

**SITE INSPECTION  
SEVEN OUT LLC TANK  
901 Francis Street  
Waycross, Ware County, GA 31501  
CERCLIS ID NO. GAN000407811  
Vol. 3 of 3**



**10509016**

**APPENDIX H**  
**REFERENCES**



## REFERENCE 1

①  
EPA540-R-92-021  
Directive 9345.1-05  
September 1992

# **Guidance for Performing Site Inspections Under CERCLA**

## **Interim Final**

Hazardous Site Evaluation Division  
Office of Solid Waste and Emergency Response  
U.S. Environmental Protection Agency  
Washington, DC 20460

## REFERENCE 2

**MAPQUEST.**

901 Francis St  
Waycross GA  
31503-2335 US

**Notes:**

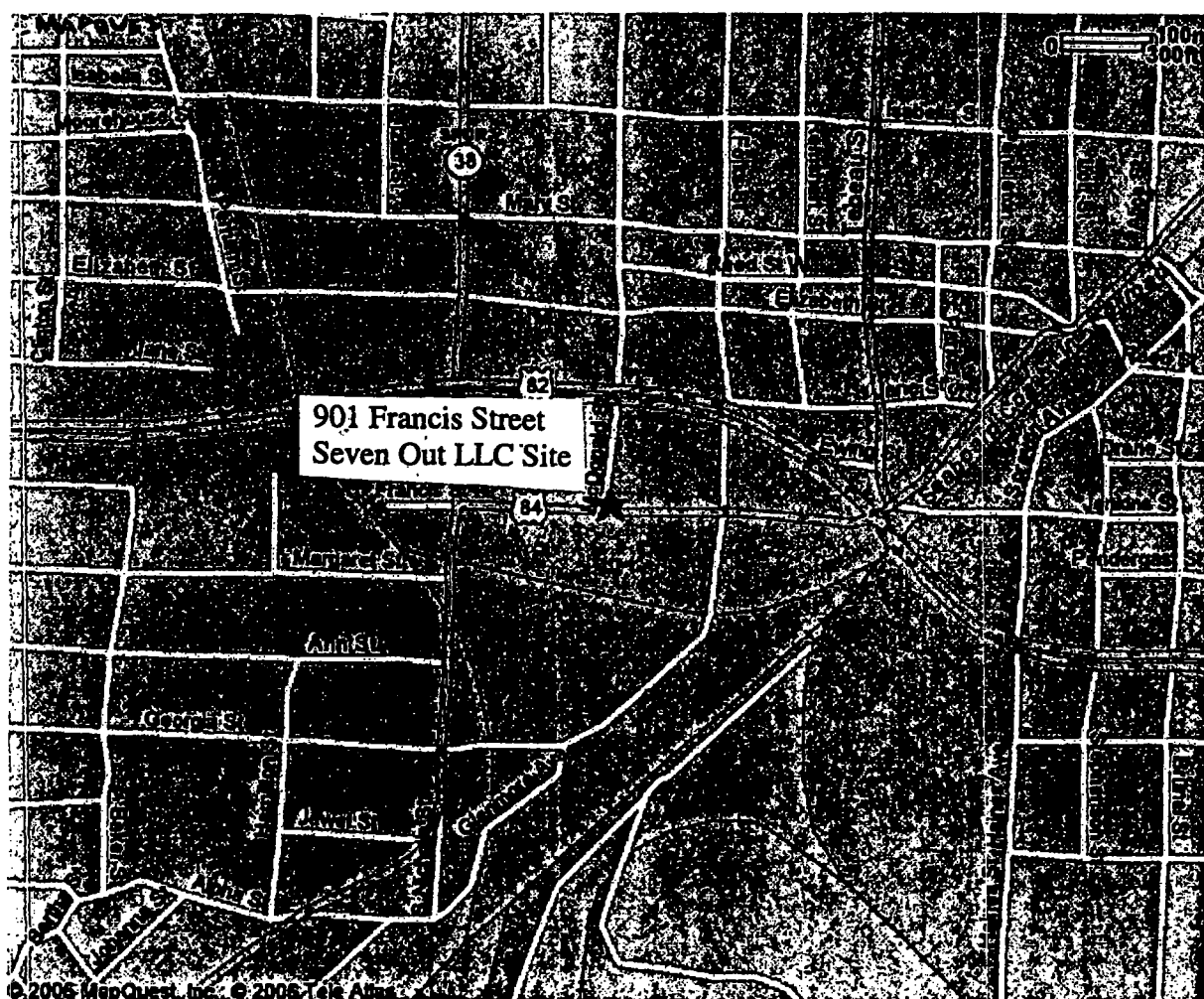
Seven Out LLC Tank

*Escape Traffic.*

Get a Pioneer navigation system.

DriveHappier.com

**Pioneer**  
sound vision soul



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## REFERENCE 3



## Tetra Tech EM Inc.

Northmont Business Park ♦ 1955 Evergreen Boulevard, Suite 300 ♦ Duluth, GA 30096 ♦ (678) 775-3080 ♦ FAX (678) 775-3138

August 19, 2004

Mr. Terry Stilman  
On-Scene Coordinator  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW, 11th Floor  
Atlanta, Georgia 30303

**Subject:        Removal Assessment Sampling Plan  
                 Seven Out, LLC Site  
                 Waycross, Ware County, Georgia  
                 EPA Contract No. 68-W-00-120 (START 4)  
                 Technical Direction Document No. 4T-04-07-A-011**

Dear Mr. Stilman:

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting one electronic copy of the removal assessment (RA) Sampling Plan for the Seven Out, LLC site in Waycross, Ware County, Georgia. The planned sampling event is scheduled for the week of August 23, 2004.

Lab analysis for the waste samples will be performed by AES Labs in Atlanta, Georgia. Please contact me at (678)775-3108 if you have any questions or comments regarding this sampling plan.

Sincerely,

John Mitchell  
START Project Manager

Enclosure

cc:     Matthew Monsees, EPA Project Officer  
         Don Rigger, EPA ERRB Removal Operations Section Chief (w/o enclosure)  
         Sam Jamison, EPA Contract Officer (w/o enclosure)  
         Steve Pierce, START Leader (w/o enclosure)  
         START File

**REMOVAL ASSESSMENT  
SAMPLING AND ANALYSIS PLAN  
SEVEN OUT, LLC SITE  
WAYCROSS, WARE COUNTY, GEORGIA**

**DRAFT**

**Prepared for  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 4  
Atlanta, Georgia 30303**

Contract No.	:	68-W-00-120
TDD No.	:	4T-04-07-A-011
Date Prepared	:	August 19, 2004
EPA Task Monitor	:	Terry Stilman
Telephone No.	:	(404) 562-8748
Prepared by	:	Tetra Tech EM Inc.
START Project Manager	:	John Mitchell
Telephone No.	:	(678) 775-3108

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## 1.0 INTRODUCTION

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) received Technical Direction Document (TDD) No. 4T-04-07-B-011 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W-00-120. Under this work assignment, START will assist EPA in conducting removal assessment (RA) activities at the Seven Out, LLC site operating under the facility name of BCX Corporation, located in Waycross, Ware County, Georgia. This sampling plan specifies the type, number, and locations of samples to be collected during the RA, as well as the sampling methodology that will be followed.

