Structure MO-1/MO-2 RS (mg/L)</i>	<i>Groundwater CCs (mg/L)</i>	<i>Exceeds Enclosed Structure MO-1 RS?</i>
Acenaphthylene	RECAP Table 3	900	0.000066	No
Acetone	RECAP Table 3	1,450	0.11	No
Anthracene	RECAP Table 3	37,000	0.000067	No
2-Butanone (Methyl ethyl ketone) (MEK)	RECAP Table 3	120,000	0.0037	No
EPH (>C <sub>12</sub> -C <sub>16</sub> ) Aromatics	RECAP Table 3	28	0.054	No
Fluorene	RECAP Table 3	2,250	0.000038	No
2-Methylnaphthalene	RECAP Table 3	84	0.000078	No
Naphthalene	RECAP Table 3	1.7	0.0046	No
Phenanthrene	RECAP Table 3	73,000	0.00015	No
Pyrene	RECAP Table 3	3,000	0.00048	No
Xylenes (total)	RECAP Table 3	4.3	0.0017	No

Notes:

- mg/kg = Milligrams per kilogram
- mg/L = Milligrams per liter
- AOIC = Area of Investigation Concentration
- CC = Compliance Concentration
- EPH = Extractable Petroleum Hydrocarbons
- MO-1= Management Option 1
- RS = RECAP Standard

## Appendix C

### Certification of Compliance with QA/QC, TS&A and H&S Plans



APPENDIX C

Certification of Compliance with  
QA/QC, TS&A and H&S Plans for  
2014 Brick Yard Site Assessment

Commercial Properties Realty Trust  
1059 Brick Yard Lane  
Baton Rouge, Louisiana  
Agency Interest No. 76922

*I certify that the field activities reported in the document of which this certificate is a part were conducted in substantial compliance with the Conestoga-Rovers & Associates (CRA) Quality Assurance/Quality Control Plan, Technical Sampling and Analyses Plan, and Health and Safety Plan. The referenced plans were prepared specifically for this project and are maintained in CRA's project file.*

Charles Jones  
Name (print)

Charles Jones 8/7/14  
Signature Date

Project Manager  
Title

## Appendix D

### Soil Boring Logs (SB-1 through SB-10)



# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-1

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 27, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Lee Lavergne

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm	
	Gravel Pavement								
2	Reddish brown Sand (FILL)	2.00	<p>2" O.D.</p>					<1	
4	Dark brown with gray CLAY (CH)	4.00						<1	
6								<1	
8								<1	
10								<1	
12								<1	
14								<1	
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00						<1	
16	Borehole terminated at 15' and grouted to the surface.								
18	Hand Probe: 0' to 5'								
	Direct Push Sampler: (2" O.D.): 0' to 15'								
20									
22									
24									
<p><b>NOTES:</b> WATER FOUND ∇</p>									

OVERBURDEN LOG: 085733 (SB1 TO SB10). GPJ\_CRA\_CORP.GDT 6/19/14





# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site  
 PROJECT NUMBER: 085733-00  
 CLIENT: Commercial Properties Realty Trust  
 LOCATION: Baton Rouge, Louisiana  
 DRILLING CO.: Walker Hill Environmental

HOLE DESIGNATION: SB-10  
 DATE COMPLETED: May 29, 2014  
 DRILLING METHOD: Direct Push Sample  
 FIELD PERSONNEL: Christina Eads  
 DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm
2								<1
4	Gray CLAY (CH)	4.00						<1
6								<1
8								<1
10								<1
12								<1
14	-- silty	13.00						<1
15	END OF BOREHOLE @ 15.0ft BGS	15.00						<1
16	Borehole terminated at 15' and grouted to the surface.							
18	Hand Probe: 0' to 5' Direct Push Sampler: (2" O.D.): 0' to 15'							
20								
22								
24								
NOTES WATER FOUND ▼								

OVERBURDEN LOG 085733 (SB1 TO SB10).GPJ\_CRA\_CORP.GDT 6/19/14

← 2" O.D.



# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-2

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 27, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Lee Lavergne

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm	
	Gravel Pavement								
	Reddish brown Sand (FILL)	1.00	← 2" O.D.						
2	Gray CLAY (CH)	2.00							<1
4									<1
6									<1
8									<1
10									<1
12	-- 1 foot reddish zone	12.00							<1
14									<1
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00							<1
16	Borehole terminated at 15' and grouted to the surface.								
18	Hand Probe: 0' to 5' Direct Push Sampler: (2" O.D.): 0' to 15'								
20									
22									
24									
<p><b>NOTES:</b> WATER FOUND ▼</p>									

OVERBURDEN LOG: 085733 (SB1 TO SB10).GPJ\_CRA\_CORP.GDT 6/19/14



# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-3

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 27, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Lee Lavergne

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm
	Gravel Pavement							
2	Reddish brown Sand (FILL)	1.00	← 2" O.D.					31
4	Gray CLAY (CH)	3.00						1
6								<1
8								<1
10								<1
12								<1
14								<1
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00						<1
16	Borehole terminated at 15' and grouted to the surface.							
18	Hand Probe: 0' to 5' Direct Push Sampler: (2" O.D.): 0' to 15'							
20								
22								
24								

OVERBURDEN LOG 085733 (SB1 TO SB10).GPJ CRA\_CORP.GDT 6/19/14

NOTES

WATER FOUND ▼





# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-4

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 27, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Lee Lavergne

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm	
	Gravel Pavement								
2	Reddish brown Sand (FILL)	1.00	← 2" O.D.						<1
4	Gray CLAY (CH)	4.00							<1
6									<1
8									<1
10									<1
12									<1
14									<1
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00							<1
16	Borehole terminated at 15' and grouted to the surface.								
18	Hand Probe: 0' to 5' Direct Push Sampler: (2" O.D.): 0' to 15'								
20									
22									
24									
<p><u>NOTES</u></p> <p>WATER FOUND ▼</p>									

OVERBURDEN LOG: 085733 (SB1 TO SB10). GPJ\_CRA\_CORP.GDT 6/19/14



# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-5

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 27, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Lee Lavergne

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm	
	Gravel Pavement								
2	Reddish brown Sand (FILL)	1.00	← 2" O.D.						<1
4	Gray CLAY (CH)	4.00							<1
6									<1
8									<1
10									<1
12									<1
14									<1
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00							<1
16	Borehole terminated at 15' and grouted to the surface.								
18	Hand Probe: 0' to 5' Direct Push Sampler: (2" O.D.): 0' to 15'								
20									
22									
24									
<p><u>NOTES</u></p> <p>WATER FOUND ▼</p>									

OVERBURDEN LOG 085733 (SB1 TO SB10).GPJ CRA\_CORP.GDT 6/19/14



# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-6

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 27, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Lee Lavergne

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm	
0	Gravel Pavement								
1.00	Gray CLAY (CH)	1.00	← 2" O.D.						<1
2									<1
4									<1
6									<1
8									<1
10									<1
12									<1
14									<1
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00							<1
16	Borehole terminated at 15' and grouted to the surface.								
18	Hand Probe: 0' to 5' Direct Push Sampler: (2" O.D.): 0' to 15'								
20									
22									
24									

OVERBURDEN LOG: 085733 (SBI TO SBI10).GPJ\_CRA\_CORP.GDT 6/19/14

NOTES:

WATER FOUND ▼





# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-7

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 29, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Christina Eads

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm	
2	Brown and gray CLAY with SILT (FILL) with brick debris							<1	
3.00	1' Recovery	3.00							
4	Tan and gray silty CLAY (CL)	4.00							<1
6									<1
8									<1
10									<1
12	Gray CLAY (CH)	12.00							<1
14									<1
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00							<1
16	Borehole terminated at 15' and grouted to the surface.								
18	Hand Probe: 0' to 5'								
	Direct Push Sampler: (2" O.D.): 0' to 15'								
20									
22									
24									
<b>NOTES:</b> WATER FOUND ▼									

OVERBURDEN LOG 085733 (SB1 TO SB10) GPJ CRA\_CORP.GDT 6/19/14



# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site  
 PROJECT NUMBER: 085733-00  
 CLIENT: Commercial Properties Realty Trust  
 LOCATION: Baton Rouge, Louisiana  
 DRILLING CO.: Walker Hill Environmental

HOLE DESIGNATION: SB-8  
 DATE COMPLETED: May 29, 2014  
 DRILLING METHOD: Direct Push Sample  
 FIELD PERSONNEL: Christina Eads  
 DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm	
0 - 2	Concrete debris (FILL)								
2 - 4	gray sandy clay	3.00	2" O.D.						<1
4 - 15	Gray CLAY (CH)	4.00							<1
15 - 16	END OF BOREHOLE @ 15.0ft BGS	15.00							<1
16 - 18	Borehole terminated at 15' and grouted to the surface.								<1
18 - 24	Hand Probe: 0' to 5' Direct Push Sampler: (2" O.D.): 0' to 15'								<1

OVERBURDEN LOG 085733 (SB1 TO SB10), GPJ CRA, CORP GDT 6/19/14

NOTES  
 WATER FOUND ▽



# STRATIGRAPHIC LOG

PROJECT NAME: Brickyard Site

HOLE DESIGNATION: SB-9

PROJECT NUMBER: 085733-00

DATE COMPLETED: May 29, 2014

CLIENT: Commercial Properties Realty Trust

DRILLING METHOD: Direct Push Sample

LOCATION: Baton Rouge, Louisiana

FIELD PERSONNEL: Christina Eads

DRILLING CO.: Walker Hill Environmental

DRILLING CO. SUPERVISOR: Jimmy Thornhill

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	(PID) ppm
0.50	Asphalt Pavement	0.50	← 2" O.D.					
2	Brick debris (FILL)	2						<1
4	Gray CLAY (CH)	4.00						<1
6	-- silty	6						<1
8		8						<1
9.00		9.00						<1
10		10						<1
12		12						<1
14		14						<1
15.00	END OF BOREHOLE @ 15.0ft BGS	15.00						<1
16	Borehole terminated at 15' and grouted to the surface.							
18	Hand Probe: 0' to 5'							
18	Direct Push Sampler: (2" O.D.): 0' to 15'							
20								
22								
24								
<b>NOTES:</b> WATER FOUND ∇								

OVERBURDEN LOG: 085733 (SB1 TO SB10). GPJ\_CRA\_CORP.GDT 6/19/14



## Appendix E

### Laboratory Analytical Reports and Chain-of-Custody Records

## Attention EDMS User: Additional Content Available

*There is an item associated with this facility or record which cannot be entered into the Electronic Document Management System (EDMS) because it is in a format which cannot be scanned. Below you will find a description of the item.*

- *To request a copy of the item, please complete a Public Records Request form at [www.deq.louisiana.gov/prr](http://www.deq.louisiana.gov/prr) and include the box number and reference number of the item in your request.*
- *To review the item, please print a copy of this page and visit the DEQ Public Records Center, 602 N. Fifth Street, Baton Rouge, LA, 70802.*
- *DEQ employees may review the item by contacting the Public Records Center.*

*For more information, please contact the Public Records Center at (225)219-3172.*



Box number:	040133
Reference Number:	NP41662
Description::	1 CD
AI:	1429
Submittal ID:	005468100

Detailed description:

Appendix E  
Analytical Lab Reports  
August 2014  
CRA Ref. No. 085733-00 (2)

## Appendix F

### Waste Manifest





Woodside Landfill  
 29340 Woodside Drive  
 Walker, LA, 70785  
 Ph: (225) 665-8225

Original  
 Ticket# 1424000

Customer Name CRASERVICES CRA SERVICES  
 Ticket Date 06/27/2014  
 Payment Type Credit Account  
 Manual Ticket#  
 Hauling Ticket#  
 Route  
 State Waste Code 902  
 Manifest 32  
 Destination  
 PO  
 Profile 959235LA (NON REGULATED WATER)  
 Generator 149-CPRTBRICKYARD CPRT BRICKYARD

Carrier CEI CUSTOM ECOLOGY INC  
 Vehicle# C140 Volume  
 Container  
 Driver  
 Check#  
 Billing # 0052043  
 Gen EPA ID NA  
 Grid 3048548 9082135 L3

Time	Scale	Operator	Inbound	Gross	16280 lb*
In 06/27/2014 12:22:01	Inbound	TAMMIE		Tare	16200 lb*
Out 06/27/2014 12:42:51	Outbound	JARRED		Net	80 lb
		* Manual Weight		Tons	0.04

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 DRUMS-SOLIDIFICATI	100	1	Each				LA
2 RCR-P-Regulatory C	100		%				LA
3 FUEL-Fuel Surcharg	100		%				LA
4 EVF-P-Standard Env	100		%				LA
5 DMU-DEMURRAGE	100	50	Each				LA
6 TPB-TRANSPORTATION	100	1	Load				LA

Total Tax  
 Total Ticket

Driver's Signature



Woodside Landfill  
 29340 Woodside Drive  
 Walker, LA, 70785  
 Ph: (225) 665-8225

Original  
 Ticket# 1424001

Customer Name CRASERVICES CRA SERVICES  
 Ticket Date 06/27/2014  
 Payment Type Credit Account  
 Manual Ticket#  
 Hauling Ticket#  
 Route  
 State Waste Code 902  
 Manifest 32  
 Destination  
 PO  
 Profile 959240LA (NON REGULATED SOIL)  
 Generator 149-CPRTBRICKYARD CPRT BRICKYARD

Carrier CEI CUSTOM ECOLOGY INC  
 Vehicle# C140A Volume  
 Container  
 Driver  
 Check#  
 Billing # 0052043  
 Gen EPA ID NA  
 Grid 3048548 9082135 L3

	Time	Scale	Operator	Inbound	Gross	16280 lb*
In	06/27/2014 12:23:11	Inbound	TAMMIE		Tare	16200 lb*
Out	06/27/2014 12:43:00	Outbound	JARRED		Net	80 lb
			* Manual Weight		Tons	0.04

Comments

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 DRUMS-NON REGULATE	100	1	Each				LA
2 RCR-P-Regulatory C	100		%				LA
3 FUEL-Fuel Surcharg	100		%				LA
4 EVF-P-Standard Env	100		%				LA

Total Tax  
 Total Ticket

Driver's Signature  
 404WM

*Jarred*

*[Signature]*







# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No. <b>NA</b>	Manifest Doc No.	2. Page 1 of <b>1</b>		
3. Generator's Mailing Address: CPRT BRICKYARD 402 NORTH FOURTH STREET BATON ROUGE LA 70802	Generator's Site Address (if different than mailing):	A. Manifest Number <b>WMNA</b>	<b>32</b> (number)		
4. Generator's Phone <b>(225)952-2979</b>		B. State Generator's ID <b>NA</b>			
5. Transporter 1 Company Name <b>CEI TRANSPORTATION</b>	6. US EPA ID Number <b>LAR000030106</b>	C. State Transporter's ID	<b>D-063-3125</b>		
7. Transporter 2 Company Name	8. US EPA ID Number	D. Transporter's Phone	<b>(800)558-7573</b>		
9. Designated Facility Name and Site Address WOODSIDE LANDFILL 29340 WOODSIDE DRIVE WALKER LA 70785	10. US EPA ID Number <b>NA</b>	E. State Transporter's ID			
		F. Transporter's Phone			
		G. State Facility ID	<b>D-063-1941</b>		
		H. State Facility Phone	<b>(225)667-6134</b>		
11. Description of Waste Materials	12. Containers		13. Total	14. Unit	I. Misc. Comments
	No.	Type	Quantity	Wt./Vol.	
a. NON-REGULATED WATER  WM Profile # 959235LA	1	DM	1	100	50 <sup>g</sup>
b. NON-REGULATED SOIL  WM Profile # 959240LA	1	DM	1	100	50 <sup>g</sup>
c.  WM Profile #					
d.  WM Profile #					
J. Additional Descriptions for Materials Listed Above	K. Disposal Location				
	Cell		Level		
	Grid				
15. Special Handling Instructions and Additional Information					
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:			
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.					
Printed Name <b>Troy Davis/CRA</b>	Signature "On behalf of" <i>Troy Davis</i>	Month <b>6</b>	Day <b>27</b>	Year <b>14</b>	
Printed Name <b>ARON HARRIS</b>	Signature <i>Aron Harris</i>	Month <b>6</b>	Day <b>27</b>	Year <b>14</b>	
Printed Name	Signature	Month	Day	Year	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.					
Printed Name <i>[Signature]</i>	Signature <i>[Signature]</i>	Month <b>6</b>	Day <b>27</b>	Year <b>14</b>	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

GENERATOR  
TRANSPORTER  
FACILITY





P.O. Box 69  
Walker, LA 70785  
Phone: (225) 667-1707  
Fax: (225) 665-6335

301637

**SERVICE TICKET**

Date: 6-27-14

Work Order #: \_\_\_\_\_

Driver: Dean Davis Truck # 140 Trailer # \_\_\_\_\_ Type  Dump  Roll Off  Flat  Tank

GENERATOR CPT Backyard  
ADDRESS 402 North Fourth St  
(P/U LOCATION) Baton Rouge, La

RECEIVER  
NAME Woodside Landfill  
ADDRESS \_\_\_\_\_  
Walker, La.

CONTACT \_\_\_\_\_

CONTACT \_\_\_\_\_

MF# 32

TIME IN \_\_\_\_\_

TIME IN 8:00 AM

TIME OUT \_\_\_\_\_

TIME OUT 9:50 AM

COMMENTS plu 2 drums

COMMENTS dump

P.O. or P.Q. # \_\_\_\_\_

SIGN Tracy Davis  
SIGNATURE VERIFIES TIMES & BOX CONDITION

SIGN [Signature]

BOX # IN DS-1 LINER

BOX #OUT \_\_\_\_\_

TYPE:  OPEN TOP  CLOSE TOP  VAC

TYPE:  OPEN TOP  CLOSE TOP  VAC

CONDITION	OK	COMMENTS
TARP		
BINDERS		
BOWS		
GASKET		
CLEAN		
OTHER		

CONDITION	OK	COMMENTS
TARP		
BINDERS		
BOWS		
GASKET		
CLEAN		
OTHER		

## Appendix G

### LDNR Water Well Survey



## APPENDIX G

WATER WELL SURVEY  
BRICK YARD SITE  
COMMERCIAL PROPERTIES REALTY TRUST  
BATON ROUGE, LOUISIANA

Well ID	Owner's Name	Well No.	Well Use	Well Depth (Ft.)
A	BARNES, C	033-382	abandoned domestic	260
B	BATON ROUGE WW	033-390	plugged and abandoned public supply	2200
B	BATON ROUGE WW	033-96	plugged and abandoned public supply	2254
B	BATON ROUGE WW	033-98	destroyed public supply	328
B	BATON ROUGE WW	033-95	plugged and abandoned public supply	2185
B	BATON ROUGE WW	033-444	plugged and abandoned public supply	2172
B	BATON ROUGE WW	033-1150	municipal public supply	2242
B	BATON ROUGE WW	033-669	plugged and abandoned public supply	900
B	BATON ROUGE WW	033-670	plugged and abandoned public supply	870
B	BATON ROUGE WW	033-1149	municipal public supply	2694
B	BATON ROUGE WW	033-630	municipal public supply	2253
B	BATON ROUGE WW	033-671	plugged and abandoned public supply	2068
B	BATON ROUGE WW	033-672	plugged and abandoned public supply	897
B	BATON ROUGE WW	033-746	plugged and abandoned public supply	338
B	BATON ROUGE WW	033-100	plugged and abandoned public supply	338
B	BATON ROUGE WW	033-99	destroyed public supply	329
B	BATON ROUGE WW	033-673	plugged and abandoned public supply	898
B	BATON ROUGE WW	033-97	plugged and abandoned public supply	2063
B	BATON ROUGE WW	033-667	plugged and abandoned public supply	800
B	BATON ROUGE WW	033-1148	abandoned observation	2724
B	BATON ROUGE WW	033-1253	municipal public supply	2687
B	BATON ROUGE WW	033-668	plugged and abandoned public supply	840
B	BATON ROUGE WW	033-747	abandoned public supply	334
B	BATON ROUGE WW	033-666	plugged and abandoned public supply	758
C	BATON ROUGE, LA	033-6602Z	plugged and abandoned piezometer	98
C	BATON ROUGE, LA	033-6603Z	plugged and abandoned piezometer	58
D	BR PUBLIC WORKS	033-8941Z	piezometer	40
D	BR PUBLIC WORKS	033-8975Z	piezometer	13
E	BROWN-EAGLE ICE	033-126	plugged and abandoned public supply	634
F	CHEVRON	033-6176Z	plugged and abandoned monitor	20
F	CHEVRON	033-6177Z	plugged and abandoned monitor	20
F	CHEVRON	033-6178Z	plugged and abandoned monitor	20
F	CHEVRON	033-5506Z	monitor	20
F	CHEVRON	033-5507Z	monitor	20
F	CHEVRON	033-6370Z	plugged and abandoned recovery	8
F	CHEVRON	033-5505Z	monitor	20
F	CHEVRON	033-6217Z	plugged and abandoned monitor	20
G	COMMUNITY CLUB	033-134	destroyed public supply	2184
H	DOWNTOWN INVEST	033-109	destroyed	888
H	DOWNTOWN INVEST	033-110	destroyed	250
I	EB CIV DEFENSE	033-880	inactive public supply	775
I	EB CIV DEFENSE	033-865	destroyed public supply	776
J	EB PUBLIC WORKS	033-5192Z	plugged and abandoned monitor	15
J	EB PUBLIC WORKS	033-107	destroyed	449
J	EB PUBLIC WORKS	033-108	destroyed	450
J	EB PUBLIC WORKS	033-577	destroyed industrial	464
J	EB PUBLIC WORKS	033-8823Z	excavated monitor	14
J	EB PUBLIC WORKS	033-5191Z	plugged and abandoned monitor	15
J	EB PUBLIC WORKS	033-5190Z	plugged and abandoned monitor	20
J	EB PUBLIC WORKS	033-5193Z	plugged and abandoned monitor	20
K	GLEASON, D	033-768	domestic	280
L	GREATER BR PORT	121-181	industrial	1900



## APPENDIX G

WATER WELL SURVEY  
BRICK YARD SITE  
COMMERCIAL PROPERTIES REALTY TRUST  
BATON ROUGE, LOUISIANA

Well ID	Owner's Name	Well No.	Well Use	Well Depth (Ft.)
L	GREATER BR PORT	121-5663Z	plugged and abandoned monitor	15
L	GREATER BR PORT	121-5664Z	plugged and abandoned monitor	15
L	GREATER BR PORT	121-37	plugged and abandoned public supply	1356
L	GREATER BR PORT	121-36	plugged and abandoned public supply	1360
L	GREATER BR PORT	121-5665Z	plugged and abandoned monitor	15
M	GULF STATES UTL	033-83	plugged and abandoned power generation	1820
N	LA CIVIL DEFENS	033-887	plugged and abandoned public supply	903
N	LA CIVIL DEFENS	033-1007	institution public supply	845
O	LA DEQ	033-6639Z	plugged and abandoned monitor	20
O	LA DEQ	033-6640Z	plugged and abandoned monitor	15
O	LA DEQ	033-6641Z	plugged and abandoned monitor	20
O	LA DEQ	033-6644Z	monitor	20
O	LA DEQ	033-6648Z	monitor	15
O	LA DEQ	033-6642Z	plugged and abandoned monitor	15
O	LA DEQ	033-6645Z	monitor	20
O	LA DEQ	033-6638Z	plugged and abandoned monitor	20
O	LA DEQ	033-6643Z	plugged and abandoned monitor	15
O	LA DEQ	033-6647Z	monitor	15
O	LA DEQ	033-6646Z	monitor	20
P	LA DOTD	033-434		611
P	LA DOTD	033-125	destroyed public supply	744
P	LA DOTD	033-124	destroyed public supply	608
Q	MOBIL OIL	033-6371Z	plugged and abandoned monitor	13
Q	MOBIL OIL	033-6372Z	plugged and abandoned monitor	13
Q	MOBIL OIL	033-6374Z	plugged and abandoned monitor	12
Q	MOBIL OIL	033-6376Z	plugged and abandoned monitor	13
Q	MOBIL OIL	033-6377Z	plugged and abandoned monitor	13
Q	MOBIL OIL	033-6378Z	monitor	13
Q	MOBIL OIL	033-6375Z	plugged and abandoned monitor	13
Q	MOBIL OIL	033-6373Z	plugged and abandoned monitor	13
R	OSBR LAND, LLC	033-9734Z	monitor	14
R	OSBR LAND LLC	033-9514Z	monitor	14
R	OSBR LAND LLC	033-9513Z	monitor	14
R	OSBR LAND LLC	033-9511Z	monitor	15
R	OSBR LAND LLC	033-9512Z	monitor	14
S	PARTY TIME ICE	033-511	plugged and abandoned industrial	336
S	PARTY TIME ICE	033-493	plugged and abandoned public supply	704
S	PARTY TIME ICE	033-512	plugged and abandoned industrial	336
S	PARTY TIME ICE	033-127	plugged and abandoned public supply	330
T	SMITH ET AL	033-607	destroyed	687
T	SMITH ET AL	033-129	destroyed	748
U	SOUTH CENTRAL	033-738	cathodic protection	290
U	U S CORPS ENGRS	033-6360Z	plugged and abandoned piezometer	25
U	U S CORPS ENGRS	033-6359Z	plugged and abandoned piezometer	35
V	STATE-TIMES	033-574	abandoned public supply	342
W	TEXACO	033-5578Z	plugged and abandoned monitor	15
W	TEXACO	033-5580Z	plugged and abandoned monitor	15
W	TEXACO	033-5581Z	plugged and abandoned monitor	15
W	TEXACO	033-5579Z	plugged and abandoned monitor	15
X	U S GEOL SURVEY	033-794	abandoned observation	2709
X	U S GEOL SURVEY	121-121	plugged and abandoned test hole	562
X	U S GEOL SURVEY	121-147	abandoned observation	1292

## Appendix H

### Groundwater Classification Documentation



CLIENT	Capital City Press	PROJECT:	Former Advocate Building Lafayette Street Baton Rouge, LA
JOB No	28217-04	DATE	08/14/07
CALCULATION BY	BLC		

**PURPOSE:** To determine Dependable Yield (unsteady/nonequilibrium state).  
**METHOD:** Cooper and Jacob (1946) modification of Theis equation.

**GENERAL ASSUMPTIONS/CONDITIONS**

1. The water-bearing formation is uniform in character and the hydraulic conductivity is the same in all directions.
2. The formation is uniform in thickness and infinite in areal extent.
3. The formation receives no recharge from any source.
4. The pumped well penetrates, and receives water from, the full thickness of the water-bearing formation.
5. The water removed from storage is discharged instantaneously when the head is lowered.
6. The pumping well is 100-percent efficient.
7. All water removed from the well comes from aquifer storage.
8. Laminar flow exists throughout the well and aquifer.
9. The water table or potentiometric surface has no slope.

**Variables**

- s := 7.2            drawdown (ft), assumes 60 % drawdown of available water column in the well
- K := .16            hydraulic conductivity (ft/day), see slug test results in the Appendix.
- b := 12             aquifer thickness (ft), typical measured water column in wells
- T = 1.92           transmissivity of the aquifer (equals conductivity times aquifer thickness [K x b]) (ft<sup>2</sup>/day)
- t := 365            time pumping (days) -- Default: 365, assumes long term drawdown conditions.
- r := .417           effective well diameter (ft) -- Default: 0.417 (default assumes gravel pack of 10 inches)
- S := .05            storativity of the aquifer (dimensionless) -- Default: 0.05 assuming typical water table conditions.

**Dependable Yield (Q) Equation**

$$Q := \frac{s \cdot T}{0.183 \cdot \log\left(\frac{2.25T \cdot t}{r^2 \cdot S}\right)}$$

Q = 14.37            ft<sup>3</sup>/day

or, in gallons (1 ft<sup>3</sup> = 7.48 gallons),

which = 107.5        gallons/day



**MW-1 SLUG OUT TEST**

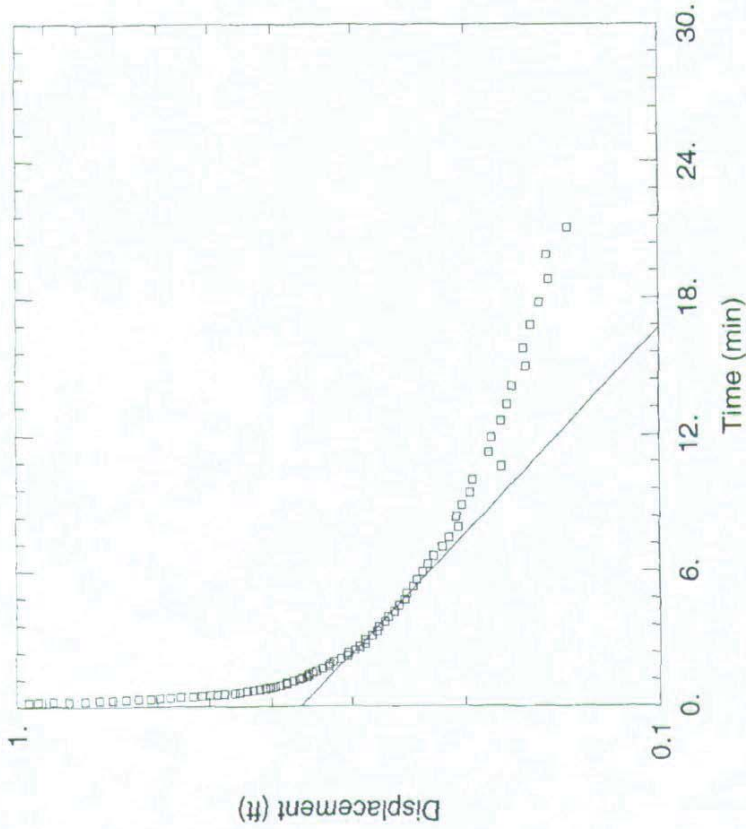
Data Set: U:\...\28217 MW1.aqt  
Date: 08/15/07 Time: 10:30:00

**PROJECT INFORMATION**

Client: Capital City Press  
Project: 28217-04  
Location: Advocate Bldg, Baton Rouge

**SOLUTION**

Aquifer Model: Confined  
Solution Method: Bouwer-Rice  
K = 6.805E-5 ft/min  
y0 = 0.3602 ft



**AQUIFER DATA**

Anisotropy Ratio (Kz/Kr): 1.

Saturated Thickness: 10.45 ft

**WELL DATA (MW-1)**

Static Water Column Height: 10.45 ft  
Screen Length: 10. ft  
Wellbore Radius: 0.343 ft  
Gravel Pack Porosity: 0.3

Initial Displacement: 1.5 ft  
Total Well Penetration Depth: 10.45 ft  
Casing Radius: 0.083 ft

Data Set: U:\AQTESOLV\28217 Advocate\28217 MW1.aqt  
 Title: MW-1 SLUG OUT TEST  
 Date: 08/15/07  
 Time: 10:30:17

PROJECT INFORMATION

Client: Capital City Press  
 Project: 28217-04  
 Location: Advocate Bldg, Baton Rouge

AQUIFER DATA

Saturated Thickness: 10.45 ft  
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-1

X Location: 0. ft  
 Y Location: 0. ft

Initial Displacement: 1.5 ft  
 Static Water Column Height: 10.45 ft  
 Casing Radius: 0.083 ft  
 Wellbore Radius: 0.343 ft  
 Well Skin Radius: 0.343 ft  
 Screen Length: 10. ft  
 Total Well Penetration Depth: 10.45 ft  
 Corrected Casing Radius (Bouwer-Rice Method): 0.083 ft  
 Gravel Pack Porosity: 0.3

No. of Observations: 81

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.211	0.956	2.24	0.306
0.224	0.925	2.37	0.305
0.237	0.875	2.51	0.298
0.251	0.825	2.66	0.293
0.266	0.778	2.82	0.287
0.282	0.739	2.98	0.287
0.298	0.705	3.16	0.28
0.316	0.671	3.35	0.275
0.335	0.642	3.55	0.273
0.355	0.614	3.76	0.267
0.376	0.594	3.98	0.264
0.398	0.572	4.22	0.258
0.422	0.552	4.47	0.254
0.447	0.529	4.73	0.249
0.473	0.513	5.01	0.247
0.501	0.498	5.31	0.241
0.531	0.486	5.62	0.238
0.562	0.473	5.96	0.233
0.596	0.456	6.31	0.229
0.631	0.448	6.68	0.224
0.668	0.437	7.08	0.217
0.708	0.428	7.5	0.212
0.75	0.418	7.94	0.205
0.794	0.409	8.41	0.207
0.841	0.402	8.91	0.203
0.891	0.395	9.44	0.197
0.944	0.388	10.	0.195
1.	0.379	10.6	0.176
1.06	0.379	11.2	0.184
1.12	0.37	11.9	0.182
1.19	0.362	12.6	0.176

---

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
1.26	0.358	13.3	0.172
1.33	0.352	14.1	0.169
1.41	0.35	15.	0.161
1.5	0.345	15.8	0.162
1.58	0.341	16.8	0.158
1.68	0.333	17.8	0.153
1.78	0.326	18.8	0.148
1.88	0.325	19.9	0.149
1.99	0.321	21.1	0.138
2.11	0.313		

---

SOLUTION

Aquifer Model: Confined  
Solution Method: Bouwer-Rice  
Shape Factor: 2.574

---

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	6.805E-5	ft/min
y0	0.3602	ft



MW-2 SLUG OUT TEST

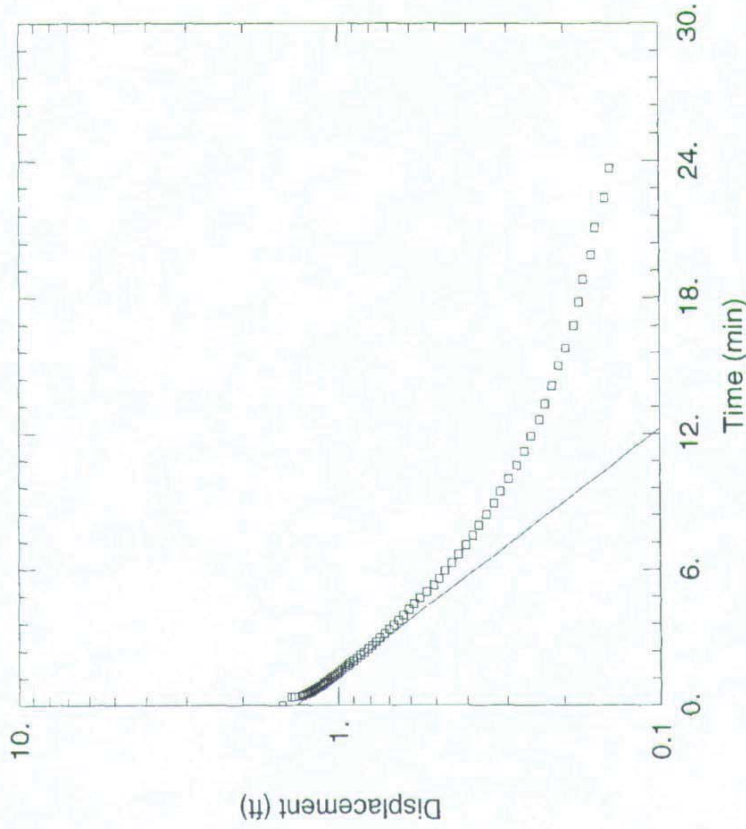
Data Set: U:\...28217 MW2.aqt  
Date: 08/15/07 Time: 10:29:54

PROJECT INFORMATION

Client: Capital City Press  
Project: 28217-04  
Location: Advocate Bldg, Baton Rouge

SOLUTION

Aquifer Model: Confined  
Solution Method: Bouwer-Rice  
K = 0.0001932 ft/min  
y0 = 1.354 ft



AQUIFER DATA

Anisotropy Ratio (Kz/Kr): 1.