The general purposes of an RA are to collect information on current site conditions, including the presence and nature of contamination, provide technical assistance for the RA sampling activities, and determine the need for removal actions at the site.

RA activities will include the following:

- Collecting environmental samples
- Interviewing the site owner and/or State representatives
- Using air monitoring instrumentation to screen the site
- Photographing site features and sampling locations
- Assessing the need for removal activities
- Preparing sampling and chain-of-custody documentation

This RA sampling and analysis plan for the Seven Out site is organized as follows:

- Section 2.0 presents facility background information.
- Section 3.0 describes sampling locations used to determine the hazardous constituents of tank contents.

To further ensure that all appropriate data quality objectives (DQO) are met, field and laboratory activities will be performed in accordance with prescribed guidance documents, including the EPA Science and Ecosystem Support Division (SESD) Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISOPQAM), EPA Contract

Laboratory Program (CLP) Statement of Work (SOW) for Inorganics Analysis, the CLP National Functional Guidelines for Inorganic Data Review, the Region 4 Data Validation Standard Operating Procedures (SOP) for CLP Routine Analytical Services, Revision 2.1, and the Region 4 Analytical Support Branch Laboratory Operations and Quality Assurance Manual (Refs. 1; 2; 3; 4; 5; 6; 7; and 8 as appropriate). These guidance documents specifically apply to sample types, sampling procedures, field quality assurance and quality control (QA/QC) samples, laboratory procedures, and data validation.

## **2.0 BACKGROUND**

The Seven Out site is located at 901 Francis Street in Waycross, Ware County, Georgia. The facility is less than 2 years old and operates as an industrial wastewater treatment facility. The property has 27 storage/treatment tanks with a combined capacity over 450,000 gallons. Wastewater is treated with the treatment process being adjusted for each batch to ensure the end product meets pretreatment standards. Wastes are precipitated out using sodium hydroxide, aluminum sulfate, ferric acid, and sulfuric acid which are stored in bulk tanks on site. The precipitated solids are then sent to a filter press. The filter press solids are sent to the Broadhurst Environmental landfill in Screvin, Georgia. The treated wastewater is discharged to the City of Waycross publicly owned treatment works (POTW) using the City's collection system.

The City of Waycross issued Notices of Violation and an Administrative Order to the facility due to many exceedances of the company's pre-treatment permit. The facility received 8 enforcement letters between May 2003 and December 2003 from the City of Waycross. The facility voluntarily ceased accepting industrial wastewater and stopped discharging to the Waycross POTW on March 1, 2004.

The plant manager informed Georgia Department of Natural Resources (GADNR) personnel that there was no documentation available that demonstrated exactly what was currently in each tank. Some information on past customers and waste profiles were identified. However, information on the current contents of the tanks is not available.

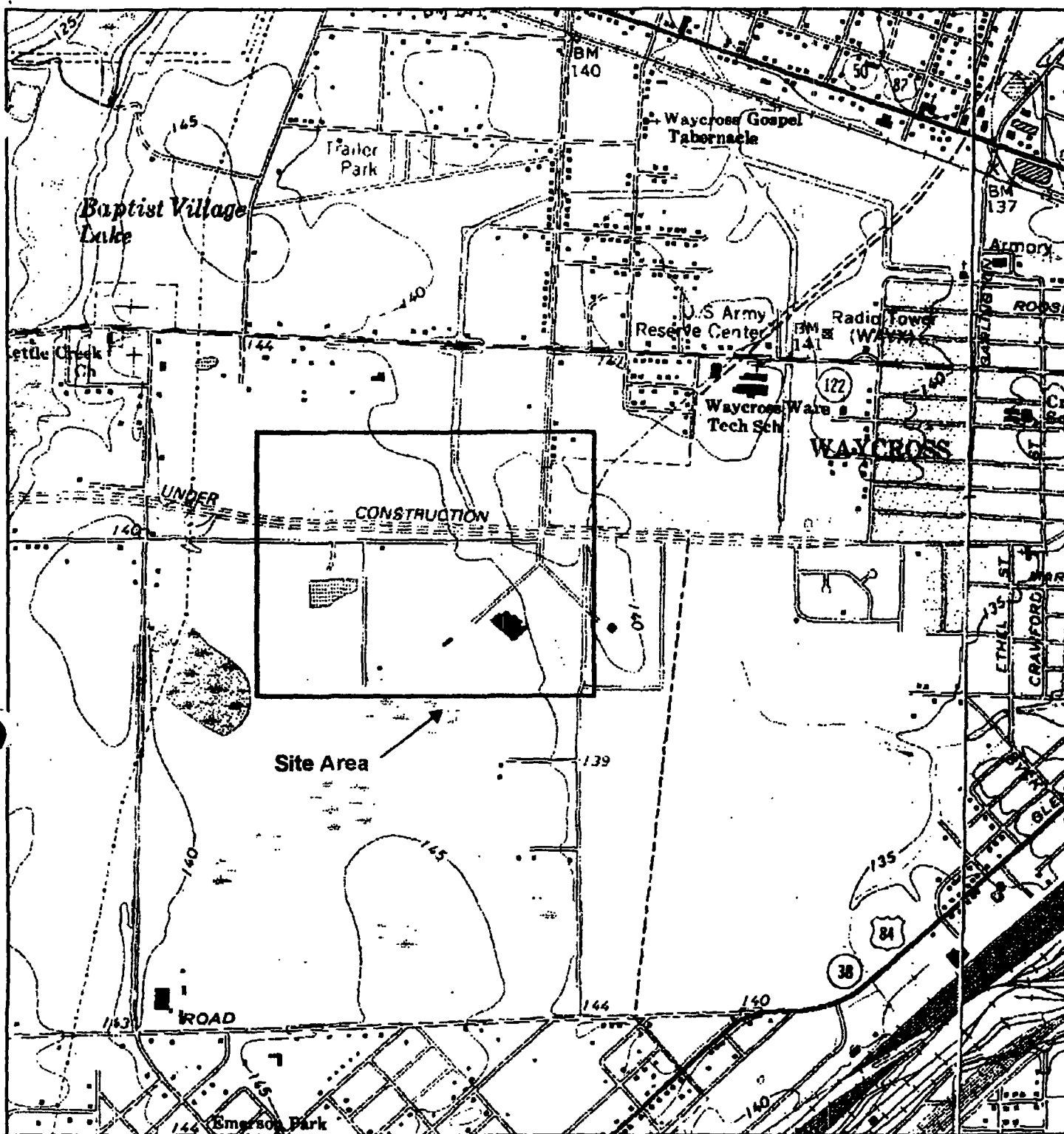
### 3.0 SAMPLING PLAN

The primary purpose of the RA is to collect data to evaluate the need for a removal action at the site. Tetra Tech will focus on collecting samples from all onsite storage and treatment tanks with an emphasis on the settled fractions and/or sludges. Figure 1 is the topographic map of the area, Figure 2 is the Site Layout Map. Table 1 outlines the numbers and types of samples to be collected during the RA and the rationale for each sampling interval from within the tank. The tank numbers will be used and an identifier with additional information based on whether the sample is a sludge/tank bottom, wastewater or light non-aqueous phase liquid (LNAPL).