Saturated Thickness: 11.57 ft

WELL DATA (MW-2)

Static Water Column Height: 11.57 ft  
Screen Length: 10. ft  
Wellbore Radius: 0.343 ft  
Gravel Pack Porosity: 0.3

Initial Displacement: 1.5 ft  
Total Well Penetration Depth: 11.57 ft  
Casing Radius: 0.083 ft

Data Set: U:\AQTESOLV\28217 Advocate\28217 MW2.aqt  
 Title: MW-2 SLUG OUT TEST  
 Date: 08/15/07  
 Time: 10:30:24

PROJECT INFORMATION

Client: Capital City Press  
 Project: 28217-04  
 Location: Advocate Bldg, Baton Rouge

AQUIFER DATA

Saturated Thickness: 11.57 ft  
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: : MW-2

X Location: 0. ft  
 Y Location: 0. ft

Initial Displacement: 1.5 ft  
 Static Water Column Height: 11.57 ft  
 Casing Radius: 0.083 ft  
 Wellbore Radius: 0.343 ft  
 Well Skin Radius: 0.343 ft  
 Screen Length: 10. ft  
 Total Well Penetration Depth: 11.57 ft  
 Corrected Casing Radius (Bouwer-Rice Method): 0.083 ft  
 Gravel Pack Porosity: 0.3

No. of Observations: 73

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.376	1.402	3.16	0.723
0.398	1.373	3.35	0.7
0.422	1.294	3.55	0.676
0.447	1.293	3.76	0.652
0.473	1.283	3.98	0.63
0.501	1.268	4.22	0.606
0.531	1.25	4.47	0.585
0.562	1.24	4.73	0.563
0.596	1.227	5.01	0.536
0.631	1.213	5.31	0.508
0.668	1.204	5.62	0.489
0.708	1.191	5.96	0.468
0.75	1.179	6.31	0.446
0.794	1.167	6.68	0.426
0.841	1.152	7.08	0.404
0.891	1.137	7.5	0.384
0.944	1.118	7.94	0.367
1.	1.108	8.41	0.349
1.06	1.093	8.91	0.33
1.12	1.077	9.44	0.315
1.19	1.062	10.	0.297
1.26	1.045	10.6	0.281
1.33	1.029	11.2	0.265
1.41	1.007	11.9	0.253
1.5	0.992	12.6	0.239
1.58	0.976	13.3	0.229
1.68	0.954	14.1	0.218
1.78	0.933	15.	0.208
1.88	0.922	15.8	0.197
1.99	0.899	16.8	0.186
2.11	0.877	17.8	0.179

---

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
2.24	0.857	18.8	0.174
2.37	0.835	19.9	0.164
2.51	0.812	21.1	0.159
2.66	0.791	22.4	0.149
2.82	0.768	23.7	0.143
2.98	0.748		

---

SOLUTION

Aquifer Model: Confined  
Solution Method: Bouwer-Rice  
Shape Factor: 2.637

---

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	0.0001932	ft/min
y0	1.354	ft



## Appendix I

### Analytical Data Evaluation (RECAP Form 3)

APPENDIX I

RECAP FORM 3  
ANALYTICAL DATA EVALUATION

Date July 2014

Facility Name Commercial Properties Realty Trust

Agency Interest (AI #) 76922

Physical Site Location Baton Rouge, Louisiana

Operation Address 1059 Brick Yard Lane

Property Owner Office of Facility Planning

Property Owner Address P.O. Box 94095, Baton Rouge, Louisiana 70804-9095

**1. Data Generation**

1.A All sample collection was done in accordance to applicable RECAP collection guidelines.

Yes  No

1.B All generated data was obtained using EPA Methodology, RECAP approved methodology (as found in text), or methodology pre-approved by the Department. Any modifications to methodology have been noted, explained and pre-approved by the Department.

Yes  No

1.C All Data are analyte-specific and the identity and concentration are confirmed.  Yes  No

1.D All data were generated by a LDEQ certified laboratory.  Yes  No

**2. Data Evaluation and Usability**

2.A Methods used are appropriate for analyzed constituents:

1. Analysis used is specific for COCs.  Yes  No

2. Results are produced with the most appropriate sensitive method. (e.g. not using portable field analytical instruments).  Yes  No

## 2.B Sample Quantitation Limits (SQL)

**Note:** The SQL is not synonymous with the IDL (instrument detection limit) or the MDL (minimum detection limit). The SQL is derived after considering the effects of dilutions, loss of instrument sensitivity, matrix interferences, and other interferences effecting the lower-end accuracy of analysis, and therefore resulting in the elevation of the method detection limit. The SQL will be the only detection limit considered for comparison to limiting standards.

1. All SQLs are less than reference concentrations (RS or SS).  Yes  No  
(If yes, proceed to Section 2C, Qualifiers and Codes).
2. Samples with SQLs greater than the limiting standard are not being reported as non-detected. (If yes, proceed to Item # 3 of this section).  Yes  No

If the SQL is higher than the limiting standard, and a non-detect is being reported, data may still be considered by the Department if all the below conditions are met:

- (a) The non-detect results make up less than 5-10 percent of a sample set for a considered individual COC.
- (b) The ND is not classified as being from a key sampling location (e.g. drinking water well).
- © Documentation provided by a LDEQ accredited laboratory (with supporting evidence) is included in the document demonstrating that a practical quantitation limit was not achievable due to site or sample-specific conditions.

Have the above three conditions been met?  Yes  No

**Note:** If one or more of the above conditions cannot be met, the total (100%) value of the PQL may be reported as a positive detected result.

Will this option be used and annotated in the Report?  Yes  No

**Note:** If all answers in this item are "no," analytical results will be rejected and re-sampling will be required.

3. Are sample results higher than both the PQL and the limiting standard?  
 Yes  No (If so, results may be used despite elevated PQL).

**Note:** Some reporting limits for the lab are over the PQL and limiting standard.



## 2.C Qualifiers and Codes

1. All qualifiers and codes for flagged data have been noted on form 3 and supporting documentation has been included in the laboratory information package. [  ] Yes [  ] No
2. All data with a qualifier of "R" (unusable data) do not come from critical sample points (if so, resample will be required). [  ] Yes [  ] No
3. All data with a qualifier of "J" (estimated concentrations) have been included as positive results. [  ] Yes [  ] No

## 2.D Blank Samples

1. Field and laboratory blanks showed no signs of contamination, and no constituents were detected in blanks. (If no constituents or contaminants were detected, proceed to 2E, Tentatively Identified Compounds). [  ] Yes [  ] No
2. Contaminants or constituents found in blanks can be considered common laboratory contaminants as defined by EPA (acetone, 2-butanone, methylene chloride, toluene, or phthalates); and the same contaminants found in site samples are present at quantities less than 10 times the levels found in blanks. (If no, constituents are to be reported as detected COCs). [  ] Yes [  ] No
3. Contaminants or constituents found in blanks are not considered common laboratory contaminants as defined by EPA; and the same contaminants found in site samples are present at quantities less than 5 times the levels found in blanks (If no, constituents are to be reported as ~~detected~~ COCs). [  ] Yes [  ] No

## 2.E Tentatively Identified Compounds (TIC)

All possible TIC have been identified, evaluation is supported with documentation in the text, and information conforms to the requirements as listed in Section 2.5 of the RECAP.

[  ] Yes [  ] No

## 2.F Historical Data

1. All quantitative historical data has been reviewed by current QA/QC guidelines, and all applicable supporting information is justified and included in the report. [  ] Yes [  ] No
2. All qualitative historical data is verifiable, has not been used quantitatively, and has only been used in the development of a conceptual model. [  ] Yes [  ] No

3. Documentation

3.A Laboratory information package assembled as follows [  ] Yes [  ] No:

1. Sample documentation (chains of custody, preparation time, time of analysis).
2. Sample and analyte identification and quantification.
3. Determination and documentation of sample quantitation limits (SQLs).
4. Initial and continuing calibration.
5. Performance evaluation samples (external QA or laboratory control samples)
6. Matrix spike recoveries.
7. Analytical error determination (determined with replicate samples).
8. Total measurement error determination summary. (Evaluates overall precision of measurement system from sample acquisition through analysis. Determined with field duplicate and matrix spike with matrix spike duplicate).
9. Explanation and supporting documentation for flagged data:

3.B All methods used in all analysis have produced tangible raw data (e.g. chromatograms, spectra, digital values), and are available to the Department upon request. [  ] Yes [  ] No

1. Representative data is included in documentation as examples of method procedures. [  ] Yes [  ] No
2. All flagged data is supported with complete associated tangible raw data. (e.g. depiction of matrix interferences, spiked recoveries reported outside of control limits, evidence for need for dilution etc.). [  ] Yes [  ] No

**Note: Any "no" answer must be explained at the conclusion of this form. Items not applicable should be left unmarked.**

4. Submitter Information

Date July, 2014

Name of Person submitting this evaluation Charles Jones

Affiliation Conestoga-Rovers & Associates

Signature *D. Brennan* Date 7-30-14

Additional Preparers Daniel D. Wascom, Deborah Brennan

## Appendix J

### Pro UCL Calculations



**TABLE 1**  
**ARSENIC PROUCL INPUTS**  
**BRICKYARD SITE**  
**COMMERCIAL PROPERTIES REALTY TRUST**  
**BATON ROUGE, LA**

<i>Sample Locations</i>	<i>Arsenic Concentrations (mg/kg)</i>
SB-1 (12-14)	5.7
SB-1(14-15)	4.7
SB-2 (12-14)	15
SB-2 (14-15)	3.5
SB-3 (0-4)	6.8
SB-3 (12-14)	3
SB-4 (12-14)	3.7
SB-4 (14-15)	3.7
SB-5 (12-14)	12
SB-5 (14-15)	2.1
SB-6 (12-14)	2.9
SB-6 (14-15)	5
SB-7 (12-14)	4.4
SB-7 (14-15)	5.1
SB-8 (8-10)	3.2
SB-8 (14-15)	3.3
SB-9 (12-14)	5.2
SB-9 (14-15)	3
SB-10 (12-14)	4.5
SB-10 (14-15)	7.3
Arithmetic Mean	5.21

## Notes:

SB = Soil Boring  
mg/kg = milligrams per kilogram

**UCL Statistics for Data Sets with Non-Detects**

User Selected Options  
 Date/Time of Computation 6/18/2014 14:48  
 From File Worksheet.xls  
 Full Precision OFF  
 Confidence Coefficient 95%  
 Number of Bootstrap Operations 2000

**Arsenic**

General Statistics			
Total Number of Observations	20	Number of Distinct Observations	18
		Number of Missing Observations	0
Minimum	2.1	Mean	5.205
Maximum	15	Median	4.45
SD	3.167	Std. Error of Mean	0.708
Coefficient of Variation	0.608	Skewness	2.165

Normal GOF Test		Shapiro Wilk GOF Test	
Shapiro Wilk Test Statistic	0.743	Data Not Normal at 5% Significance Level	
5% Shapiro Wilk Critical Value	0.905	Lilliefors GOF Test	
Lilliefors Test Statistic	0.251	Data Not Normal at 5% Significance Level	
5% Lilliefors Critical Value	0.198		

Data Not Normal at 5% Significance Level

Assuming Normal Distribution			
<b>95% Normal UCL</b>		<b>95% UCLs (Adjusted for Skewness)</b>	
95% Student's-t UCL	6.429	95% Adjusted-CLT UCL (Chen-1995)	6.736
		95% Modified-t UCL (Johnson-1978)	6.486

Gamma GOF Test		Anderson-Darling Gamma GOF Test	
A-D Test Statistic	0.897	Data Not Gamma Distributed at 5% Significance Level	
5% A-D Critical Value	0.745	Kolmogrov-Smirnov Gamma GOF Test	
K-S Test Statistic	0.185	Detected data appear Gamma Distributed at 5% Significance Level	
5% K-S Critical Value	0.195	Detected data follow Appr. Gamma Distribution at 5% Significance Level	

Gamma Statistics			
k hat (MLE)	4.154	k star (bias corrected MLE)	3.564
Theta hat (MLE)	1.253	Theta star (bias corrected MLE)	1.46
nu hat (MLE)	166.2	nu star (bias corrected)	142.6
MLE Mean (bias corrected)	5.205	MLE Sd (bias corrected)	2.757
		Approximate Chi Square Value (0.05)	116
Adjusted Level of Significance	0.038	Adjusted Chi Square Value	114.1

Assuming Gamma Distribution			
95% Approximate Gamma UCL (use when n>=50)	6.398	95% Adjusted Gamma UCL (use when n<50)	6.505

Lognormal GOF Test		Shapiro Wilk Lognormal GOF Test	
Shapiro Wilk Test Statistic	0.928	Data appear Lognormal at 5% Significance Level	
5% Shapiro Wilk Critical Value	0.905	Lilliefors Lognormal GOF Test	
Lilliefors Test Statistic	0.148	Data appear Lognormal at 5% Significance Level	
5% Lilliefors Critical Value	0.198		

Data appear Lognormal at 5% Significance Level

Lognormal Statistics			
Minimum of Logged Data	0.742	Mean of logged Data	1.524
Maximum of Logged Data	2.708	SD of logged Data	0.48

Assuming Lognormal Distribution			
95% H-UCL	6.42	90% Chebyshev (MVUE) UCL	6.823
95% Chebyshev (MVUE) UCL	7.594	97.5% Chebyshev (MVUE) UCL	8.664
99% Chebyshev (MVUE) UCL	10.77		

**Nonparametric Distribution Free UCL Statistics**  
 Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs			
95% CLT UCL	6.37	95% Jackknife UCL	6.429
95% Standard Bootstrap UCL	6.33	95% Bootstrap-t UCL	7.374
95% Hall's Bootstrap UCL	12.71	95% Percentile Bootstrap UCL	6.365
95% BCA Bootstrap UCL	6.65		
90% Chebyshev (Mean, Sd) UCL	7.329	95% Chebyshev (Mean, Sd) UCL	8.291
97.5% Chebyshev (Mean, Sd) UCL	9.627	99% Chebyshev (Mean, Sd) UCL	12.25

Suggested UCL to Use	
95% Adjusted Gamma UCL	6.505

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulation results will not cover all Real World data sets. For additional insight the user may want to consult a statistician.

## Appendix K

### Ecological Checklist (RECAP Form 18)



APPENDIX K

RECAP FORM 18  
ECOLOGICAL CHECKLIST

Section 1 - Facility Information

1. Name of facility: Brick Yard Site
2. Location of facility: 1059 Brick Yard Lane  
Baton Rouge, Louisiana  
  
Parish: East Baton Rouge Parish
3. Mailing address: Office of Facility Planning  
P.O. Box 94095  
Baton Rouge, Louisiana 70804-9095
4. Type of facility: Former hazardous waste handling facility
5. Describe land use at and in the vicinity of the release site: Residential and industrial property
6. If available, attach a USGS topographic map of the facility and/or aerial or other photographs of the release site and surrounding areas. See Figures 1 and 2, Appendix A.

Section 2 - Surrounding Land Use Information

1. Describe land use adjacent to the facility: The land use surrounding the facility is primarily of residential and industrial use.
2. Provide the following information regarding the nearest surface water body:  
  
Name of the surface water body: Mississippi River  
  
Type of surface water body (pond, lake, river, etc.): River  
  
Designated use of the segment/subsequent of the surface water body (LAC 33:IX): (050103) Primary and Secondary Contact Recreation and Propagation of Fish and Wildlife and Agriculture
3. Do any potentially sensitive environmental areas exist adjacent to or in proximity to the site, e.g., Federal and State parks, National and State monuments, wetlands, etc? No

**Section 3 - Release Information**

1. Nature of the release: The source of the release was above ground storage tanks and previous site use as a hazardous waste transfer facility.
2. Location of the release (within the facility): Constituents were released onto the property and leached into the soil over time.
3. Location of the release with respect to the facility property boundaries: The release occurred within the property boundaries.
4. Constituents known or suspected to have been released: Unknown
5. Indicate which media are known or suspected to be impacted and if sampling data are available:  

<input checked="" type="checkbox"/> soil 0 - 15 feet bgs	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
<input type="checkbox"/> soil >15 feet bgs	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
<input checked="" type="checkbox"/> groundwater	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
<input type="checkbox"/> surface water/sediment	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
6. Has migration occurred outside the facility property boundaries?  yes  no  
If yes, describe the designated use of the offsite land impacted: N/A

**Section 4 - Criteria for Further Assessment**

If the AOI meets all of the criteria presented below, then typically no further ecological evaluation shall be required. If the AOI does not meet all of the criteria, then a screening level ecological risk shall be conducted. The Submitter should make the initial decision regarding whether or not a screening level ecological risk assessment is warranted based on compliance of the AOI with criteria listed below. After review of the ecological checklist and other available site information, the Department will make a final determination on the need for a screening level ecological risk assessment. If site conditions at the AOI change such that the one or more of the criteria are not met, then a screening level ecological risk assessment shall be conducted.

Indicate if the AOI meets the following criteria:

1. The area of impacted soil is approximately 1 acre or less in size  yes  no
2. There is no current release of demonstrable long-term threat of release (via runoff or groundwater discharge) of COCs from the AOI to a surface water body  yes  no
3. Recreational species, commercial species, threatened or endangered species, and/or their habitats are not currently being exposed, or expected to be exposed, to COCs present at or migrating from the AOI  yes  no

4. There are no obvious impacts to ecological receptors or their habitats and none are expected in the future.  yes  no

Further ecological evaluation is required at this AOI:  yes  no

**Section 5 - Site Summary**

Since constituents were released to the drainage lateral and subsequently into Bayou Mallet, an Ecological Assessment was completed and is attached in Appendix L.

**Section 6 - Submitter Information**

Date: August 2014

Name of person submitting this checklist: Charles Jones

Affiliation: Conestoga-Rovers & Associates

Signature:  Date: 8/7/14

Additional Preparers: Daniel D. Wascom, Brian Carter



Office of Environmental Compliance  
Underground Storage Tank and Remediation Division  
NFA, COC, or NFI Letters ONLY

(Use this form as an attachment to the OEC Route Slip for NFA, COC, or NFI Letters)

Originator: <u>T. DORAN</u>		Check One or Both as Applicable:	<input checked="" type="checkbox"/> NFA Letter	<input type="checkbox"/> COC Letter or	
			<input type="checkbox"/> No Further Interest Letter		
<b>Required Cost/Fee Info</b>					
Final Invoicing Verification Contact:			Fee Payment Verification Contact:		
PRP – Bridget Jones			Solid Waste – Vicki Thibodeaux		
Environmental Conditions Review – Vicki Thibodeaux			Environmental Conditions Review – Vicki Thibodeaux		
VRP – Vicki Thibodeaux			GW Fee – Vicki Thibodeaux		
Date Fee Paid:	<u>N/A GOVERNMENTAL ENTITY</u>	Fee Type:	<input type="checkbox"/> SW (\$1320)	<input type="checkbox"/> ECR (\$1500)	<input type="checkbox"/> GW (\$ _____)
Date Final Invoice Paid:		Invoice Type:	<input type="checkbox"/> PRP	<input type="checkbox"/> VRP	<input type="checkbox"/> ECR (if costs incurred > \$1500 fee)
<b>Technical Criteria Checklist for NFA/COC</b>					
Document that vertical and lateral extent of impact has been defined to extent required. Check one:			<input type="checkbox"/> Industrial/Commercial		
			<input checked="" type="checkbox"/> Non-Industrial (residential)		
Available information documents constituent concentrations in all media are less than or equal to the limiting RS at this time; OR			<u>TL</u> TL initials		
Exceedance is addressed under a VRP Partial Remedial Action by Use Restrictions. <i>Verified by Team Leader (TL)</i>					
Explain any unusual conditions or allowed exceedance.					
<b>Controls in Place</b>					
Are either LaDEQ-approved Controls (Engineering or Institutional) or Use Restrictions (VRP) part of the remedy? If "YES", attach a Clerk of Court Certified Copy, and select which types of control:			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
Engineering Controls:		Institutional Controls:			
<input type="checkbox"/> Access Controls (Fences, etc.)	<input type="checkbox"/> Access Restrictions	<input type="checkbox"/> GW Use Restriction			
<input type="checkbox"/> Cap/Surface Soil Barrier Construction/Maintenance	<input type="checkbox"/> Building/Construction Restrictions	<input type="checkbox"/> Land Restriction			
<input type="checkbox"/> Impervious Cap	<input type="checkbox"/> City Ordinance	<input type="checkbox"/> Mortgage Notice (SW Industrial/Commercial)			
<input type="checkbox"/> Signage	<input type="checkbox"/> Conveyance Notice (all Industrial/Commercial)	<input type="checkbox"/> Non-Residential Use Restriction			
<input type="checkbox"/> Subsurface Containment	<input type="checkbox"/> Excavation Restriction	<input type="checkbox"/> Servitudes			
	<input type="checkbox"/> Partial Remediation Agreement	<input type="checkbox"/> Other			
Monitoring wells and/or borings were properly plugged and abandoned. <i>Verified by Team Leader (TL)</i>			<u>TL</u> TL initials		
Waste from investigation and/or corrective actions were properly disposed of, and disposal manifests or other documentation has been provided to LDEQ. <i>Verified by Team Leader (TL)</i>			<u>TL</u> TL initials		
Final inspection has been performed verifying conditions for NFA/COC.			<input checked="" type="checkbox"/> YES (Attach copy of FIF)		

12/9/14





## State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY

OCT 15 2015 OFFICE OF ENVIRONMENTAL COMPLIANCE

Mr. Joey Lambert  
Commercial Property Realty Trust  
402 North 4<sup>th</sup> Street, First Floor  
Baton Rouge, LA 70802

RE: No Further Action Notification  
Brickyard Site, AI #1429  
1059 Brickyard Lane  
Baton Rouge, East Baton Rouge Parish, Louisiana

Dear Mr. Lambert:

The Louisiana Department of Environmental Quality – Underground Storage Tank and Remediation Division (LDEQ-USTRD) has completed its review of your Risk Evaluation/Corrective Action Program Report dated August 7, 2014, and later revised October 31, 2014 in your Response to Notice of Deficiency for the above referenced area of investigation, located at 1059 Brickyard Lane, Baton Rouge in East Baton Rouge Parish. Based on our review of this document and all previously submitted information, we have determined that no further action is necessary at this time. The Basis of Decision for this notification is attached.

No soils may be removed from this site without prior approval from LDEQ unless they are removed and disposed at a permitted disposal facility. Prior to the construction of enclosed structures over any portion of the impacted area, further evaluation and approval from LDEQ is warranted.

If you have any questions or need further information, please call the LDEQ Team Leader Mr. Tommy Doran at (225) 219-3019. Thank you for your cooperation in addressing this area.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary A. Fulton Jr.", written over a horizontal line.

Gary A. Fulton Jr., Administrator  
Underground Storage Tank and Remediation Division

Attachment - Basis of Decision

c: Imaging Operations – Inactive and Abandoned Sites  
Charles E. Jones, CRA  
Terri Gibson, LDEQ

## BASIS OF DECISION FOR NO FURTHER ACTION

### Brickyard Site (aka – Chevron USA, Baton Rouge, and Clearwater Fluids) AI #1429

The Louisiana Department of Environmental Quality – Underground Storage Tank and Remediation Division (LDEQ-USTRD) has determined that The Brickyard Site requires No Further Action - At This Time.

The property was previously operated as a brickyard from 1885 to 1940. From 1940 to 1990, the site was owned and operated as the Chevron Asphalt Company Plant, as an asphalt emulsification plant. The site was purchase from Chevron USA in 1990 by Clearwater Fluids Recycling Incorporated. Clearwater Fluids operated the site until 1992 as a hazardous waste recycler. During Clearwater Ownership, the site consisted of a tank farm and a three-room warehouse complete with a loading dock. The tank farm consisted of twelve aboveground storage tanks (AST) with capacities ranging from 5,000 to 420,000 gallons. The warehouse contained three 85-gallon salvage drums and a 55-gallon drum containing investigation-derived waste, and spent PPE. In addition, six vats, two tanks, and a boiler were also stored in the warehouse. An on-site chemical lab was closed in 1986. All waste was shipped off-site, and all tanks and the warehouse were demolished in June and July 1998. These chemicals were inventoried in June of 1989 and subsequently disposed of off-site during a cleanup action later that year.

An LDEQ Site Assessment was conducted in May 1991. On February 18, 1992, the Department issued a Compliance Order to discontinue Clearwater's hazardous waste treatment storage, and disposal. However, Clearwater leased the land to Chem Rail Tank Cleaners between April and December of 1993 as a hazardous waste transfer facility.

An emergency response action (ERA) was conducted by the Department on June 27, 1994 in response to reports of a leaking tank on the site (Tank 1). Approximately 40,000 gallons of material was pumped from Tank 1 into fractionation, or "frac" tanks until the fluid level inside the tank was below the leak line. In response to the ERA, the Environmental Protection Agency (EPA) in accordance with the LDEQ, signed an Action Memorandum to access the site and begin removal activities. In August 1994, approximately 302,000 gallons of manifested hazardous waste was transported off-site to a deep well injection facility.

Remedial standards were developed for this property using LDEQ's RECAP Screening Standards and Management Option 1 standards for soil and Management Option 1 for groundwater. The standards that were applied to this site are listed in the table that appears at the end of this BOD.

The Site is currently used by the State for the property assistance facility, mail sorting, and printing operations. The Site is located in an area with commercial and residential properties. The Site is bordered to the north by Interstate 10, to the south by Terrace Avenue, to the west by River Road, and to the east by Louisiana Highway 30.



A survey of registered water wells within a one-mile radius of the Site identified 25 registered, active water wells.

The groundwater at this site has been classified as Groundwater Class 3A Drinking Water based upon slug tests from an investigation of a site located within one mile of the site. The distance from the Point of Compliance (POC) to the Point of Exposure (POE) and the thickness of the impacted groundwater within the permeable zone were used to select a Dilution and Attenuation Factor (DAF) of 63 from tables in Appendix H of the RECAP document.

Soil and groundwater sampling has confirmed that constituents of concern concentrations do not exceed the established site-specific remediation standards, so no remedial action was required. No Further Action - At This Time is granted when contamination is confirmed to exist at concentrations that do not exceed the established standards.

There are no institutional controls on this property.

An inspection of the site was performed on December 4, 2014 confirming that no investigation derived waste remains on site. No soils may be moved from this location without written authorization from the LDEQ unless they are removed and disposed at a permitted disposal facility.

Groundwater samples were gathered from soil boring holes that were properly developed into temporary monitoring wells. Following groundwater sample collection, the temporary wells were removed from the ground and the boreholes were plugged and abandoned in accordance the *LDOTD Handbook for the Construction of Geotechnical Borehole Water Monitoring System, December 2000*.

The impacted media, constituents of concern, maximum concentration remaining on site and limiting RECAP standard established for this site are listed in the following table:

Medium	Constituent of Concern	Soil AOIC or Groundwater CC	Basis of AOIC or CC	Limiting RS	Basis of LRS	Management Option
Soil 0'-15'	Arsenic	6.5 mg/kg	95%UCL	12 mg/kg	Soil <sub>dl</sub>	SS
Soil 0'-15'	Aromatics >C21-C35	340 mg/kg	Max	1800	Soil <sub>dl</sub>	MO-1
Groundwater	Acetone	0.11 mg/l	Max	208 mg/l	GW <sub>3Dw</sub>	MO-1
Groundwater	Bis (2-ethyl-hexyl)phthalate	0.011 mg/l	Max	0.34 mg/l	GW <sub>sol</sub>	MO-1
Groundwater	Arsenic	0.037 mg/l	Max	3.15 mg/l	GW <sub>3Dw</sub>	MO-1
Groundwater	Barium	3.90 mg/l	Max	126 mg/l	GW <sub>3Dw</sub>	MO-1
Groundwater	Cadmium	0.013 mg/l	Max	0.63 mg/l	GW <sub>3Dw</sub>	MO-1
Groundwater	Chromium	0.13 mg/l	Max	3.2 mg/l	GW <sub>3Dw</sub>	MO-1
Groundwater	Lead	0.39 mg/l	Max	3.2 mg/l	GW <sub>3Dw</sub>	MO-1

Additional information on the details of the investigation and evaluation of this site may be obtained from LDEQ's Public Records Center located in the Galvez Building, Room 127, 602 N. Fifth Street, Baton Rouge, LA 70802. Additional information regarding the Public Records may be obtained by calling (225) 219-3168 or by emailing [publicrecords@la.gov](mailto:publicrecords@la.gov).



**OFFICE OF ENVIRONMENTAL COMPLIANCE  
UNDERGROUND STORAGE TANK AND REMEDIATION DIVISION**  
Routing/Approval Slip



AI No.	1429	Facility:	CHEVRON USA-BRICKYARD SITE	Date Routed:	10-2-15
Other ID No.		Location:	1059 BRICKYARD LANE, BATON ROUGE E. BATON ROUGE		
Activity No.		Originator:	T. DORAN		
Section/Group:		Attachments:	NFA / BOD		
Description/Type of Document(s):		NFA w/ BOD			

Closure     Comfort Letter     Correspondence     Corrective Action     Conveyance Notice   
 NFA     NOD     Personnel     Other

Technical Review	Req'd.	Initials	Date	Return to Originator?	Comments
Environmental Scientist	<input checked="" type="checkbox"/>	FLD	10-2-15	<input type="checkbox"/> Y <input type="checkbox"/> N	
Geology	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Legal	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Technical Advisor	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Other ( _____ )	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Additional Comments					

Management Review	Req'd.	Initials	Date	Return to Originator?	Comments
Supervisor	<input checked="" type="checkbox"/>	ASR	10/6/15	<input type="checkbox"/> Y <input type="checkbox"/> N	
Manager	<input checked="" type="checkbox"/>	[Signature]	10/7/15	<input type="checkbox"/> Y <input type="checkbox"/> N	
Administrator	<input checked="" type="checkbox"/>	CAF	10/15/15	<input type="checkbox"/> Y <input type="checkbox"/> N	
Assistant Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Deputy Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Other ( _____ )	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	

Additional Comments: Do not send FIF "Copy" to EDMS

TEMPO Data Entry Completed (Date Document Completed): \_\_\_\_\_



LPM



April 15, 2014

Louisiana Department of Environmental Quality  
Office of Environmental Compliance  
Surveillance Division – SPOC  
Post Office Box 4312  
Baton Rouge, Louisiana 70821-4312

RECEIVED  
APR 16 2014  
DEQ  
Single Point of Contact

**Re: Unauthorized Discharge Notification Report**  
**Thomas & Taylor, LLC**  
**Former Kean's Dry Cleaner**  
**3109 Perkins Road**  
**Baton Rouge, Louisiana**  
**East Baton Rouge Parish**  
**Agency Interest No. 59372**  
**PPM Project No. 500013901**

514-41345

T 155 135

Bob Crain

Dear Sirs:

On behalf of Thomas & Taylor, LLC, PPM Consultants, Inc. (PPM) submits the attached Unauthorized Discharge Notification Report for the above-referenced site to the Louisiana Department of Environmental Quality (LDEQ).

An online notification of the foregoing results was made to the LDEQ Single Point of Contact (SPOC), on behalf of Thomas & Taylor, LLC, on April 8, 2014, (LDEQ Confirmation No. F71G 12788), in accordance with LAC 33:I.3923. This letter and the attachments hereto are the written report which is submitted in compliance with LAC 33:I.3925.

Thomas & Taylor, LLC purchased the subject property on April 7, 2014, but is not the discharger and prior to April 7, 2014, had not owned or conducted any operations on the property. Any release or discharge appears to be historic in nature and was discovered during the Phase II Environmental Site Assessment. We are not aware of any particular "unauthorized discharge."

As stated, any release or discharge appears to be historic in nature. We have no knowledge of the date, time, or duration of any "unauthorized discharge," or the details of any circumstances or events leading to a discharge. No continuing sources of contamination are known to be present at the site. The horizontal and vertical extent of impact has not been defined, nor has any remedial action been taken as of this date. We do not have any indication that any contaminants that may be present are migrating, nor do we have any information regarding the fate of any contamination, whether any off-site impact resulted,

any public or private wells in the area, the names of responsible parties, or whether any discharge was preventable. Any possible discharge did not result in an emergency situation or any injuries. No materials were recovered.

**Proposed Course of Action**

As shown in the attachments hereto, PPM performed a preliminary Risk Evaluation/ Corrective Action Program (RECAP) Management Option 1 (MO-1) and Management Option 2 (MO-2) evaluation which shows that all constituent concentrations in soil are below the applicable MO-1 standards, and all constituent concentrations detected in groundwater are below the applicable MO-1 or MO-2 standards with the exception of tetrachloroethylene at one sample location. PPM proposes to promptly submit to LDEQ a work plan for addressing the tetrachloroethylene concentrations in groundwater at the one sample location and development of site-specific RECAP Standards.

Should you have any questions or comments regarding this submittal, please contact me at (225) 293-7270 or Mr. Boyd Bryan with Jones Walker LLP at (225) 248-2134.

Sincerely,

A handwritten signature in blue ink, appearing to read "Peter T. Smith". The signature is written in a cursive style with a large initial "P".

Peter T. Smith, PG, CHMM  
Senior Project Manager

PS/rb

Attachments

cc: Mr. Boyd Bryan, Jones Walker LLP

LOUISIANA NOTIFICATION REQUIREMENTS

This form should be completed and submitted to the Underground Storage Tank Division within seven (7) calendar days after verbal notification.

If mailed, submittal date will be the postmark date of the written notification. Forward to:

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
Surveillance Division - SPOC  
Unauthorized Discharge Notification Report  
Post Office Box 4312  
Baton Rouge, LA 70821-4312

---

1. Name of person, company or other party who is filing the written reports.

*Robin Breland  
PPM Consultants, Inc.  
7936 Office Park Boulevard, Suite A  
Baton Rouge, LA 70809  
(225)293-7270*

2. Time and date of verbal notification, name of person making the notification and identification of the site or facility. (Name and Address).

*April 8, 2014, 2:45 PM, to Louisiana Department of Environmental Quality (LDEQ)/SPOC, Baton Rouge, Robin Breland, PPM Consultants, Inc.*

*Former Kean's Dry Cleaner, 3109 Perkins Road, Baton Rouge, Louisiana 70808*

3. Release date and time.

*The release occurred at an unknown date and time; however, soil and groundwater samples were collected on March 6 and 21, 2014, during a Phase II Environmental Site Assessment (ESA).*

4. Incident details and/or emergency condition.

*Laboratory data for samples collected during a Phase II ESA performed for a proposed property purchase indicated a tetrachloroethylene*



*concentration in soil and cis-1,2,-dichloroethene, tetrachloroethylene, and trichloroethylene concentrations in groundwater above the LDEQ Risk Evaluation Corrective Action Program (RECAP) Table 1 Screening Standards. According to the laboratory results, several other volatile organic compounds were not detected in groundwater at the site; however, the laboratory detection limits for these constituents were above the LDEQ RECAP Table 1 Screening Standards.*

*PPM performed a preliminary RECAP MO-1 and MO-2 evaluation for the constituents exceeding the Screening Standards. Based on this evaluation, all constituent concentrations in soil were below the applicable MO-1 standards, and all constituent concentrations detected in groundwater were below the applicable MO-1 or MO-2 standards with the exception of tetrachloroethylene at one sample location. See the attached Site/Area Map (Attachment A), Soil and Groundwater Analytical Laboratory Summary Tables (Attachment B), RECAP Forms (Attachment C), and Analytical Laboratory Reports and Chain-Of-Custody Documents (Attachment D).*

5. Product released and estimated quantity released in gallons.

*Product Released: Unknown  
Quantity Released: Unknown*

6. Surface or groundwater impact.

*No surface impact was observed. Laboratory results for the Phase II ESA indicated a tetrachloroethylene concentration in soil and cis-1,2,-dichloroethene, tetrachloroethylene, and trichloroethylene concentrations in groundwater above the LDEQ RECAP Table 1 Screening Standards.*

*Based on a preliminary MO-1 and MO-2 evaluation, only tetrachloroethylene in one groundwater sample exceeds the applicable MO-2 standard.*

7. Action taken to stop release.

*Not applicable.*

8. Measures taken to prevent recurrence of the incident.

*Not applicable.*

9. Is the U.S.T. System registered?

YES \_\_\_\_\_  
NO \_\_\_\_\_

*Not applicable.*

ANSWER THE FOLLOWING ONLY IF GROUNDWATER CONTAMINATION IS CONFIRMED

1. Reporting party status (owner, operator, consultant, etc.)

*Consultant, on behalf of the owner, Thomas & Taylor, LLC*

2. Attach groundwater contamination data and/or analytical results.

*Analytical results are included in the attached Groundwater Analytical Laboratory Summary Table (Attachment B).*

3. Possible routes of migration.

*Unknown*

4. List all abandoned or active water wells within the immediate area.

*See Attachment E, LDNR Water Well Survey.*

5. Names of all other responsible parties.

*Not Applicable*

BOBBY JINDAL  
GOVERNOR



PEGGY M. HATCH  
SECRETARY

State of Louisiana  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE

September 23, 2015

Mr. Boyd Bryan  
Jones Walker LLP  
8555 United Plaza Blvd.  
Baton Rouge, LA 70809

RE: Corrective Action Plan Approval  
Former Kean's Dry Cleaners; AI Number 39372  
3109 Perkins Road  
Baton Rouge, LA, East Baton Rouge Parish

Dear Mr. Bryan:

The Louisiana Department of Environmental Quality (LDEQ) has completed review of the Corrective Action Plan dated August 17, 2015, submitted on your behalf by PPM Consultants. Thank you for providing this information.