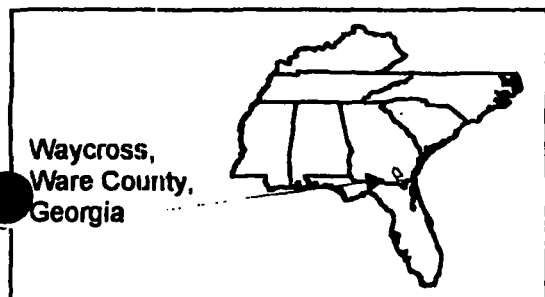
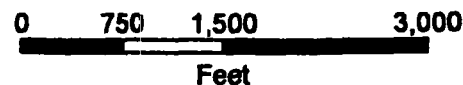
All waste samples will be submitted to AES Laboratories in Atlanta, Georgia for analysis of Target Analyte List (TAL) metals, TAL Volatiles, TAL Semi-volatiles and selected TCLP for metals with analytical service parameters in accordance with the following EPA guidance document, as appropriate:

- U.S. Environmental Protection Agency, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA 540/R-94/013, February 1994.
- U.S. Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services, Revision 2.1, July 1999.
- U.S. Environmental Protection Agency, Science and Ecosystem Support Division Region 4, Analytical Support Branch Laboratory Operations and Quality Assurance Manual, July 1, 2001.

Table 2 presents QA/QC samples to be collected during the RA field activities. Table 3 presents the analytical methodology for each sample matrix, as well as the appropriate sample container and sample preservative. Sampling and field QA/QC procedures for RA field activities will be conducted in accordance with the EPA SESD Region 4 EISOPQAM (Ref. 1).



Modified from USGS 7.5 Minute Quadrangles: Waycross East, GA, 1993; Waycross West, GA, 1993



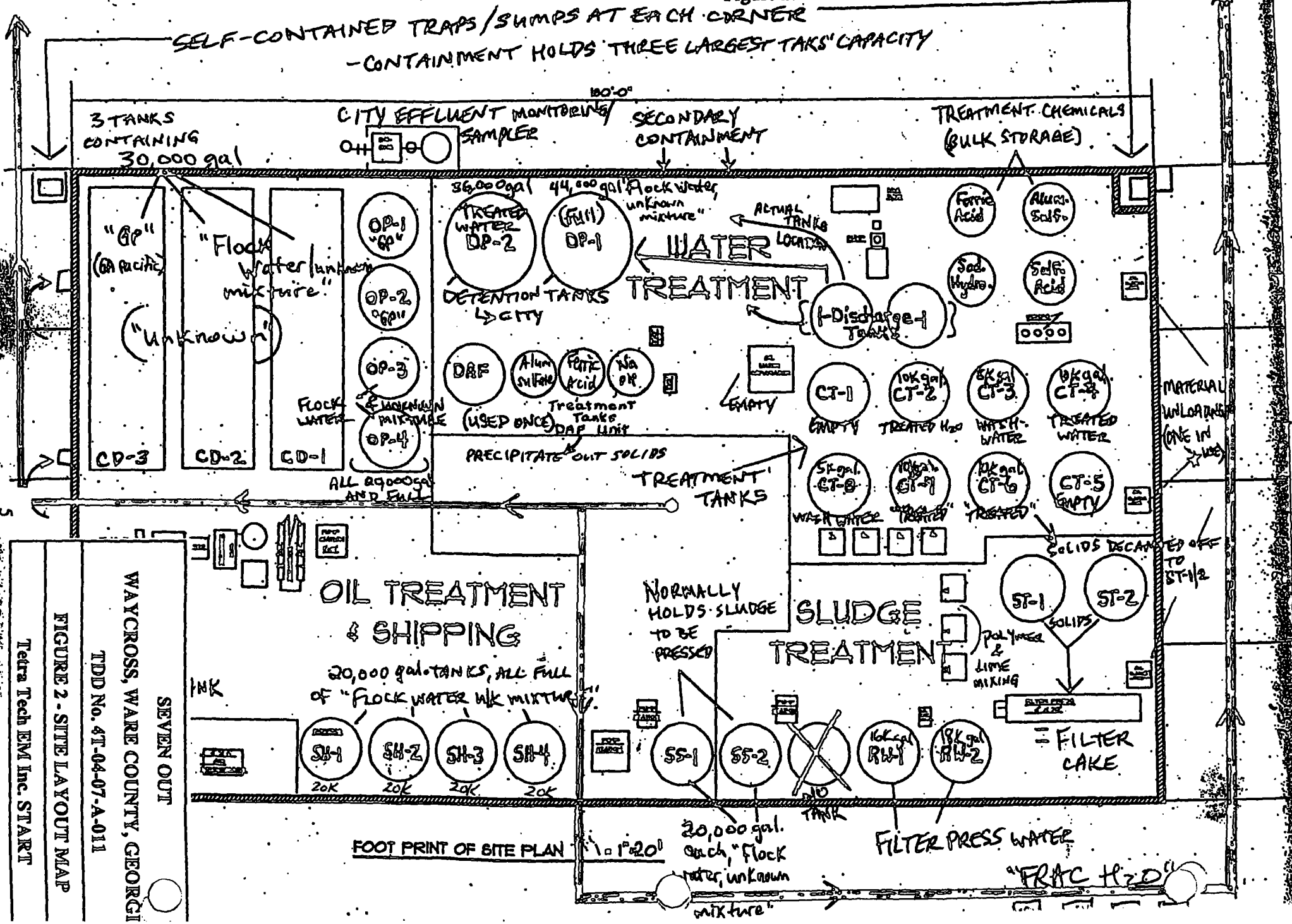
SEVEN OUT  
WAYCROSS, WARE COUNTY, GEORGIA  
TDD No. 4T-04-07-A-011

FIGURE 1 - FACILITY LOCATION MAP



Tetra Tech EM Inc. START

**SOURCE:**  
Evacuation Site Plan



**TABLE 1**  
**SAMPLING PLAN**

<b>Sample Number</b>	<b>Sample Type/Matrix</b>	<b>Location</b>	<b>Rationale</b>
SO- 1 to 40- w/tank identifier	Grab/Sludge wastewater or LNAPL	Tank Specific	Determine presence of hazardous substances
SO- 1 to 5 - w/tank identifier	Grab/Sludge	Tank Specific	Determine presence of hazardous substances

Notes:        SO        - Seven Out, LLC Site  
                  LNAPL   - Light Non-Aqueous Phase Liquid Sample