Based on a technical review of the above-referenced document, we hereby approve the Corrective Action Plan as submitted.

Please contact me at (225) 219-3509 or [emad.nofal@la.gov](mailto:emad.nofal@la.gov) with any questions. All correspondence must include the AI number and be submitted in triplicate to:

Gary A. Fulton Jr., Administrator  
Underground Storage Tank and Remediation Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312

Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Emad Nofal".

Emad Nofal, Environmental Scientist 3  
Underground Storage Tank and Remediation Division

c: Imaging Operations – SW  
Mr. Michael D. Luckett, PPM Consultants



BOBBY JINDAL  
GOVERNOR



PEGGY M. HATCH  
SECRETARY

State of Louisiana  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL COMPLIANCE

August 3, 2015

Mr. Boyd Bryan  
Jones Walker LLP  
8555 United Plaza Blvd.  
Baton Rouge, LA 70809

RE: Risk Evaluation/ Corrective Action Report Approval/ CAP Request  
Former Kean's Dry Cleaners; AI Number 39372  
3109 Perkins Road  
Baton Rouge, LA, East Baton Rouge Parish

Dear Mr. Bryan:

The Underground Storage Tank and Remediation Division has completed review of the referenced report dated June 12, 2015 submitted on your behalf by PPM Consultants. Thank you for providing this information.

The investigation has confirmed the presence of contamination. The levels of contamination present will require corrective action based on the RECAP evaluation. Within 60 days, please update the corrective action plan that was submitted on April 24, 2015, or provide a new corrective action plan capable of providing remediation of all phases of contamination in soil and groundwater that exceed RECAP standards. The plan should include conceptual plans for implementation utilizing site diagrams in plan view and cross section, with projections for the time required to complete remediation and the basis for the projections. The diagrams should designate the areas to be treated and the locations and types of treatment equipment to be used.

Please contact me at (225) 219-3673 or [emad.nofal@la.gov](mailto:emad.nofal@la.gov) with any questions. All correspondence must include the AI number and be submitted in triplicate to:

Gary A. Fulton Jr., Administrator  
Underground Storage Tank and Remediation Division  
P.O. Box 4312  
Baton Rouge, LA 70821-4312

Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "Emad Nofal".

Emad Nofal, Environmental Scientist  
Underground Storage Tank and Remediation Division

c: Imaging Operations – SW  
Mr. Michael D. Lockett, PPM Consultants

JOHN BEL EDWARDS  
GOVERNOR



CHUCK CARR BROWN, Ph.D.  
SECRETARY

**State of Louisiana**  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL ASSESSMENT

March 30, 2017

Mr. Boyd Bryan  
Jones Walker LLP  
Four United Plaza  
8555 United Plaza Blvd.  
Baton Rouge, LA 70809

RE: Risk Evaluation/Corrective Action Program Addendum  
Former Kean's Dry Cleaners; **AI Number 39372**  
3109 Perkins Road  
Baton Rouge, LA, East Baton Rouge Parish

Dear Mr. Bryan:

We have completed our review of the referenced document dated January 24, 2017, submitted on your behalf by PPM Consultants verifying that residual contaminant concentrations did not exceed the remediation standards established for this facility for the last four quarterly sampling events.

Since remedial standards were based upon an *industrial exposure* scenario, a notification must be recorded in the parish conveyance records and mortgage records prior to the issuance of a No Further Action-At This Time (NFA-ATT) by the Department. Please complete the attached Conveyance Notification and RECAP Conveyance Notice Form. Submit both items within 60 days for approval prior to filing in the parish records. The format for the notice that must be filed is attached and can be obtained at [www.deq.louisiana.gov/RECAP](http://www.deq.louisiana.gov/RECAP). Any deviations from the posted formats shall have prior Departmental approval. Along with the Conveyance Notification and RECAP Conveyance Notice Form, a scaled site plan showing the affected soil and groundwater zone must be attached. A true copy of the notice certified by the Clerk of Court should be submitted to LDEQ within 60 days of LDEQ approval.

Additionally, monitoring wells present at the site must be properly plugged and abandoned prior to consideration of NFA-ATT. Therefore, within ninety days, please provide a report detailing the completion of plugging and abandonment activities in accordance with the latest version of the Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook prepared by LDEQ and the Louisiana Department of Transportation and Development. Please notify me at least five (5) working days prior to the implementation of plugging and abandonment activities so I may provide field oversight if available.

Mr. Bryan  
Page 2  
3/30/17

Please contact me at (225) 219-3673 or [emad.nofal@la.gov](mailto:emad.nofal@la.gov) with any questions. All correspondence must include the AI number and be submitted in triplicate to:

Percy V. Harris, Administrator  
Remediation Division  
P.O. Box 4314  
Baton Rouge, LA 70821-4314

Thank you for your cooperation.

Sincerely,



Emad Nofal, Environmental Scientist  
Remediation Division

Attachment Conveyance Notification and RECAP Notification Form

c: Imaging Operations – SW  
Mr. Peter T. Smith, PPM Consultants





State of Louisiana  
Department of Environmental Quality



M. J. "MIKE" FOSTER, JR.  
GOVERNOR

L. HALL BOHLINGER  
SECRETARY

September 2, 2003

**CERTIFIED – RETURN RECEIPT REQUESTED 7001 0320 0002 6644 6436**

Mr. David Gardner  
Chevron Environmental Management Company  
P.O. Box 4256  
Houston, Texas 77210-4256

RE: Team Leader Notification  
Investigation Work Plan Request  
Chevron Facility #60109392; **AI Number 18777**  
111 Lobdell Highway, Port Allen, West Baton Rouge Parish, Louisiana

Dear Mr. Gardner:

We have received the Unauthorized Discharge Notification Report dated July 14, 2003 submitted on your behalf by Conestoga-Rovers & Associates. This information confirmed a release from the UST system at the above-referenced facility. Thank you for the notification.

I have been designated as Team Leader for your facility. I will be your single point of contact with the Louisiana Department of Environmental Quality (LDEQ) for all remediation-related activities dealing with soil and/or groundwater issues through investigation, risk evaluation, corrective action and corrective action monitoring. Your facility has been assigned an internal tracking number which needs to appear on all correspondence submitted to the Remediation Services Division. This Agency Interest (AI) number for your facility is **18777**.

It is required that you conduct a remedial investigation at this facility. Within twenty days following receipt of this letter, please submit the name of your Response Action Contractor (RAC – list enclosed) and provide an abbreviated work plan and cost estimate to perform the investigation in accordance with the latest edition of the LDEQ's Risk Evaluation/Corrective Action Program (RECAP), Appendix B. Analytical requirements are detailed in the enclosed chart.



Mr. David Gardner  
September 2, 2003  
Page 2

Following LDEQ approval of the investigation work plan/cost estimate, field activities should be completed. Following completion of the field investigation, please provide a proposal and cost estimate to complete a RECAP Appendix K risk evaluation. The proposal must include the input parameters identified during the field investigation. If contaminants have migrated under an enclosed structure, the proposal must also include a RECAP Management Option II evaluation for enclosed space. The risk evaluation may proceed following LDEQ approval of the RECAP work plan/cost estimate.

Within one hundred twenty days, you must submit a combined site investigation/risk evaluation report for this facility. If the information contained within the report does not meet the data and format requirements specified in RECAP, the report shall be deemed inadequate and will be returned for revision. If the facility is eligible for the Louisiana Motor Fuels Underground Storage Tank Trust Fund and you wish to ensure maximum potential eligibility under the fund, all site activities relevant to this incident must be conducted in accordance with the latest edition of the *Louisiana Motor Fuels Underground Storage Tank Cost Control Guidance Document*. Following receipt and review of the investigation report, you will be contacted in writing regarding further requirements.

Should you have any questions concerning this matter, feel free to contact me at (225) 219-3227. All correspondence must include the **AI number** and be submitted in triplicate to:

Keith L. Casanova, Administrator  
Remediation Services Division  
P.O. Box 4314  
Baton Rouge, LA 70821-4314.

Thank you for your cooperation.

Sincerely,



Charles S. Andrews  
Staff Environmental Scientist

Enclosure

c: LDEQ File Scanning Room 144-UST File  
Mr. Seth Domangue, CRA

**Analytical Methods  
UST Investigations**

PRODUCT STORED	SAMPLE MEDIA	ANALYSES REQUIRED	ANALYTICAL METHODS
Gasoline	Soil/Water	BTEX	SW-846, Methods 8021 B or 8260 B
	Soil/Water	TPH-GRO (C <sub>6</sub> - C <sub>12</sub> )	SW-846, Method 8015 B
	Soil/Water	Lead <sup>1</sup>	SW-846, Methods 6010 B, 6020, 7420 or 7421
	Soil/Water	MTBE <sup>2</sup>	SW-846, Method 8260 B
Diesel	Soil/Water	TPH-DRO (C <sub>10</sub> - C <sub>20</sub> )	SW-846, Method 8015 B
	Soil/Water	PAHs	SW-846, Methods 8100, 8270 C, or 8310
Used Oil	Soil/Water	TPH-ORO (C <sub>20</sub> - C <sub>28</sub> )	SW-846, Method 8015 B
	Soil/Water	Metals	SW-846, Methods 6000/7000
	Soil/Water	PAHs	SW-846, Methods 8100, 8270 C, or 8310
Kerosene, Jet Fuel	Soil/Water	BTEX	SW-846, Methods 8021 B or 8260 B
	Soil/Water	TPH-GRO & DRO (C <sub>6</sub> - C <sub>20</sub> )	SW-846, Method 8015 B
	Soil/Water	PAHs	SW-846, Method 8100, 8270 C, or 8310
Hazardous or Other Substances	Soil/Water	Analyze by approved method for the substance stored or primary constituent	

<sup>1</sup> When suspected to be present. Required for all gasoline USTs operated before 1/1/86.

<sup>2</sup> When suspected to be present. Required for all gasoline USTs operated after 1/1/86.

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes

TPH - Total Petroleum Hydrocarbons (GRO-Gasoline Range Organics, DRO-Diesel Range Organics, ORO-Oil Range Organics)

MTBE - Methyl tert-butyl ether

PAHs - Polycyclic Aromatic Hydrocarbons (Acenaphthene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Pyrene)



**OFFICE OF ENVIRONMENTAL ASSESSMENT  
REMEDIAATION SERVICES DIVISION**

SECTION: GA-3 PROJECT: Cherokee Falls AI# 18777  
 ORIGINATOR: Andrews DATE: 28 Aug 03 Other # \_\_\_\_\_

	Req'd.	Signature	Date	Comments
Immediate Supervisor				
Section Mgr./Supvr.	✓	<i>Ken Wells</i>		
Section Secretary	X	<i>Angie Stevens</i>	<i>8/29/03</i>	✓
Executive Secretary				
Administrator				
Legal				
Assistant Secretary		<i>USA</i>	<i>08/29/03</i>	
Deputy Secretary				<i>le 7/2003</i>
Secretary				

7001 0320 0002 6444 6436

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
*(Domestic Mail Only; No Insurance Coverage Provided)*

**Mr. David Gardner**

Postage	\$		Postmark Here
Certified Fee		<b>X</b>	
Return Receipt Fee (Endorsement Required)			
Restricted Delivery Fee (Endorsement Required)		<b>X</b>	
<b>Total Postage &amp; Fees</b>	<b>\$</b>	<b>X</b>	

Sent To  
**Chevron Environmtl. Management Company**  
 Street, Apt. No.:  
 P.O. Box 4256  
 City, State, ZIP+4  
**Houston, TX 77210-4256**

\* See Reverse Side for Postage and Fees \*      \* See Reverse Side for Postage and Fees \*



**CONESTOGA-ROVERS & ASSOCIATES**

*Charlie Melchior*  
*CRO*

4915 S. Sherwood Forest Blvd.  
Baton Rouge, Louisiana 70816  
Telephone: (225) 292-9007 Fax: (225) 292-3614  
www.CRAworld.com

AI 18777  
503-2606  
T-62718  
*EDM*

**TRANSMITTAL**

DATE: 07/11/03 REFERENCE NO.: 27513-00

PROJECT NAME: Chevron Service Station # 60109392

To: Louisiana Department of Environmental Quality  
P.O. Box 82215  
Baton Rouge, LA 70884-2215  
Attn: Surveillance Division - SPOC

**RECEIVED**

JUL 14 2003

OFFICE OF  
ENVIRONMENTAL COMPLIANCE  
ENFORCEMENT DIVISION

Please find enclosed:  Draft  Final  
 Originals  Other  
 Prints

Sent via:  Mail  Same Day Courier  
 Overnight Courier  Other

QUANTITY	DESCRIPTION
1	Unauthorized Discharge Notification Report
	Chevron Service Station # 60109392
	111 Lobdell Highway
	Port Allen, Louisiana

As Requested  For Review and Comment  
 For Your Use

COMMENTS:

Copy to: \_\_\_\_\_  
Completed by: Seth Domangue  
[Please Print]

Signed: *Seth Domangue*

Filing: Correspondence File



INCIDENT # \_\_\_\_\_

DATE 07/09/03

**LOUISIANA NOTIFICATION REQUIREMENTS**

This form should be completed and submitted to the Underground Storage Tank Division within seven (7) calendar days after verbal notification.

If mailed, submittal date will be the postmark date of the written notification. Forward to:

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
P. O. Box 82215  
Baton Rouge, LA 70884-2215  
Attention: SURVEILLANCE DIVISION – SPOC  
“UNAUTHORIZED DISCHARGE NOTIFICATION REPORT”

1. Name of person, company, or other party who is filing the written report.

**CRA, Inc., Baton Rouge, Louisiana, as environmental consultant for Chevron Environmental Management Company; represented by Bill Delange; P.O. Box 4256, Houston, TX 77210**

2. Time and date of verbal notification, name of person making the notification, and identification of the site or facility. (Name and address)

**July 8, 2003, 3:18 p.m., to Jessica Troxclair, LDEQ/SPOC, Baton Rouge; Seth P. Domangue, CRA, Inc., Baton Rouge, LA;**

**Chevron Service Station No. 60109392  
111 Lobdell Hwy.  
Port Allen, LA**

3. Release date and time.

**Unknown**

4. Incident details and/or emergency condition.

**Analytical results for several soil and groundwater samples collected during site assessment activities showed hydrocarbon concentrations above the LDEQ RECAP Screening Standards (SS). No emergency conditions existed.**

5. Product released and estimated quantity released in gallons.

**Gasoline - Quantity released is unknown.**

6. Surface or groundwater impact.

**Groundwater benzene, ethylbenzene, and TPH-GRO concentrations above RECAP SS were detected.**

7. Action taken to stop release.

**Not Applicable.**

8. Measures taken to prevent recurrence of the incident.

**Tank tightness tests and inventory data record review ordered by Chevron.**

9. Is the U.S.T. system registered?

YES   X   U.S.T. ID#   61-001981  

NO           

**ANSWER THE FOLLOWING ONLY IF GROUNDWATER CONTAMINATION IS CONFIRMED**

1. Reporting party status (owner, operator, consultant, etc.).

**Environmental consultant for Chevron Environmental Mgmt. Company.**

2. Attach groundwater contamination data and/or analytical results.

**Tables summarizing soil and groundwater analytical results, a copy of the analytical laboratory report and soil boring logs are attached.**

3. Possible routes of migration.

**Groundwater, underground utility corridors**

4. List all abandoned or active water wells within the immediate area.

**N/A**

5. Names of all other responsible parties.

**N/A**



TABLE 1  
 SOIL SAMPLE ANALYTICAL LABORATORY DATA  
 CHEVRON SERVICE STATION NO. 60109392  
 111 LOBDELL HIGHWAY  
 PORT ALLEN, LOUISIANA

Boring (depth, ft.)	Sample Date	Parameter					
		Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	TPH-GRO (mg/kg)
		0.051*	20*	19*	150*	20*	65*
SB-1 (2' - 4')	06/23/03	0.143	0.605	0.473	<0.0208	<0.0208	53.3
SB-1 (4' - 6')	06/23/03	0.402	2.24	1.93	<0.0204	<0.0204	181
SB-2 (4' - 6')	06/23/03	0.107	0.287	0.295	0.721	0.0813	19.5
SB-2 (10' - 12')	06/23/03	0.0324	0.395	<0.0206	<0.0206	<0.0206	26.6
SB-3 (2' - 4')	06/23/03	<0.0199	<0.0199	<0.0199	<0.0199	<0.0199	2.03
SB-3 (14' - 16')	06/23/03	<0.0216	<0.0216	<0.0216	<0.0216	<0.0216	<2.165

MTBE = methyl tertiary butyl ether

TPH-GRO = Total Petroleum Hydrocarbons-Gasoline Range Organics

mg/kg = Milligrams per kilogram, which is equivalent to parts per million (ppm).

\* Screening Standards specified in the LDEQ's June 20, 2000, RECAP Table 1 - Screening

Options, Screening Standards for Soil and Groundwater.

NOTES: Bold font with shading indicates result exceeds REC-AP Screening Standard.

TABLE 2  
 GROUNDWATER SAMPLE ANALYTICAL LABORATORY DATA  
 CHEVRON SERVICE STATION NO. 60109392  
 111 LOBDELL HIGHWAY  
 FORT ALLEN, LOUISIANA

Boring	Sample Date	Parameter					
		Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TPH-GRO (mg/L)
		0.005*	1.0*	0.7*	10*	0.52*	0.15*
SB-1	06/23/03	1.19	0.0873	2.52	0.4069	0.0683	20.9
SB-2	06/23/03	0.0804	0.0378	0.0284	0.0414	0.0516	5.9
SB-3	06/23/03	<0.0005	<0.0005	<0.0005	<0.0005	0.001	<0.05

MTBE = methyl tertiary butyl ether

TPH-GRO = Total Petroleum Hydrocarbons-Gasoline Range Organics

mg/L = Milligrams per liter, which is equivalent to parts per million (ppm).

\* Screening Standards specified in the LDFQ's June 20, 2000, RECAP Table 1 - Screening Option, Screening Standards for Soil and Groundwater.

NOTES: Bold font with shading indicates result exceeds RECAP Screening Standard.

SOIL BORING LOGS



# BORING LOG

**Project:** Baseline Site Assessment  
 Chevron Service Station No. 60109392  
 111 Lobdell Highway  
 Port Allen, Louisiana

**Client:** Chevron Environmental Management Company  
 Houston, Texas

No. SB-1

**File No.:** 27513-00  
**Date:** 06/23/03  
**Drilling Co.:** Crescent Geotechnical Services, Inc.  
**Supervisor:** Brian Louvierre  
**Type Rig:** Terra Probe  
**Logged by:** SPD/SAH

LABORATORY TEST DATA					FIELD DATA				BORING DATA		
Moisture Content (%)	Atterberg Test		% Finer than #200 Sieve	Other	Organic Vapor Meter (1) (ppm)	Penetrometer (Tons/Sq ft) or Std Pen. Test (blows/foot)	Sampling	Depth (feet)	Water Level	Screen Interval	Hand probed: 0' to 4' bgs Direct Push Technology (2.0" O.D.): 0' to 12' bgs  Start Time: 0915      Finish Time: 0945
	Liquid Limit (%)	Plastic Index (%)									
					<1,500	*	X	—			6" concrete pavement, fill SAND/CLAY (FILL)  —some gravel, strong hydrocarbon odor
					<1,500	*	X	—			
					<1,500	*	X	5	▽		
					<1,500	*	X	—			
					<1,500	*	X	—			
					<1,500	*	X	10			
							—	—			Boring terminated at 12' and grouted with a thick cement-bentonite mixture.
							—	—			
							—	—			
							—	—			
							—	—			
							—	—			
							—	—			
							—	—			
							—	—			
							—	—			

Shelby Tube

Direct Push Sampler

Auger Cuttings

No Recovery

(1) Photovac 20/20  
 Note: PID malfunctioned/all samples measured 1,459 ppm

Stratification is Inferred And May Not be Exact.  
 Soil Classification Based on Visual-Manual Procedure

**Conestoga-Rovers & Associates**

Water First Noted

\* No Penetrometer or SPT Value

# BORING LOG

**Project:** Baseline Site Assessment  
 Chevron Service Station No. 60109392  
 111 Lobdell Highway  
 Port Allen, Louisiana

**Client:** Chevron Environmental Management Company  
 Houston, Texas

No. SB-2

**File No.:** 27513-00  
**Date:** 06/23/03  
**Drilling Co.:** Crescent Geotechnical Services, Inc.  
**Supervisor:** Brian Louvierre  
**Type Rig:** Terra Probe  
**Logged by:** SPD/SAH

LABORATORY TEST DATA				FIELD DATA				BORING DATA			
Moisture Content (%)	Atterberg Test		% Finer than #200 Sieve	Other	Organic Vapor Meter (1) (ppm)	Penetrometer (Tons/Sq.ft) or Std Pen. Test (blows/foot)	Sampling	Depth (feet)	Water Level	Screen Interval	Hand probed: 0' to 4' bgs Direct Push Technology (2.0" O.D.): 0' to 12' bgs  Start Time: 1020                      Finish Time: 1045
	Liquid Limit (%)	Plastic Index (%)									
					<1,500	0.5	X				6" concrete pavement, fill SAND (FILL) Gray silty CLAY (CL) with humus  —more silt, slight hydrocarbon odor  —stiff Boring terminated at 12' and grouted with a thick cement-bentonite mixture
					<1,500	1.0	X				
					<1,500	1.0	X	5	▽		
					<1,500	1.5	X				
					<1,500	1.5	X	10			
					<1,500	2.0	X				

Shelby Tube

Direct Push Sampler

Auger Cuttings

No Recovery

(1) Photovac 20/20

Note PID malfunctioned/all samples measured 1,459 ppm

Stratification is Inferred And May Not be Exact  
 Soil Classification Based on Visual-Manual Procedure

**Conestoga-Rovers & Associates**

Water First Noted

No Penetrometer or SPT Value

# BORING LOG

**Project:** Baseline Site Assessment  
 Chevron Service Station No. 60109392  
 111 Lobdell Highway  
 Port Allen, Louisiana

**Client:** Chevron Environmental Management Company  
 Houston, Texas

No. SB-3

**File No.:** 27513-00  
**Date:** 06/23/03  
**Drilling Co.:** Crescent Geotechnical Services, Inc  
**Supervisor:** Brian Louvierre  
**Type Rig:** Terra Probe  
**Logged by:** SPD/SAH

LABORATORY TEST DATA					FIELD DATA				BORING DATA		
Moisture Content (%)	Atterberg Test		% Finer than #200 Sieve	Other	Organic Vapor Meter (1) (ppm)	Penetrometer (Tons/Sq.ft) or Std Pen. Test (blows/foot)	Sampling	Depth (feet)	Water Level	Screen Interval	Hand probed: 0' to 4' bgs Direct Push Technology (2.0" O.D.): 0' to 16' bgs  Start Time: 1100                      Finish Time: 1145
	Liquid Limit (%)	Plastic Index (%)									
					<1,500	.	X				Grass, humus, fill SAND (FILL)
					<1,500	0.5	X				Gray silty CLAY (CL) with humus
					<1,500	0.5	X	5	▽		—more silt
					<1,500	1.0	X				
					<1,500	1.0	X	10			
					<1,500	2.0	X				—stiff, less silt
					<1,500	2.5	X				
					<1,500	2.5	X	15			
											Boring terminated at 16' and grouted with a thick cement-bentonite mixture.

Shelby Tube

Direct Push Sampler

Auger Cuttings

No Recovery

(1) Photovac 20/20

Note: PID malfunctioned/all samples measured 1,459 ppm.

Stratification is Inferred And May Not be Exact  
 Soil Classification Based on Visual-Manual Procedure

**Conestoga-Rovers & Associates**

Water First Noted

No Penetrometer or SPT Value



SOIL AND GROUNDWATER ANALYTICAL LABORATORY REPORT



**Pace Analytical®**  
www.pacelabs.com

**Pace Analytical Services, Inc.**  
1000 Riverbend Blvd., Suite F  
St. Rose, LA 70087  
Phone: 504 469 0333  
Fax: 504.469.0555

July 02, 2003

Mr. Bill DeLange  
CHEVRON PRODUCTS CO.  
5959 Corporate Dr.  
Houston, TX 77036

RE: Lab Project Number: 2019388  
Client Project ID: 60109392

Dear Mr. DeLange:

Enclosed are the analytical results for sample(s) received by the laboratory on June 25, 2003. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report please feel free to contact me.

Sincerely,



Cindy Olavesen  
cindy.olavesen@pacelabs.com  
Project Manager

Enclosures

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Project No.: 2019388

Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
SB-1	20159910	Water	06/23/2003	11 40	06/25/2003	16 05
SB-1 (2-4')	20159900	Soil	06/23/2003	09:30	06/25/2003	16:05
SB-1 (4-6')	20159901	Soil	06/23/2003	09:35	06/25/2003	16:05
SB-2	20159911	Water	06/23/2003	11 45	06/25/2003	16:05
SB-2 (10-12')	20159904	Soil	06/23/2003	10 40	06/25/2003	16 05
SB-2 (4-6')	20159902	Soil	06/23/2003	10 30	06/25/2003	16:05
SB-3	20159912	Water	06/23/2003	12 45	06/25/2003	16 05
SB-3 (14-16')	20159909	Soil	06/23/2003	11:45	06/25/2003	16:05
SB-3 (2-4')	20159906	Soil	06/23/2003	11:20	06/25/2003	16:05
WT-1	20159916	Water	06/23/2003		06/25/2003	16:05

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAPI)/Drinking Water LA00C006  
 Florida Dept. of Health/Hazardous Waste E87595  
 Kansas Dept. of Health & Environment/ELWHW E-10266  
 New Jersey DEPE/Wastewater - 58002  
 Tennessee Dept. of Environment & Conservation/Div. of UST (F1'e)  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
 Foreign Soil Import (U.S. Territories)



Client ID: SB-1 (2-4)

Project: 60109392

Lab ID: 20159900

Description: None

Client: CHEVRON PRODUCTS CO.

Site: None

Project No.: 2019388

Prep Factor: 1

Collected: 06/23/03

Received: 06/25/03

Matrix: Soil

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
TPH - Gasoline Range O	Louisiana TPH	27277	1	53300		ug/kg	2075	26-Jun-03	27-Jun-03	16:32
Benzene	SW 8021 Arom	27276	1	143.	Ph	ug/kg	20.8	26-Jun-03	27-Jun-03	16:32
Ethylbenzene	SW 8021 Arom	27276	1	473.	Ph	ug/kg	20.8	26-Jun-03	27-Jun-03	16:32
Methyl tert-butyl ether (	SW 8021 Arom	27276	1	ND		ug/kg	20.8	26-Jun-03	27-Jun-03	16:32
Toluene	SW 8021 Arom	27276	1	605	Ph	ug/kg	20.8	26-Jun-03	27-Jun-03	16:32
m,p-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	20.8	26-Jun-03	27-Jun-03	16:32
o-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	20.8	26-Jun-03	27-Jun-03	16:32

7 parameter(s) reported

Client ID: SB-1 (4-6)

Project: 60109392

Lab ID: 20159901

Description: None

Client: CHEVRON PRODUCTS CO.

Site: None

Project No.: 2019388

Prep Factor: 1

Collected: 06/23/03

Received: 06/25/03

Matrix: Soil

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
TPH - Gasoline Range O	Louisiana TPH	27277	1	181000		ug/kg	2040	26-Jun-03	30-Jun-03	11:03
Benzene	SW 8021 Arom	27276	1	402	Ph	ug/kg	20.4	26-Jun-03	30-Jun-03	11:03
Ethylbenzene	SW 8021 Arom	27276	1	1930	Ph	ug/kg	20.4	26-Jun-03	30-Jun-03	11:03
Methyl tert-butyl ether (	SW 8021 Arom	27276	1	ND		ug/kg	20.4	26-Jun-03	30-Jun-03	11:03
Toluene	SW 8021 Arom	27276	1	2240	Ph	ug/kg	20.4	26-Jun-03	30-Jun-03	11:03
m,p-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	20.4	26-Jun-03	30-Jun-03	11:03
o-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	20.4	26-Jun-03	30-Jun-03	11:03

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

Laboratory Certifications: Puerto Rico - 3449  
Louisiana Dept. of Health and Hospitals (LELAP)/Drinking Water - LA000006  
Florida Dept. of Health-Hazardous Waste (HELAC) - E87595  
Kansas Dept. of Health & Environment (ELWHW) - E 10266  
New Jersey DEPE/Wastewater - 58002  
LA Dept. of Environmental Quality (LELAP) - 02005  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
USDA Foreign Soil Import (US Territories) - S47276



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Client ID: SB-2 (4-6)

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159902

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Soil

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
TPH - Gasoline Range O	Louisiana TPH	27277	1	19500		ug/kg	2070	26-Jun-03	27-Jun-03	17:15
Benzene	SW 8021 Arom	27276	1	107.		ug/kg	20.7	26-Jun-03	27-Jun-03	17:15
Ethylbenzene	SW 8021 Arom	27276	1	295.		ug/kg	20.7	26-Jun-03	27-Jun-03	17:15
Methyl tert-butyl ether (	SW 8021 Arom	27276	1	81.3		ug/kg	20.7	26-Jun-03	27-Jun-03	17:15
Toluene	SW 8021 Arom	27276	1	287.	Ph	ug/kg	20.7	26-Jun-03	27-Jun-03	17:15
m,p-Xylene	SW 8021 Arom	27276	1	587		ug/kg	20.7	26-Jun-03	27-Jun-03	17:15
o-Xylene	SW 8021 Arom	27276	1	134	Ph	ug/kg	20.7	26-Jun-03	27-Jun-03	17:15

7 parameter(s) reported

Client ID: SB-2 (10-12)

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159904

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Soil

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
TPH - Gasoline Range O	Louisiana TPH	27277	1	26600		ug/kg	2065	26-Jun-03	27-Jun-03	17:36
Benzene	SW 8021 Arom	27276	1	32.4		ug/kg	20.6	26-Jun-03	27-Jun-03	17:37
Ethylbenzene	SW 8021 Arom	27276	1	ND	Ph	ug/kg	20.6	26-Jun-03	27-Jun-03	17:37
Methyl tert-butyl ether (	SW 8021 Arom	27276	1	ND		ug/kg	20.6	26-Jun-03	27-Jun-03	17:37
Toluene	SW 8021 Arom	27276	1	395	Ph	ug/kg	20.6	26-Jun-03	27-Jun-03	17:37
m,p-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	20.6	26-Jun-03	27-Jun-03	17:37
o-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	20.6	26-Jun-03	27-Jun-03	17:37

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

Laboratory Certifications: Puerto Rico - 3449  
Louisiana Dept. of Health and Hospitals (ELAP) - Drinking Water - LA003006  
Florida Dept. of Health/Hazardous Waste (NELAC) - E87595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater - 58002  
LA Dept. of Environmental Quality (LELAP) - 02006  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
USDA Foreign Soil Import (U.S. Territories) - S-47270

Client ID: SB-3 (2-4)

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159906

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Soil

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
TPH - Gasoline Range O	Louisiana TPH	27277	1	2030		ug/kg	1990	26-Jun-03	27-Jun-03	21:35
Benzene	SW 8021 Arom	27276	1	ND		ug/kg	19.9	26-Jun-03	27-Jun-03	21:35
Ethylbenzene	SW 8021 Arom	27276	1	ND		ug/kg	19.9	26-Jun-03	27-Jun-03	21:35
Methyl tert-butyl ether (	SW 8021 Arom	27276	1	ND		ug/kg	19.9	26-Jun-03	27-Jun-03	21:35
Toluene	SW 8021 Arom	27276	1	ND		ug/kg	19.9	26-Jun-03	27-Jun-03	21:35
m,p-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	19.9	26-Jun-03	27-Jun-03	21:35
o-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	19.9	26-Jun-03	27-Jun-03	21:35

7 parameter(s) reported

Client ID: SB-3 (14-16)

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159909

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Soil

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
TPH - Gasoline Range O	Louisiana TPH	27277	1	ND		ug/kg	2165	26-Jun-03	27-Jun-03	21:57
Benzene	SW 8021 Arom	27276	1	ND		ug/kg	21.6	26-Jun-03	27-Jun-03	21:57
Ethylbenzene	SW 8021 Arom	27276	1	ND		ug/kg	21.6	26-Jun-03	27-Jun-03	21:57
Methyl tert-butyl ether (	SW 8021 Arom	27276	1	ND		ug/kg	21.6	26-Jun-03	27-Jun-03	21:57
Toluene	SW 8021 Arom	27276	1	ND		ug/kg	21.6	26-Jun-03	27-Jun-03	21:57
m,p-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	21.6	26-Jun-03	27-Jun-03	21:57
o-Xylene	SW 8021 Arom	27276	1	ND		ug/kg	21.6	26-Jun-03	27-Jun-03	21:57

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

Laboratory Certifications: Puerto Rico - 3449  
Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LA000006  
Florida Dept. of Health Hazardous Waste (NELAC) E07595  
Kansas Dept. of Health & Environment ELWHW E 10266  
New Jersey DEPE/Wastewater - 58002  
LA Dept. of Environmental Quality (LELAP) 02036  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
USDA Foreign Soil Import (U.S. Territories) 547270





# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Client ID: SB-1

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159910

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Water

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting	Prep.	Analysis	Reg. Limit
							Limit			
TPH - Gasoline Range O	Louisiana TPH	27295	20	20900	D1	ug/L	1000		28-Jun-03 03:54	
Benzene	SW 8021 Arom	27294	20	1190	D1	ug/L	10.0		28-Jun-03 03:54	
Ethylbenzene	SW 8021 Arom	27294	20	2520	D1	ug/L	10.0		28-Jun-03 03:54	
Methyl tert-butyl ether (	SW 8021 Arom	27294	20	68.3	D1	ug/L	10.0		28-Jun-03 03:54	
Toluene	SW 8021 Arom	27294	20	87.3	D1	ug/L	10.0		28-Jun-03 03:54	
m,p-Xylene	SW 8021 Arom	27294	20	390	D1	ug/L	10.0		28-Jun-03 03:54	
o-Xylene	SW 8021 Arom	27294	20	16.9	D1	ug/L	10.0		28-Jun-03 03:54	

7 parameter(s) reported

Client ID: SB-2

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159911

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Water

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting	Prep.	Analysis	Reg. Limit
							Limit			
TPH - Gasoline Range O	Louisiana TPH	27295	10	5900	D1	ug/L	500.		30-Jun-03 13:51	
Benzene	SW 8021 Arom	27294	1	80.4		ug/L	0.500		28-Jun-03 04:14	
Ethylbenzene	SW 8021 Arom	27294	1	28.4		ug/L	0.500		28-Jun-03 04:14	
Methyl tert-butyl ether (	SW 8021 Arom	27294	1	51.6		ug/L	0.500		28-Jun-03 04:14	
Toluene	SW 8021 Arom	27294	1	37.8	Ph	ug/L	0.500		28-Jun-03 04:14	
m,p-Xylene	SW 8021 Arom	27294	1	30.2		ug/L	0.500		28-Jun-03 04:14	
o-Xylene	SW 8021 Arom	27294	1	11.2		ug/L	0.500		28-Jun-03 04:14	

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

Laboratory Certifications: Puerto Rico 3449  
Louisiana Dept of Health and Hospitals (ELAP) Drinking Water LA03006  
Florida Dept. of Health/Hazardous Waste (NELAC) - E87595  
Kansas Dept. of Health & Environment ELWRW E 10266  
New Jersey DEPE/Wastewater - 58002  
LA Dept. of Environmental Quality (LELAP) 02006  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
USDA Foreign Soil Import (U.S. Territories) - S-47270



# Report of Laboratory Analysis

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Client ID: SB-3

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159912

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Water

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep. Analysis	Reg. Limit
TPH - Gasoline Range O	Louisiana TPH	27295	1	ND		ug/L	50.0	28-Jun-03 06:00	
Benzene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 06:00	
Ethylbenzene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 06:00	
Methyl tert-butyl ether (	SW 8021 Arom	27296	1	1.00		ug/L	0.500	28-Jun-03 06:00	
Toluene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 06:00	
m,p-Xylene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 06:00	
o-Xylene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 06:00	

7 parameter(s) reported

Client ID: WI-1

Client: CHEVRON PRODUCTS CO.