**TABLE 2**  
**QUALITY ASSURANCE AND QUALITY CONTROL SAMPLING PLAN**

<b>Sample Number</b>	<b>Quality Control Sample Type</b>	<b>Rationale</b>
SO-WB-01	Water trip blank	Determine if site conditions or sample handling procedures are influencing sample results
SO-RB-01	Equipment rinsate blank	Determine if decontamination procedures adequately clean equipment
SO-XX-XX	MS/MSD	Provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology
SO-XX-XX	Field Duplicate	Measure both field and laboratory precision

Notes: SD - Seven Out Site  
 WB - Water blank  
 RB - Rinsate blank  
 MS/MSD - Matrix spike/matrix spike duplicate

**TABLE 3**  
**ANALYTICAL METHODOLOGY, REQUIRED SAMPLE CONTAINERS,**  
**AND PRESERVATIVES**

Matrix	Analysis	Method	Sample Container	Preservative
Sludge	TCLP	1311/6010B	4 oz Glass	Cool to 4 °C
Sludge	TAL Metals	6010B/7471A	8 oz Glass	Cool to 4 °C
Sludge	TAL Volatiles	8260B	8 oz Glass	Cool to 4 °C
Sludge	TAL Semi-Volatiles	8270C	8 oz Glass	Cool to 4 °C
Waste Water	TAL Metals	6010B/7471A	2 - 1 Liter Poly	Cool to 4 °C
Waste Water	TAL Volatiles	8260B	2 - 40ml	Cool to 4 °C
Waste Water	TAL Semi-Volatiles	8270C	1 Liter Amber Glass	Cool to 4 °C

Notes: EPA - U.S. Environmental Protection Agency  
TCLP - Total  
°C - Degree Celsius  
oz - Ounce  
ml - Milliliter



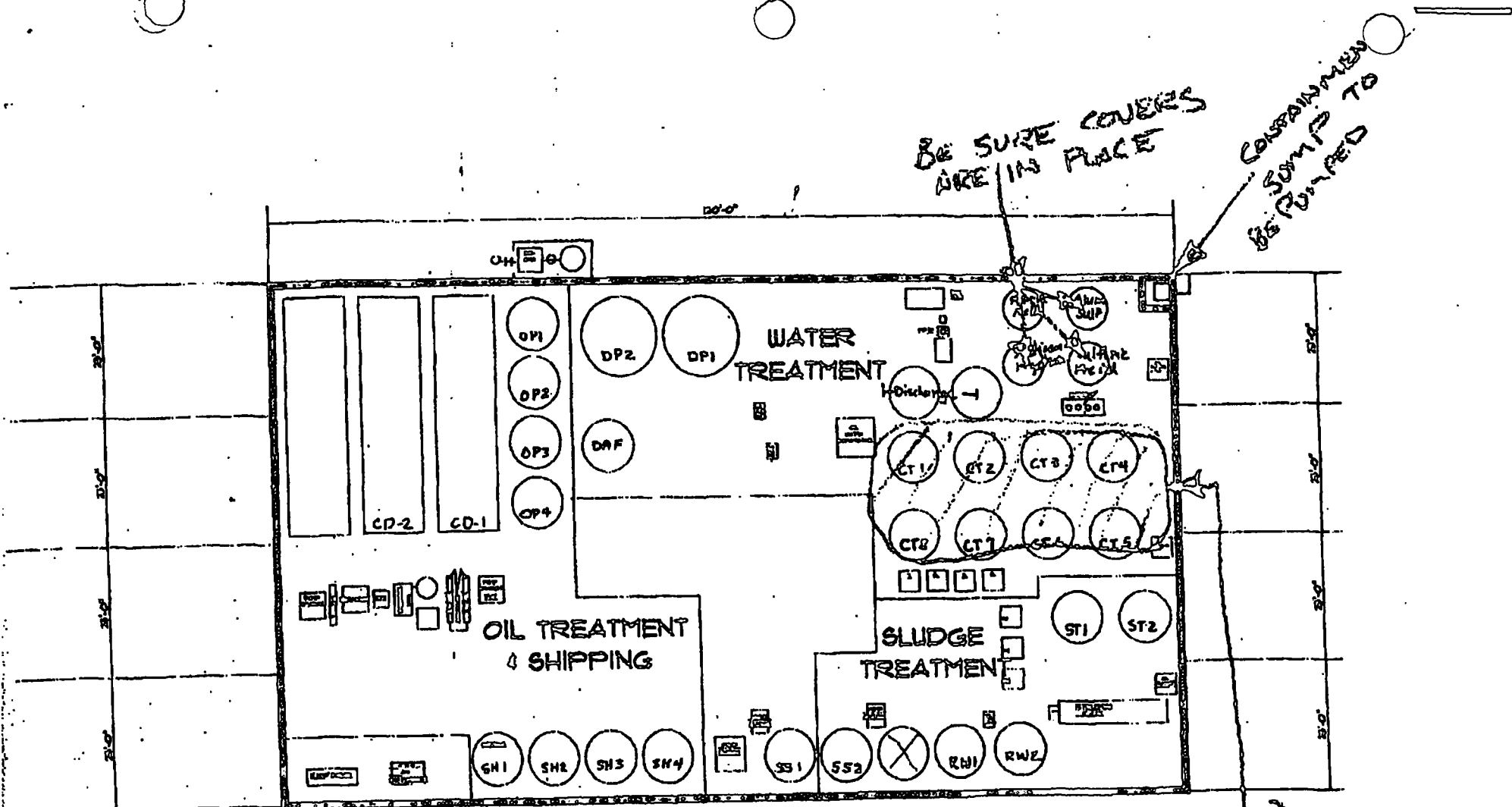
SESD Region 4 EISOPQAM, the CLP SOWs for Inorganic Analysis, the CLP National Functional Guidelines for Inorganic Data Review, the Region 4 Data Validation SOP for CLP Routine Analytical Services, Revision 2.1, and the Region 4 Analytical Support Branch Laboratory Operations and Quality Assurance Manual (Refs. 1; 2; 3; 4; 5; 6; and 7, as appropriate).

Tetra Tech will collect a total of 40 waste sludge/wastewater samples from the tanks on site. Tetra Tech will visually survey the tank contents using collection methods to include sludge judges, disposable bailers, and Bacon bomb sampling devices. Access to the tanks will be gained through the use of a 45 foot articulating man-lift and conventional ladders. Air monitoring will be conducted around the tanks prior to sampling activities.

All sludge and wastewater samples will be collected and placed on ice in accordance with the EPA SESD Region 4 EISOPQAM (Ref. 1). The sample collection strategy is subject to change based on the observed characteristics of the tank contents or at the discretion of the EPA on-scene coordinator (OSC).

## **REFERENCES**

1. U.S. Environmental Protection Agency, Science and Ecosystem Support Division (SESD) Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISOPQAM), May 1996, Includes 1997 Revisions.
2. U.S. Environmental Protection Agency, Contract Laboratory Program Statement of Work for Organics Analysis, OLM04.2a, May 1999, with contract modifications.
3. U.S. Environmental Protection Agency, Contract Laboratory Program Statement of Work for Inorganics Analysis, ILM04.1, January 2000.
4. U.S. Environmental Protection Agency, Contract Laboratory Program National Functional Guidelines for Organic Data Review, EPA 540/R-99/008, October 1999.
5. U.S. Environmental Protection Agency, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA 540/R-94/013, February 1994.
6. U.S. Environmental Protection Agency, Region 4, SESD, Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services, Revision 2.1, July 1999.
7. U.S. Environmental Protection Agency, SESD Region 4, Analytical Support Branch Laboratory Operations and Quality Assurance Manual, July 1, 2001.



OP1 \_\_\_\_\_  
 OP2 \_\_\_\_\_  
 OP3 \_\_\_\_\_  
 OP4 \_\_\_\_\_  
 SH1 \_\_\_\_\_  
 SH2 \_\_\_\_\_  
 SH3 \_\_\_\_\_  
 SH4 \_\_\_\_\_  
 SS1 \_\_\_\_\_

RW1 \_\_\_\_\_  
 RW2 \_\_\_\_\_  
 ST1 \_\_\_\_\_  
 ST2 \_\_\_\_\_  
 CT1 \_\_\_\_\_  
 CT2 \_\_\_\_\_  
 CT3 \_\_\_\_\_  
 CT4 \_\_\_\_\_

FOOT PRINT OF SITE PLAN 01-201

CT6 \_\_\_\_\_  
 CT7 \_\_\_\_\_  
 CT8 \_\_\_\_\_  
 DP1 \_\_\_\_\_  
 DP2 \_\_\_\_\_  
 CD1 \_\_\_\_\_

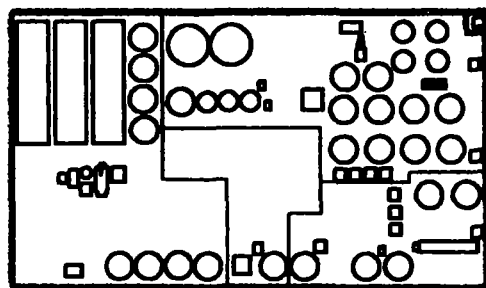
AREAS OF CONCERN  
 TO PUMP DOWN  
 ENOUGH TO STOP  
 OVERFLOWING

BAKER

BAKER

BAKER

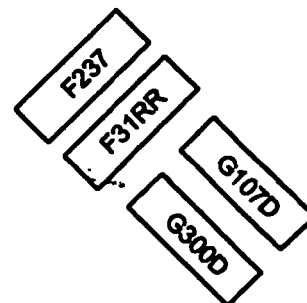
BAKER



SO-SW

SO-DD

SO-FRT



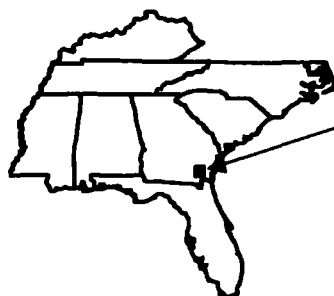
# LEGEND

③ Soil sample

□ FRAC Tank

NOT TO SCALE

SO-BG is the background soil sample and was sampled off site.  
The sample location is not depicted on this figure



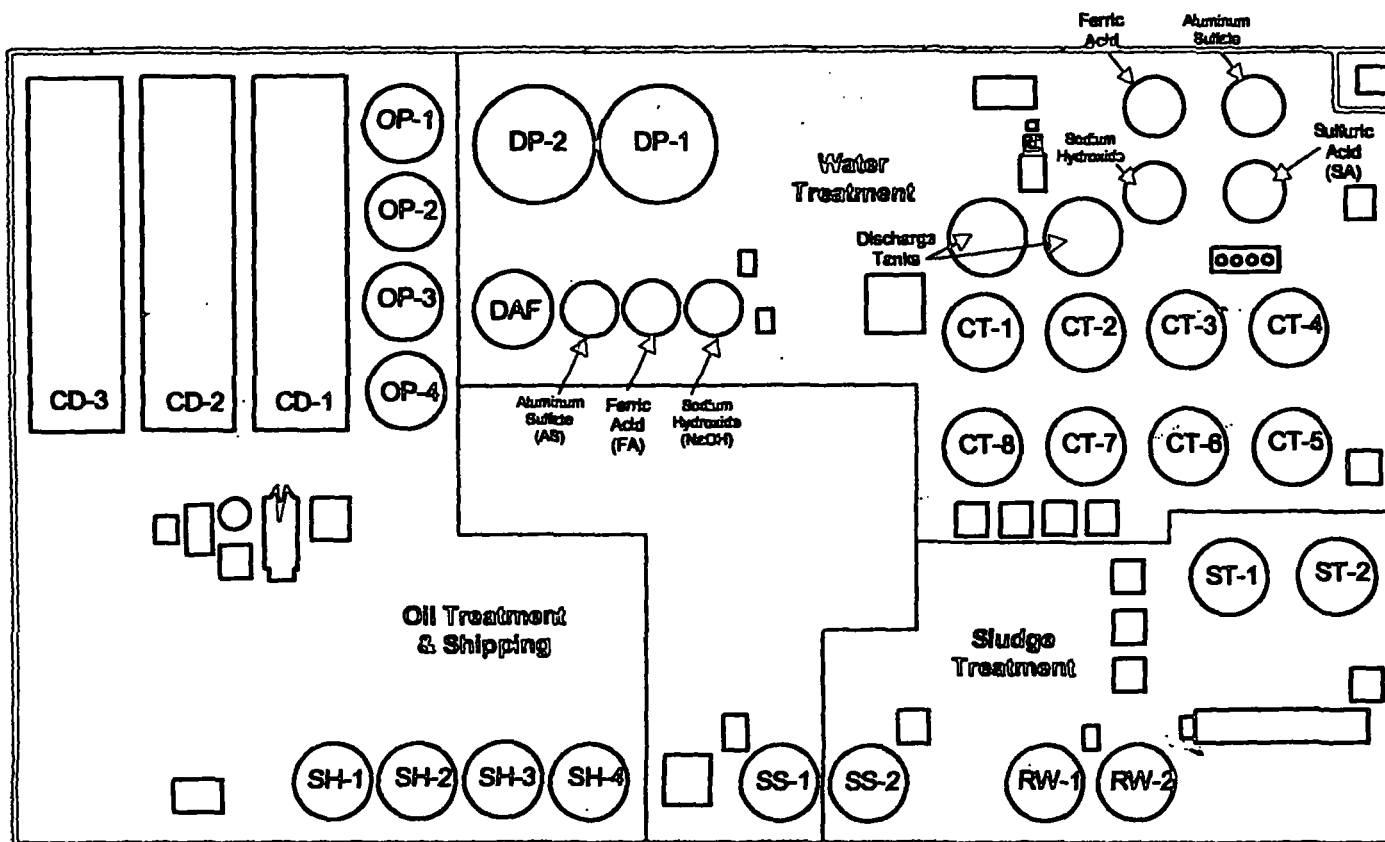
Waycross, Ware County  
Georgia

**SEVEN OUT**  
**WAYCROSS, WARE COUNTY, GEORGIA**  
**TDD No. 4T-04-07-A-011**

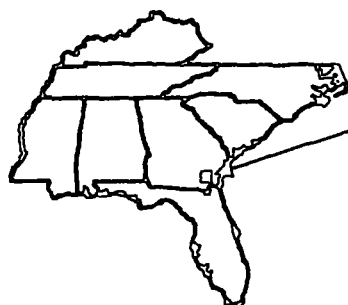
**FIGURE 3 - FRAC TANKS**  
**AND SOIL SAMPLE LOCATIONS**



Tetra Tech EM Inc.