Project: 60109392

Site: None

Lab ID: 20159916

Project No.: 2019388

Prep Factor: 1

Description: None

Collected: 06/23/03

Received: 06/25/03

Matrix: Water

%Moisture:

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep. Analysis	Reg. Limit
Benzene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 07:03	
Ethylbenzene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 07:03	
Methyl tert-butyl ether (	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 07:03	
Toluene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 07:03	
m,p-Xylene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 07:03	
o-Xylene	SW 8021 Arom	27296	1	ND		ug/L	0.500	28-Jun-03 07:03	

6 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit  
DF denotes Dilution Factor of final sample. The Prep Factor accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

Laboratory Certifications Puerto Rico - 3449  
Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water - LA000006  
Florida Dept. of Health/Hazardous Waste (NELAC) - 087595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
New Jersey DEPE/Wastewater - 58002  
LA Dept. of Environmental Quality (ELAP) - 02006  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
USDA Foreign Soil Import (U.S. Territories) - S-47270



# Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Method: Med Soil GC Organics

Project No.: 2019388

Batch: 27277

Units: ug/kg

Parameter Name	LCS	LCS	LCS	LCS	MS	MS	MSD (1)	MS	DUP	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	RPD	
TPH - Gasoline Range Organics	25000.00	98	96	1	25000.00						50 - 150	50 - 150	50

1 compound(s) reported

\* denotes recoveries outside of QC limits  
MS spike concentrations are not corrected for moisture content of the spiked sample  
1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water - LA000006  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater - 59002  
Tennessee Dept. of Environment & Conservation/Div. of UST (Frie)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)



Method: Water GC Organics

Project No.: 2019388

Batch: 27295

Units: ug/L

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS	MSD (I)MS	DUP	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	RPD
TPH - Gasoline Range Organics	500.00	106			500.00	88	87	1		50 - 150	50 - 150	25
TPH - Gasoline Range Organics	500.00	106			500.00					50 - 150	50 - 150	25
TPH - Gasoline Range Organics	500.00	105			500.00					50 - 150	50 - 150	25

J compound(s) reported

\* denotes recovery outside of OC limits  
MS spike concentrations are not corrected for moisture content of the spiked sample  
(I) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water - LA000066  
Florida Dept. of Health/Hazardous Waste - EB7595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

www.pacelabs.com

Phone: 504.469.0333  
Fax: 504.469.0555

Method: Med Soil 8021

Project No.: 2019388

Batch: 27276

Units: ug/kg

Parameter Name	LCS	LCS	LCSD	LCS	MS	MS	MSD	(1)MS	DUP	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	RPD	
Benzene	1000.00	85	87	2	1000.00						70 - 128	51 - 134	50 Q5
Ethylbenzene	1000.00	86	88	2	1000.00						81 - 131	50 - 153	50 Q5
Methyl tert-butyl ether (MTBE)	1000.00	85	86	1	1000.00						64 - 126	57 - 114	50 Q5
Toluene	1000.00	85	88	3	1000.00						80 - 132	57 - 139	50 Q5
m,p-Xylene	2000.00	87 *	89	2	2000.00						88 - 139	61 - 148	50 Q5
o-Xylene	1000.00	88	90	2	1000.00						88 - 134	50 - 164	50 Q5

6 compound(s) reported

\* denotes recoveries outside of QC limits  
MS spike concentrations are not corrected for moisture content of the spiked sample  
(1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA003006  
Florida Dept. of Health/Hazardous Waste E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (F14)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Method: Water 8021

Project No.: 2019388

Batch: 27294

Units: ug/L

Parameter Name	LCS Spike	LCS %Rec	LCS D %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	(1)MS RPD	DUP RPD	QC Limits		Max RPD	Qu
										LCS	MS/MSD		
Benzene	20.00	92			20.00	93	94	1		78 - 127	52 - 142	25	
Benzene	20.00	96			20.00					78 - 127	52 - 142	25	
Benzene	20.00	92			20.00					78 - 127	52 - 142	25	
Ethylbenzene	20.00	98			20.00					87 - 129	54 - 147	25	
Ethylbenzene	20.00	98			20.00					87 - 129	54 - 147	25	
Ethylbenzene	20.00	95			20.00	97	97	0		87 - 129	54 - 147	25	
Methyl tert-butyl ether (MTBE)	20.00	93			20.00					61 - 130	50 - 150	25	
Methyl tert-butyl ether (MTBE)	20.00	89			20.00					61 - 130	50 - 150	25	
Methyl tert-butyl ether (MTBE)	20.00	91			20.00					61 - 130	50 - 150	25	
Toluene	20.00	92			20.00	94	95	2		85 - 131	61 - 145	25	
Toluene	20.00	95			20.00					85 - 131	61 - 145	25	
Toluene	20.00	94			20.00					85 - 131	61 - 145	25	
m,p-Xylene	40.00	105			40.00					90 - 135	56 - 153	25	
m,p-Xylene	40.00	103			40.00	101	100	1		90 - 135	56 - 153	25	
m,p-Xylene	40.00	102			40.00					90 - 135	56 - 153	25	
o-Xylene	20.00	96			20.00	95	95	0		91 - 133	61 - 149	25	
o-Xylene	20.00	96			20.00					91 - 133	61 - 149	25	
o-Xylene	20.00	95			20.00					91 - 133	61 - 149	25	

18 compound(s) reported

\* denotes recoveries outside of QC limits  
MS spike concentrations are not corrected for moisture content of the spiked sample.  
(1) MS RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
Florida Dept. of Health/Hazardous Waste E07595  
Kansas Dept. of Health & Environment/ELWHW E:0266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)





# Report of Quality Control

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Method: Water 8021

Project No.: 2019388

Batch: 27296

Units: ug/L

Parameter Name	LCS	LCS	LCS	LCS	MS	MS	MSD	(1)MS	DUP	QC Limits		Max	Qu
	Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	RPD	
Benzene	20.00	92			20.00	92	93	2		78 - 127	52 - 142	25	
Benzene	20.00	96			20.00					78 - 127	52 - 142	25	
Benzene	20.00	92			20.00					78 - 127	52 - 142	25	
Ethylbenzene	20.00	95			20.00	91	91	0		87 - 129	54 - 147	25	
Ethylbenzene	20.00	98			20.00					87 - 129	54 - 147	25	
Ethylbenzene	20.00	98			20.00					87 - 129	54 - 147	25	
Methyl tert-butyl ether (MTBE)	20.00	91			20.00	90	92	2		61 - 130	50 - 150	25	
Methyl tert-butyl ether (MTBE)	20.00	93			20.00					61 - 130	50 - 150	25	
Methyl tert-butyl ether (MTBE)	20.00	89			20.00					61 - 130	50 - 150	25	
Toluene	20.00	92			20.00	90	92	2		85 - 131	61 - 145	25	
Toluene	20.00	95			20.00					85 - 131	61 - 145	25	
Toluene	20.00	94			20.00					85 - 131	61 - 145	25	
m,p-Xylene	40.00	103			40.00	98	98	0		90 - 135	56 - 153	25	
m,p-Xylene	40.00	102			40.00					90 - 135	56 - 153	25	
m,p-Xylene	40.00	105			40.00					90 - 135	56 - 153	25	
o-Xylene	20.00	96			20.00					91 - 133	61 - 149	25	
o-Xylene	20.00	96			20.00	92	93	1		91 - 133	61 - 149	25	
o-Xylene	20.00	95			20.00					91 - 133	61 - 149	25	

18 compound(s) reported

\* denotes recoveries outside of QC limits

MS spike concentrations are not corrected for moisture content of the spiked sample.

(1) MS RPD is calculated via SW-846 rules, on the basis of spiked sample concentrations rather than spike recoveries.

Laboratory Certifications.

Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
 Florida Dept. of Health/Hazardous Waste EB7595  
 Kansas Dept. of Health & Environment/ELWHW E-10266  
 New Jersey DEPE/Wastewater - 58002  
 Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
 Foreign Soil Import (U.S. Territories)

Method: Med Soil 8021

Report: 2019388

Batch: 27276

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20159900	Sample	115	97						
20159901	Sample	142	128						
20159902	Sample	85	80						
20159904	Sample	96	90						
20159906	Sample	81	82						
20159909	Sample	83	82						
20159917	Sample	87	86						
20159918	Sample	90	91						
20159919	Sample	82	82						
27276B1	Blank	96	95						
27276S1	LCS	104	103						
27276S2	LCS	104	103						

QC limits:                      34-142      31-150

Sur 1: 4-Bromofluorobenzene (PID) (S)  
Sur 2: 4-Bromofluorobenzene (PID) confirmat

\* denotes surrogate recovery outside of QC limits  
D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
^ Lab ID consisting of a batch number with a S suffix is an LCS  
^ Lab ID with a MS suffix is a matrix spike  
A Lab ID with a MSD suffix is a matrix spike duplicate.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
Florida Dept. of Health Hazardous Waste E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)

Method: Med Soil GC Organics

Report: 2019388

Batch: 27277

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20159900	Sample		116						
20159901	Sample G1		203*						
20159902	Sample		87						
20159904	Sample		101						
20159906	Sample		83						
20159909	Sample		84						
20159917	Sample		90						
20159918	Sample		94						
20159919	Sample		82						
20159993	Sample		78						
20159994	Sample		84						
20159996	Sample		86						
20159997	Sample		88						
20159998	Sample		84						
27277B1	Blank		100						
27277S1	LCS		96						
27277S2	LCS		93						

QC limits: 34-142

Sur 2: 4-Bromofluorobenzene (S)

\* denotes surrogate recovery outside of QC limits  
 D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion  
 A Lab ID consisting of a batch number with a B suffix is a method blank.  
 A Lab ID consisting of a batch number with a S suffix is an LCS  
 A Lab ID with a MS suffix is a matrix spike  
 A Lab ID with a MSD suffix is a matrix spike duplicate.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
 Florida Dept. of Health/Hazardous Waste E87595  
 Kansas Dept. of Health & Environment/ELWHW - E 10266  
 New Jersey DEPE/Wastewater 58002  
 Tennessee Dept. of Environment & Conservation/Div or UST (File)  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)



Method: Water 8021

Report: 2019388

Batch: 27294

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20159910	Sample	103	95						
20159911	Sample	110	101						
20159920	Sample	88	84						
20159923	Sample	90	86						
20159926	Sample	91	86						
20159936	Sample	84	80						
20159971	Sample	100	89						
20159972	Sample	96	84						
20159973	Sample	92	86						
20159974	Sample	94	89						
20159975	Sample	98	87						
20159976	Sample	95	96						
20159977	Sample M1	72*	58*						
20159977RE	Re-run G1	51*	43*						
20160068	Sample	93	93						
20160069	Sample	88	84						
20160071	Sample	87	83						
20160072	Sample	89	86						
27294B1	Blank	86	81						
27294B2	Blank	87	84						
27294B3	Blank	81	77						
27294B4	Blank	86	82						
27294B5	Blank	82	77						
27294MS	Spike	100	94						
27294MSD	Spike Dup	99	94						
27294S1	LCS	99	93						
27294S2	LCS	96	93						
27294S3	LCS	98	92						
QC limits:		73-132	65-133						

Sur 1 4-Bromofluorobenzene (PID) (S)  
Sur 2 4-Bromofluorobenzene (PID) confirmat

\* denotes surrogate recovery outside of OC limits.  
D denotes surrogate recovery is outside of OC limits due to sample dilution, and is not considered an excursion  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS  
A Lab ID with a MS suffix is a matrix spike  
A Lab ID with a MSD suffix is a matrix spike duplicate

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water - LA000006  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)

Method: Water GC Organics

Report: 2019388

Batch: 27295

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20159910	Sample		72						
20159911	Sample		88						
20159912	Sample		92						
20159920	Sample		90						
20159923	Sample		89						
20159971	Sample		99						
20159972	Sample		100						
20159973	Sample		95						
20159974	Sample		93						
20159975	Sample		97						
20159976	Sample		68						
20159977	Sample M1		66						
20159977RE	Re-run G1		41*						
20160004	Sample		88						
20160005	Sample		95						
20160006	Sample		93						
20160049	Sample		99						
20160050	Sample		91						
20160071	Sample		88						
20160072	Sample		89						
27295B1	Blank		90						
27295B2	Blank		90						
27295B3	Blank		89						
27295B4	Blank		85						
27295B5	Blank		86						
27295MS	Spike		84						
27295MSD	Spike Dup		87						
27295S1	LCS		95						
27295S2	LCS		91						
27295S3	LCS		93						

QC limits: 63-125

Sur 2 4-Bromofluorobenzene (S)

\* denotes surrogate recovery outside of QC limits  
 D denotes surrogate recovery is outside of QC limits due to sample dilution, and is not considered an excursion  
 A Lab ID consisting of a batch number with a B suffix is a method blank.  
 A Lab ID consisting of a batch number with a S suffix is an LCS.  
 A Lab ID with a MS suffix is a matrix spike  
 A Lab ID with a MSD suffix is a matrix spike duplicate.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
 Florida Dept. of Health/Hazardous Waste E07595  
 Kansas Dept. of Health & Environment/ELWHW - E-10266  
 New Jersey DEPE/Wastewater - 58002  
 Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
 Foreign Soil Import (U.S. Territories)

Method: Water 8021

Report: 2019388

Batch: 27296

Lab ID	Type and Qualifiers	Sur 1 %Rec	Sur 2 %Rec	Sur 3 %Rec	Sur 4 %Rec	Sur 5 %Rec	Sur 6 %Rec	Sur 7 %Rec	Sur 8 %Rec
20159912	Sample	88	83						
20159916	Sample	87	82						
20159940	Sample	111	119						
20159940DL	Dilution	96	90						
20159941	Sample	81	77						
20159942	Sample	93	89						
20159943	Sample	93	90						
20159944	Sample	85	80						
20159945	Sample	113	111						
20159947	Sample	85	76						
20159948	Sample	81	74						
20160013	Sample G1	136*	154*						
20160014	Sample	120	117						
20160015	Sample G1	123	164*						
20160016	Sample	101	92						
20160017	Sample	122	129						
20160018	Sample G1	146*	128						
20160020	Sample	77	73						
20160049	Sample	100	90						
20160050	Sample	110	100						
27296B1	Blank	81	77						
27296B2	Blank	86	82						
27296B3	Blank	77	74						
27296B4	Blank	82	77						
27296B5	Blank	79	73						
27296MS	Spike	95	91						
27296MSD	Spike Dup	97	92						
27296S1	LCS	99	93						
27296S2	LCS	96	93						
27296S3	LCS	98	92						

QC Limits:                      73-132              65-133

Sur 1: 4-Bromofluorobenzene (PID) (S)  
Sur 2: 4-Bromofluorobenzene (PID) confirmat

\* denotes surrogate recovers outside of QC limits  
D denotes surrogate recovers is outside of QC limits due to sample dilution, and is not considered an excursion.  
A Lab ID consisting of a batch number with a B suffix is a method blank.  
A Lab ID consisting of a batch number with a S suffix is an LCS  
A Lab ID with a MS suffix is a matrix spike  
A Lab ID with a MSD suffix is a matrix spike duplicate.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
Florida Dept. of Health/Hazardous Waste E87595  
Kansas Dept. of Health & Environment/ELWHW E-10266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)





# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27276B1

Description: Med Soil Method Blan

Project No.: 2019388

Method: Med Soil 8021

Batch: 27276

Units: ug/kg

Prep Factor: 1

Leached:

Prepared: 26-Jun-03

Analyzed: 27-Jun-03 14:19 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		25.0
100-41-4	Ethylbenzene	1	ND		25.0
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		25.0
108-88-3	Toluene	1	ND		25.0
1330-20-7	m,p-Xylene	1	ND		25.0
95-47-6	o-Xylene	1	ND		25.0

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water - LA60006  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27277B1

Description: Med Soil Method Blan

Project No.: 2019388

Method: Med Soil GC Organics

Batch: 27277

Units: ug/kg

Prep Factor: 1

Leached:

Prepared: 26-Jun-03

Analyzed: 27-Jun-03 14:19 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics	1	ND		2500

1 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW E 10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)

# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27294B1

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27294

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 27-Jun-03 16:44 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LAC03006  
Florida Dept. of Health/Hazardous Waste E87595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Salm Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555



www.pacelabs.com

Lab ID: 27294B2

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27294

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 28-Jun-03 00:25 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
Florida Dept. of Health/Hazardous Waste EB7595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 Saint Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27294B3

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27294

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 28-Jun-03 05:18 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
 DF denotes Dilution Factor.  
 RL denotes sample Reporting Limit.  
 On list's qualifiers: Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water - LA000006  
 Florida Dept. of Health/Hazardous Waste - E37595  
 Kansas Dept. of Health & Environment/ELWHW - E 10265  
 New Jersey DEPE/Wastewater - 58092  
 Tennessee Dept. of Environment & Conservation/Div. of UST (Fire)  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
 Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27294B4