NOT TO SCALE



Waycross, Ware County  
Georgia

**SEVEN OUT, LLC SITE**  
**WAYCROSS, WARE COUNTY, GEORGIA**  
TDD No. 4T-04-07-A-011

**FIGURE 2**  
**FACILITY LAYOUT MAP**



Tetra Tech EM Inc.

## REFERENCE 4

(4)

# Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, S.E., Suite 1154, Atlanta, Georgia 30334-9000

Noel Holcomb, Commissioner  
Environmental Protection Division  
Carol A. Couch, Ph.D., Director  
404/656-2833

June 20, 2006

## TRIP REPORT

**SITE NAME & LOCATION:** Seven Out LLC Tank (BCX, Inc.)  
901 Francis Street  
Waycross, GA 31503  
EPA ID # GAN000407811

**TRIP BY:** Edwin L. Williams *EW*  
Advanced Geologist

**OFFICIALS CONTACTED:** None

**DATE OF TRIP:** June 15-16, 2006

**REFERENCES:** Georgia Hazardous Waste Management Act  
Georgia Hazardous Waste Management Rules  
Comprehensive Environmental Response and  
Liability Act (CERCLA)  
Seven Out LLC Tank Preliminary Assessment (PA)

### COMMENTS:

I arrived at the above listed address at 12:30 a.m. on June 15, 2005. The temperature was in the high 80s to low 90s and there was a slightly overcast sky. The purpose of the trip was to conduct a Visual Site Inspection (VSI) of the subject site and surrounding areas and to evaluate the soil exposure, air pathway, and surface water migration pathway from the site as part of a Site Investigation (SI) to be performed at the site later in the year. Having been involved with the Preliminary Assessment (PA) for this site, I was quite familiar with the facility.

Prior to the VSI, a review of tax records indicated that the site was multiple parcels, specifically 901 Francis Street, 903 Francis Street, and 3 Folks Street. These parcels were all connected via gravel drives or paved streets.

The 901 Francis Street parcel was completely secured. Except for the locked front and side doors, the parcel was surrounded by a locked fence. The parcel consisted of two separate buildings, made of either brick or stone. The primary building housed the former offices of the Seven Out LLC business and was also a storage facility. The former storage portion of the building was only the shell of a building with no windows or doors in place. This portion of the building was without a roof. A secondary building, that resembled a brick multi-bay garage was located on the opposite side of the parcel. According to records, it had been a waste storage facility. At the time of the VSI, these buildings were primarily empty. Access into the yard that joined the two buildings of the parcel could not be obtained due to the locked gate. A visual inspection from outside the fence noted that there was very little material within the fenced parcel. The parcel was abandoned except for a car that was inside the fenced area.

June 20, 2006

The 903 Francis Street parcel (assumed to be 903, since there was no address) included a small building that was apparently the office for the tank farm/treatment plant at 3 Folks Street. This small building was locked.

The 3 Folks Street parcel (just east of the 901 Francis Street parcel) was the site of the treatment plant, the primary function of Seven Out LLC. The parcel was unsecured and was accessible from Folks Street (on the east), Francis Street (on the north) and McDonald Street (on the west). The parcel includes a concrete paved area with a concrete bermed area within the concrete paved area. Parts of the concrete area were unlined parking areas. A small building was located at the edge of the concrete parking area. This apparently was the tank farm office. Numerous vertical and horizontal above ground storage tanks were located within the bermed area. For the amount of capacity of the tanks, the bermed area appeared quite inadequate to contain multiple failures of the tank system. Rainwater was also collected in the bermed area, especially on the northeast side and corner. It appeared that the bermed area was not poured on level ground and that the area sloped to the north, causing some of the collected rainwater to overflow the bermed area. Obviously, a release of liquid wastes from one of the tanks would also pool up in this area and possibly overflow the berm. In this area, I observed an abandoned rail line that ran between the tank farm property and the adjacent property (The Sports Shop). The tank farm included more than 30 large capacity waste-containing and product-containing tanks. These tanks were separated into three process categories: water treatment, sludge treatment, and oil treatment and shipping. Some of the tanks had labeling that indicated they were for used oil, sludge, ferric acid, aluminum sulfate, sodium hydroxide, or sulfuric acid. At the time of the VSI, no releases were observed from the tank farm containers. Using a roll-o-tape, the size of the tank farm/treatment plant was measured to be about 100' X 180'. Along the back edge of the secondary containment was a narrow drainage ditch. Along the edge of the drainage ditch and secondary containment, contaminated soil was observed. The contaminated soil had been covered with what appeared to be sawdust or mulch, which was also stained.

A pipeline went from the secondary containment of the tank farm, overhead above a gravel road to a pump station on the tank farm side of the CSX rail tracks. Evidently, wastes were taken from tank cars and pumped to the treatment plant. Because there was no siding for the tank cars, it is not clear if trains actually stopped to allow wastes to be pumped from them or if this pump station was just placed there to appear that they received wastes from tank cars. The gravel road connected the 901 Francis Street parcel to the termination of McDonald Street to the 3 Folks Street parcel to the termination of Folks Street. A locked gate, owned by CSX Railway was at the terminus of Folks Street.

With no fence attached to the locked gate, I proceeded around the locked gate onto the CSX property. The CSX property was the site of the CSX switchyard for Waycross. At this point, the road was Glenmore Avenue. About 50 feet onto CSX property was a recently cleared and newly graveled area. This is was area where frac/Baker tanks had been stored. Some of the tanks were used by Seven Out to store wastes for processing. Some of the other tanks had been stored there during the EPA removal to store liquid wastes that had been overflowing at the tank farm. Prior to EPA's activities at the Seven Out facility, there had been a spillage of wastes from one of the Seven Out frac tanks on the property. Near the vicinity where the frac tanks had been was a long abandoned loading dock. This dock was accessible by rail traffic from the opposite side. At the time of the VSI, no tanks or wastes were observed on the property.



Having been to the facility before, I proceeded west parallel to the rail lines, following the previously determined drainage pathway. Along the rail line, I observed two additional abandoned rail lines on the south side of the primary line. I also observed another abandoned loading dock that would have been originally serviceable by one of the two abandoned lines. The pathway proceeded west along a drainage ditch next to the railway. Culverts transported runoff from rainfalls under the tracks and along the drainage ditch. The drainage ditch extended behind the properties that fronted on Francis Street. At the intersection of Georgia Spur 38 (S. Nicholls Street) and the railway the drainage from the ditch crossed under S. Nicholls Street and proceeded a short distance to its intersection with an unnamed tributary. At this same intersection, I observed large above ground fuel tanks, belonging to C & M Oil Company. Any runoff from this facility would have emptied into the drainage ditch prior to its emptying into the unnamed tributary. I have viewed this tributary during extremely heavy rainfall and during a time period of minimal rainfall. At both times, this tributary was constantly flowing. This point would be the Probable Point of Entry (PPE) for the Surface Water Pathway. Standing on the bridge rail crossing of the unnamed tributary, I observed additional above ground storage tanks to the south. I returned to S. Nicholls Street and walked south to its intersection with Margaret Street. At the termination of Margaret Street was an abandoned BP fuel tank farm. Because this tank farm was located on a hill overlooking the unnamed tributary, any runoff from this facility would drain into the unnamed tributary. None of the available local residents nearby could tell me when the BP facility had closed down.

I then proceeded north on S. Nicholls Street to the Francis Street intersection. At this intersection was the Waycross Coca Cola Bottling Company. Well data had indicated that this facility had a water well. I proceeded inside to ask management about the status of the well. A conversation with the manager on the following day determined that the well was no longer in use and had not been in use for many years. The well had been completed in the deep aquifer.

I then proceeded back to the 901 Francis Street parcel. I observed that the parcel between 801 Francis Street (The Sport Store) and 901 Francis Street was a vacant lot. Sanborn Fire Insurance Maps that had been viewed prior to the VSI indicated that this site was formerly the Gillon Machine Shop and Foundry. The site was entirely grassed over and no remnants of any foundations were visible on the vacant lot. Two water oak trees were observed on the southwest corner of the lot and were measured to be 11 feet in circumference, hoping to be able to obtain a date on how long the trees may have been growing there so as to give a time frame on the demolition of the foundry.

I then proceeded to the Sports Shop to inquire for permission from the owner, Mr. Bennie James, to take samples along the back of his property where the secondary containment had overflowed. I spoke with Mr. James the following day. He gave verbal permission for sampling on his property. He also stated that the Seven Out company had initiated the purchase of his business, making a down payment, and signing a purchase agreement. However, Seven Out had never paid him for the business and he had not pursued the matter, because he really wasn't interested in moving. I thanked Mr. James for his time and left the area.

I proceeded by car to track the surface water migration pathway from the PPE downstream. The unnamed tributary flows along a ditch for a few blocks. This unnamed tributary flows through a residential area, a small city-block size park and behind the First Christian Church

June 20, 2006

At the intersection of Folks Street and Isabella Street, the unnamed tributary flows underground into the City of Waycross's underground stormwater drainage system. The unnamed stream continues underground until it intersects the City of Waycross Drainage Canal near the intersection of Lee Street and U.S. Highway 84. From here, the City of Waycross Drainage Canal travels northeast, crossing under U.S. Highway 82/Ga. 38 on two occasions before flowing southeast to its confluence with the Satilla River, east of the U.S. 82/Ga. 38 crossing of the Satilla River. The Drainage Canal flows through several residential areas and public parks on its migration to the Satilla River. The Drainage Canal flows near the Waycross District Office of the Georgia Dept. of Natural Resources Game and Fish Office. On the following day, a technician with the Fisheries Management Branch stated that fishing for consumption from the Drainage Canal is not known to occur. He stated that some recreational fishing by children is done, but they have no knowledge that the children take their catch home to eat. The technician continued to state that there are bucketsitters (those who catch fish, keep them in the bucket that they sit on for later consumption) along the Satilla River.

I continued following the Drainage Canal to an area behind Capt. Joe's Seafood Restaurant at 2010 Plant Avenue (U.S. 82/Ga. 38) that was cleared of debris and overgrowth. I proceeded to walk back to the Drainage Canal behind the facility and observed bass and bream swimming in the water. A barking dog on the other side of the canal caused an older gentleman to see me. He approached from the other side of the canal and we spoke across the canal for a few minutes. He stated that his grandkids fish in the canal but that the fish aren't fit to eat because of all of the pollution that is in the canal from the City of Waycross. He did state that the condition of the canal was much better that it was several years ago when there weren't any fish in the canal at all.

About 1/8 mile northeast on U.S. 82/Ga. 38, the canal crossing under the roadway and continues to its discharge into the Satilla River. I proceeded northeast on the highway to its overpass of the Satilla River. There I pulled off the highway and walked down to the river. The river was shallow with minimal flow, however, I did see some bream swimming in the water. The area along the bank and under the bridge had many blue bait (worm) containers laying around, indicating that upstream of the Waycross Drainage Canal's discharge to the Satilla River was a place frequented by fishermen. No wetlands were observed along the pathway of the Drainage Canal until it crossed under the U.S. 82/Ga. 38 for its final northeast run to the Satilla River. Just northeast of that intersection, is a small wetland. A little further northeast, just prior to its confluence with the Satilla River, is a larger wetland. On the northwest side of that wetland is a sewer disposal facility. Due to the lack of accessibility to the Satilla River from this point to the termination of the 15-mile migration pathway, no further tracing of the pathway was completed.

I completed the fieldwork and returned to the hotel at 5:30 pm.

#### RECOMMENDATIONS:

Verify property owners for the vacant property between 901 and 801 Francis Street. Verify property owner address for CSX parcel behind 3 Folks Street.