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27294

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 30-Jun-03 10:43 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit  
DF denotes Dilution Factor  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water - LA000086  
Florida Dept. of Health/Hazardous Waste - EB7595  
Kansas Dept. of Health & Environment/ELWHW - E 16266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (FHA)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)





# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27294B5

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27294

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 01-Jul-03 16:41 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water - LA000006  
Florida Dept. of Health/Hazardous Waste - E87595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)

# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

 **Pace Analytical™**  
New Orleans Laboratory

www.pacelabs.com

Lab ID: 27295B1

Description: Water Method Blank

Project No.: 2019388

Method: Water GC Organics

Batch: 27295

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 27-Jun-03 16:44 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics	1	ND		50.0
	TPH - Gasoline Range Organics	1	ND		50.0

2 compound(s) reported

ND denotes Not Detected at or above the reporting limit  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LA000606  
Florida Dept. of Health/Hazardous Waste E87595  
Kansas Dept. of Health & Environment/ELWHW E 10266  
New Jersey DEPE/Wastewater - 59002  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27295B2

Description: Water Method Blank

Project No.: 2019388

Method: Water GC Organics

Batch: 27295

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 28-Jun-03 00:25 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics	1	ND		50.0
	TPH - Gasoline Range Organics	1	ND		50.0

2 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
Florida Dept. of Health/Hazardous Waste E67595  
Kansas Dept. of Health & Environment/ELWHW - E-10266  
New Jersey DEPE/Wastewater - 58002  
Tennessee Dept. of Environment & Conservation/Div of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)





# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27295B3

Description: Water Method Blank

Project No.: 2019388

Method: Water GC Organics

Batch: 27295

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 28-Jun-03 05:18 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics	1	ND		50.0
	TPH - Gasoline Range Organics	1	ND		50.0

2 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LAC00006  
Florida Dept. of Health/Hazardous Waste - EB7595  
Kansas Dept. of Health & Environment/ELWHW E-10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
Foreign Soil Import (U.S. Territories)

# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

 **Pace Analytical™**  
New Orleans Laboratory

www.pacelabs.com

Lab ID: 27295B4

Description: Water Method Blank

Project No.: 2019388

Method: Water GC Organics

Batch: 27295

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 30-Jun-03 10:43 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics	1	ND		50.0
	TPH - Gasoline Range Organics	1	ND		50.0

2 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LAC0006  
Florida Dept. of Health/Hazardous Waste E87595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 Saint Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27295B5

Description: Water Method Blank

Project No.: 2019388

Method: Water GC Organics

Batch: 27295

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 01-Jul-03 16:42 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
	TPH - Gasoline Range Organics	1	ND		50.0
	TPH - Gasoline Range Organics	1	ND		50.0

2 compound(s) reported

ND denotes Not Detected at or above the reporting limit  
 DF denotes Dilution Factor  
 RL denotes sample Reporting Limit.  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LA300006  
 Florida Dept. of Health/Hazardous Waste - E87595  
 Kansas Dept. of Health & Environment/ELWHW E 10266  
 New Jersey DEPE/Wastewater - 58032  
 Tennessee Dept. of Environment & Conservation/Div of UST (File)  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
 Foreign Soil Import (U.S. Territories)





# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27296B1

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27296

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 28-Jun-03 05:18 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit  
DF denotes Dilution Factor  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA000006  
Florida Dept. of Health/Hazardous Waste E87595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div. of UST (File)  
U.S. Dept. of Agriculture/Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27296B2

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27296

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 30-Jun-03 10:43 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit.

DF denotes Dilution Factor.

RL denotes sample Reporting Limit.

On lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:

Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA00006

Florida Dept. of Health/Hazardous Waste E87595

Kansas Dept. of Health & Environment/ELWHW - E-10266

New Jersey DEPE/Wastewater 58002

Tennessee Dept. of Environment & Conservation/Div. of UST (File)

U.S. Dept. of Agriculture Animal & Plant Health Inspection Services

Foreign Soil Import (U.S. Territories)



# Report of Method Blank

Pace Analytical Services, Inc.  
 1000 Riverbend Blvd, Suite F  
 Saint Rose, LA 70087  
 Phone: 504.469.0333  
 Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27296B3

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27296

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 30-Jun-03 16:37 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
 DF denotes Dilution Factor  
 RL denotes sample Reporting Limit  
 Qu lists qualifiers. Specific qualifiers are defined at the end of the report

Laboratory Certifications:  
 Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water LA00006  
 Florida Dept. of Health/Hazardous Waste CB7595  
 Kansas Dept. of Health & Environment/ELWHW E-10266  
 New Jersey DEPE/Wastewater - 58002  
 Tennessee Dept. of Environment & Conservation/Div of UST (F)el  
 U.S. Dept. of Agriculture Animal & Plant Health Inspection Services -  
 Foreign Soil Import (U.S. Territories)

# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Lab ID: 27296B4

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27296

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 01-Jul-03 16:41 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit  
DF denotes Dilution Factor  
RL denotes sample Reporting Limit  
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP): Drinking Water LA000005  
Florida Dept. of Health/Hazardous Waste EB7595  
Kansas Dept. of Health & Environment: ELWHW - E-10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div of IUST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)





# Report of Method Blank

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

www.pacelabs.com

Phone: 504.469.0333  
Fax: 504.469.0555

Lab ID: 27296B5

Description: Water Method Blank

Project No.: 2019388

Method: Water 8021

Batch: 27296

Units: ug/L

Prep Factor: 1

Leached:

Prepared:

Analyzed: 01-Jul-03 21:54 CCW

CAS Number	Parameter	Dilution	Result	Qu	Reporting Limit
71-43-2	Benzene	1	ND		0.500
100-41-4	Ethylbenzene	1	ND		0.500
1634-04-4	Methyl tert-butyl ether (MTBE)	1	ND		0.500
108-88-3	Toluene	1	ND		0.500
1330-20-7	m,p-Xylene	1	ND		0.500
95-47-6	o-Xylene	1	ND		0.500

6 compound(s) reported

ND denotes Not Detected at or above the reporting limit.  
DF denotes Dilution Factor.  
RL denotes sample Reporting Limit.  
Qu lists qualifiers - Specific qualifiers are defined at the end of the report

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP) Drinking Water - LA000006  
Florida Dept. of Health/Hazardous Waste - E07595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater - 58062  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)



## Report Qualifiers

Pace Analytical Services, Inc.  
1000 Riverbend Blvd, Suite F  
Saint Rose, LA 70087

Phone: 504.469.0333  
Fax: 504.469.0555

www.pacelabs.com

Project No.: **2019388**

### Analyte Qualifiers

Qualifier	Qualifier Description
G1	Interferences are present which caused poor surrogate recovery.
Ph	The relative percent difference between the two detectors is greater than 40%, indicating interference on one or more detectors. The higher of the two values is reported.

### General Qualifiers

Qualifier	Qualifier Description
D1	The analysis was performed at a dilution due to the high analyte concentration.

### QC Qualifiers

Qualifier	Qualifier Description
Q5	Insufficient sample was provided to perform matrix spike analyses on any sample in this analytical batch. Method performance for this analyte has been demonstrated by the laboratory control sample recovery.

Laboratory Certifications:  
Louisiana Dept. of Health and Hospitals (ELAP)/Drinking Water LA00006  
Florida Dept. of Health/Hazardous Waste EB7595  
Kansas Dept. of Health & Environment/ELWHW - E 10266  
New Jersey DEPE/Wastewater 58002  
Tennessee Dept. of Environment & Conservation/Div or UST (File)  
U.S. Dept. of Agriculture Animal & Plant Health Inspection Services  
Foreign Soil Import (U.S. Territories)

Company: **CHEYRON**  
Address: **P.O. Box 4254**  
**HOUSTON TX 77210**

Report To: **SETH DOMANIGUE (CRA)**  
Copy To: **BILL DELANIG (CHEYRON)**  
Invoice To: **BILL DELANIG (CHEYRON)**  
PO:

Project Name: **111 LOBBELL HWY PORT AUENLA**  
Project Number: **9392**  
SS # **00109123 S. Domangue 1/1/03**

Project #: **EPN: 2019388**  
Profile #:

Requested Analysis: **TR-GRB 8015**  
**BTEX/MTBE Re2/B**

Client Information (Check quote/contract):  
Requested Due Date: **STD**  
\* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.  
Turn Around Time (TAT) in calendar days.

ITEM #	SAMPLE ID	One character per box (A-Z, 0-9, -)	Sample IDs MUST BE UNIQUE	MATRIX CODE	Valid Matrix Codes	DATE COLLECTED	mm/dd/yy	TIME COLLECTED	hh:mm a/p	# Containers	Preservatives						Remarks / Lab ID		
											Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>		Methanol	Other
1	S B - 1 (2-4')			SL	WT	6/23/03		0930		4		X						20159900	Method 5035
2	S B - 1 (4-6')				WT			0935		4		X						20159901	
3	S B - 2 (4-6')				WT			1030		4		X						20159902	
4	S B - 2 (10-12')				WT			1040		4		X						20159904	
5	S B - 3 (2-4')				WT			1120		4		X						20159906	
6	S B - 3 (14-16')				WT			1145		4		X						20159909	
7	S B - 1				WT			1140		4		X						20159910	
8	S B - 2				WT			1145		4		X						20159911	
9	S B - 3				WT			1245		4		X						20159912	
10	WT - 1				WT					2		X						20159910	provided by lab
11																			
12																			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Lab. Cooler		6/24/03	1		Seth Domangue / CRA	6/24/03	1430	Seth Domangue / CRA	6/24/03	1430
Temp in °C					Seth Domangue / CRA	6/25/03	13:00	Seth Domangue / CRA	6/25/03	13:00
Received on Ice					Seth Domangue / CRA	6/25/03	16:05	Seth Domangue / CRA	6/25/03	16:05
Sealed Cooler					Seth Domangue / CRA	6/25/03	16:05	Seth Domangue / CRA	6/25/03	16:05
Samples Intact					Seth Domangue / CRA	6/25/03	16:05	Seth Domangue / CRA	6/25/03	16:05

SAMPLE NOTES  
Please dispose of all samples  
NOT listed on CCL

Additional Comments: **CRA Project #: 27513-00**

SAMPLER NAME AND SIGNATURE  
PRINT Name of SAMPLER: **SETH DOMANIGUE / SETH HENDERSON**  
SIGNATURE of SAMPLER: *Seth Domangue*  
DATE Signed (MM/DD/YY): **06/24/03**



1450 U.S. POSTAGE P8553118  
 7220 02.210 JUL 10 2003  
 0552 MAILED FROM ZIP CODE 70816

**First Class Mail**  
**First Class Mail**



**Conestoga-Rovers & Associates**  
 4915 S. Sherwood Forest Blvd  
 Baton Rouge, LA 70816  
 (225)292-9007

LDEQ  
 SURVEILLANCE DIVISION - SPOC  
 PO BOX 82215  
 BATON ROUGE LA 70884-2215

**RECEIVED**  
 JUL 15 2003  
 DEQ  
 Single Point of Contact





State of Louisiana  
Department of Environmental Quality



KATHLEEN BABINEAUX BLANCO  
GOVERNOR

NOV 22 2005

MIKE D. McDANIEL, Ph.D.  
SECRETARY

CERTIFIED MAIL - RETURN RECEIPT REQUESTED 7004 1160 0001 9950 8441

Ms. Amy Sierra  
Chevron Environmental Management Company  
P.O. Box 4256  
Houston, TX 77210-4256

RE: No Further Action Notification  
Chevron #60109392; **Agency Interest (AI) No. 18777**  
UST FID No. 61-001981, Incident No. 62718  
111 Lobdell Highway  
Port Allen, Louisiana; West Baton Rouge Parish

Dear Ms. Sierra:

The Louisiana Department of Environmental Quality – Remediation Services Division (LDEQ-RSD) has completed its review of your Report of Monitor Well Plugging and Abandonment Activities/ NFA-ATT Request dated October 18, 2005 for the above referenced area of investigation located at 111 Lobdell Highway in West Baton Rouge Parish. Based on our review of this document and all previously submitted information, we have determined that no further action is necessary at this time. The Basis of Decision for this notification is attached.

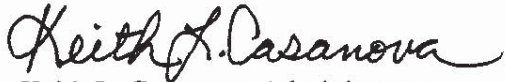
No soils may be removed from this site without prior approval from LDEQ unless they are removed and disposed at a permitted disposal facility. Prior to the construction of enclosed structures over any portion of the impacted area, further evaluation and approval from LDEQ is warranted.



Ms. Amy Sierra  
Page 2

If you have any questions or need further information, please call Charles S. Andrews at (225) 219-3227. Thank you for your cooperation in addressing this area.

Sincerely,

A handwritten signature in black ink that reads "Keith L. Casanova". The signature is written in a cursive style with a long, sweeping tail on the letter "a".

Keith L. Casanova, Administrator  
Remediation Services Division

csa

Attachment

c: LDEQ File Scanning Room 144-UST File  
Claire Bladen, Motor Fuels Trust Fund  
Mr. Peter Smith, CRA

**Chevron Service Station #60109392**  
**AI NO. 18777**  
**BASIS OF DECISION FOR NO FURTHER ACTION**

The Louisiana Department of Environmental Quality – Remediation Services Division (LDEQ-RSD) has determined that the Chevron Service Station #60109392 requires No Further Action at this time.

The land at this location has been used as a service station/convenience store facility since 1986. Chevron owns the property and plans to continue operating the service station/convenience store business at this location for the foreseeable future. Adjacent property use is all light commercial (hotels, service stations and fast food restaurants) and is zoned by the City of Port Allen as C-1 Commercial. Conestoga-Rovers & Associates performed a limited Baseline Site Assessment as part of the Chevron/Texaco merger with a report date of July 14, 2003. As a result of the findings of the limited investigation, Conestoga-Rovers & Associates completed an Additional Site Investigation/RECAP Report dated April 4, 2005.

Remedial standards were developed for this property using LDEQ's RECAP Management Option 1 and Management Option 2 Appendix I. The standards that were applied to this site are listed in the tables that appear at the end of this BOD. No phase-separated hydrocarbons were observed in any of the soil borings or monitoring wells. The shallow groundwater at the site was determined through site-specific data to be Class 3 Non-Drinking Water. There are no supply wells screened in this interval within a one mile radius of the site.

Soil and groundwater sampling has confirmed that constituent of concern concentrations do not exceed the established site-specific standards, so no remedial action was required. The additional investigation determined that constituents are not impacting adjacent property.

No Further Action is granted when contamination is confirmed to exist at concentrations that do not exceed the established standards.

Chevron Environmental Management Company has provided the Department with a true copy of the Conveyance Notice certified and recorded with the West Baton Rouge Parish Clerk of Court. In accordance with LAC 33:I.Chapter 13, if land use changes from industrial to non-industrial, the responsible party shall notify the LDEQ within thirty (30) days and the Area of Investigation shall be reevaluated to determine if conditions are appropriate for the proposed land use. Future use may dictate additional remedial activities.

All six of the monitoring wells were plugged and abandoned on April 27, 2005. An inspection performed on May 27, 2005 confirmed that all soil cuttings and well purge water have been removed from the site.

Constituent of Concern Soil	Maximum Concentration (mg/kg)	Limiting RECAP Standard (mg/kg)
Benzene	0.933	MO-1 Soil <sub>esi</sub> 2.5
Toluene	ND (0.261)	MO-1 Soil <sub>esi</sub> 18
Ethyl benzene	1.24	MO-1 Soil <sub>esi</sub> 600
Xylenes	0.464	MO-1 Soil <sub>esi</sub> 12.8
MTBE	ND (0.261)	MO-1 Soil <sub>esi</sub> 1,100
TPH-G	267	MO-2 Soil <sub>esi</sub> 1,100

Constituent of Concern Groundwater	Maximum Concentration (mg/L)	Limiting RECAP Standard (mg/L)
Benzene	0.221	MO-1 GW <sub>esi</sub> 7.2
Toluene	0.00693	MO-1 GW <sub>esi</sub> 28
Ethyl benzene	0.0452	MO-1 GW <sub>esi</sub> 713
Xylenes	0.0172	MO-1 GW <sub>esi</sub> 22
MTBE	0.0415	MO-1 GW <sub>esi</sub> 2,125
Aliphatics C <sub>6</sub> -C <sub>8</sub>	3.1	MO-1 GW <sub>esi</sub> 29
Aliphatics C <sub>8</sub> -C <sub>10</sub>	0.354	MO-1 GW <sub>esi</sub> 0.99
Aromatics C <sub>8</sub> -C <sub>10</sub>	0.302	MO-1 GW <sub>esi</sub> 17.75

**Additional information on the details of the investigation and evaluation of this site may be obtained from LDEQ's Public Records Center located in the Galvez Building, Room 127, 602 N. Fifth Street, Baton Rouge, LA 70802. Additional information regarding the Public Records may be obtained by calling (225) 219-3168 or by emailing [publicrecords@la.gov](mailto:publicrecords@la.gov).**



7004 3160 0001 9950 8441  
1448 0566 1000 0971 4002

**U.S. Postal Service**  
**CERTIFIED MAIL<sup>®</sup> RECEIPT**  
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To  
**Ms. Amy Sierra**  
**Chevron Environmental Management Co.**  
P.O. Box 4256  
Houston, TX 77210-4256

NFA/BDD

OFFICE OF ENVIRONMENTAL ASSESSMENT  
REMIEDIATION SERVICES DIVISION

PROJECT: Chernob 60109392 ORIGINATOR: A. Wickens  
AI#: 18777 OTHER #:

SECTION: Gp3  
DATE: 15 Nov 05

	Req'd.	Signature	Date	Comments
Section Mgr./Supvr.	<input checked="" type="checkbox"/>	<i>[Signature]</i>	11/15/05	
Adm. Assistant	<input checked="" type="checkbox"/>	<i>[Signature]</i>	11/15/05	
Administrator	<input checked="" type="checkbox"/>	<i>[Signature]</i>	11/15/05	see comments - OK
Legal	<input type="checkbox"/>	<i>[Signature]</i>	11-22-05	NFA
Other ( )	<input type="checkbox"/>			
Assistant Secretary	<input type="checkbox"/>			
Deputy Secretary	<input type="checkbox"/>			
Secretary	<input type="checkbox"/>			
Additional Comments				