PHOTOGRAPH: 45

SAMPLES: None

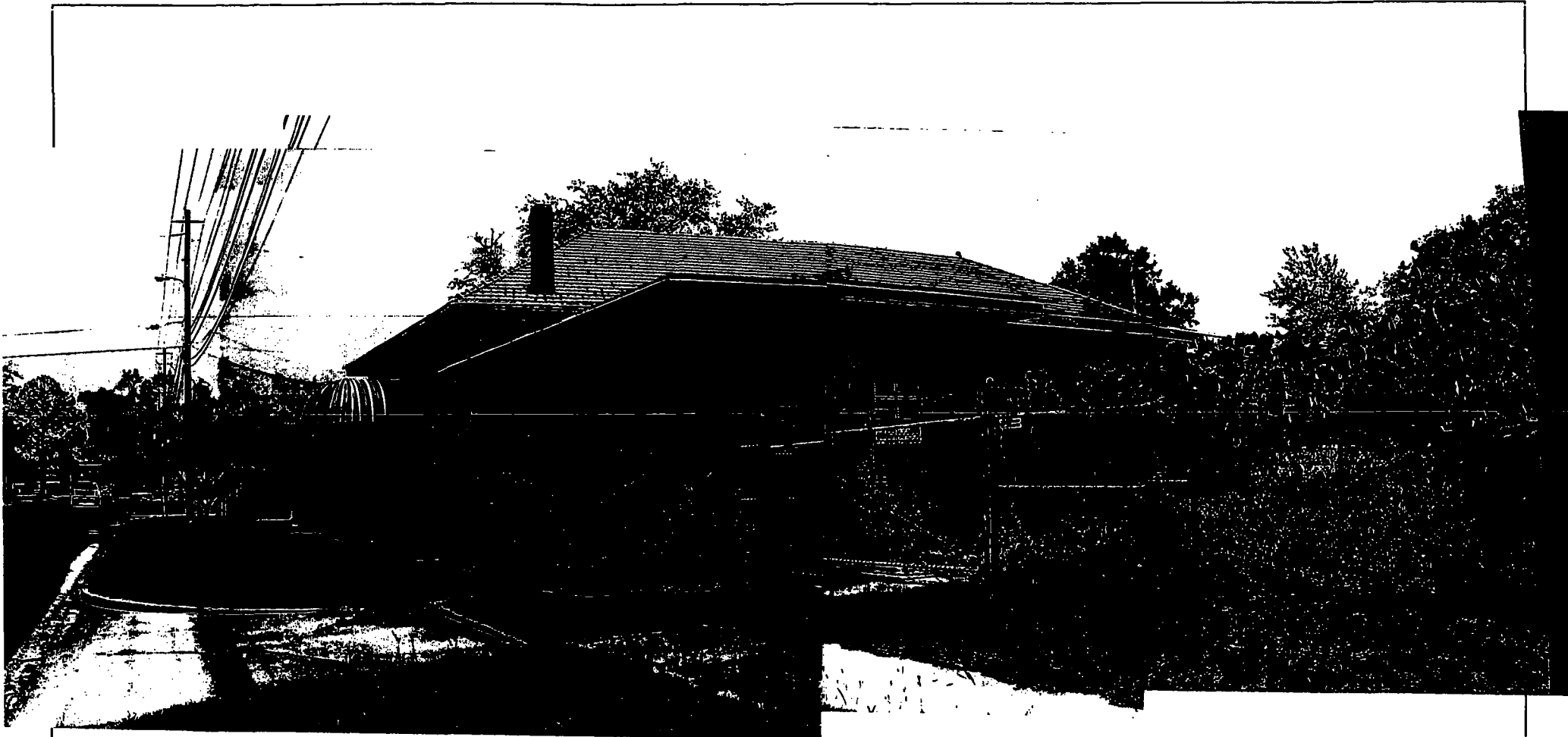
Seven Out LLC VSI Recon Trip Report  
Page five  
June 20, 2006

REVIEWED BY:

A handwritten signature in black ink, appearing to be "JS", written over the text "REVIEWED BY:".

s:\drive\eddie\CERCLA\SIS\SevenOutSI Site Recon Trip Report.doc.

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture:** 1, 2, and 3 of 45 **Date:** 6/15/2006 **Time:** 12:40 pm **Direction:** looking E down Francis Street **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View of 901 Francis Street Parcel – offices and warehouse of Seven Out LLC (former Waycross Coca Cola Building)

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 4 of 45 Date: 6/15/2006 Time: 12:42 pm Direction: looking S from Francis Street Agency:**  
**Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of West**  
**side of 901 Francis Street Parcel – warehouse of Seven Out LLC and garage (former Waycross Cooperative**  
**Laundry)**



**Picture: 5 of 45 Date: 6/15/2006 Time: 12:42 pm Direction: looking S From Francis Street Agency:**  
**Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of West**  
**side of 901 Francis Street Parcel – warehouse of Seven Out LLC and garage (former Waycross Cooperative**  
**Laundry) to west boundary of site**

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 6 of 45 Date: 6/15/2006 Time: 12:45 pm Direction: looking SW from parking area between Tank Farm and 901 Francis Street Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of Southwest side of 901 Francis Street Parcel (note drain culvert on left)**



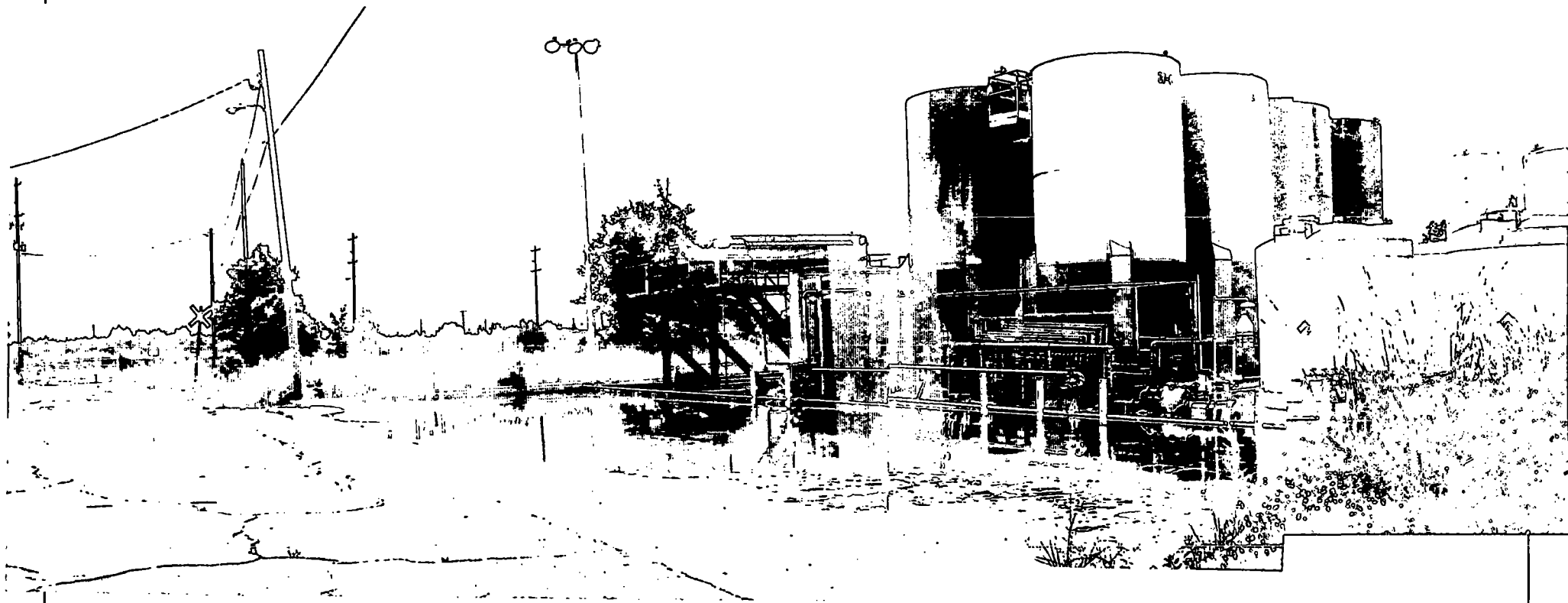
**Picture: 7 of 45 Date: 6/15/2006 Time: 12:46 pm Direction: looking SW from parking area between Tank Farm and 901 Francis Street Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Closeup view of drain culvert in parking area between Tank Farm and 901 Francis Street Parcel.**

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 8 of 45**   **Date:** 6/15/2006   **Time:** 12:48 pm   **Direction:** looking SE from parking area between Tank Farm and 901 Francis Street   **Agency:** Georgia Hazardous Waste Management Branch   **Photographer:** Eddie Williams   **Subject:** View of Sports Shop and Seven Out LLC Tank Farm (3 Folks Street) behind Sports Shop

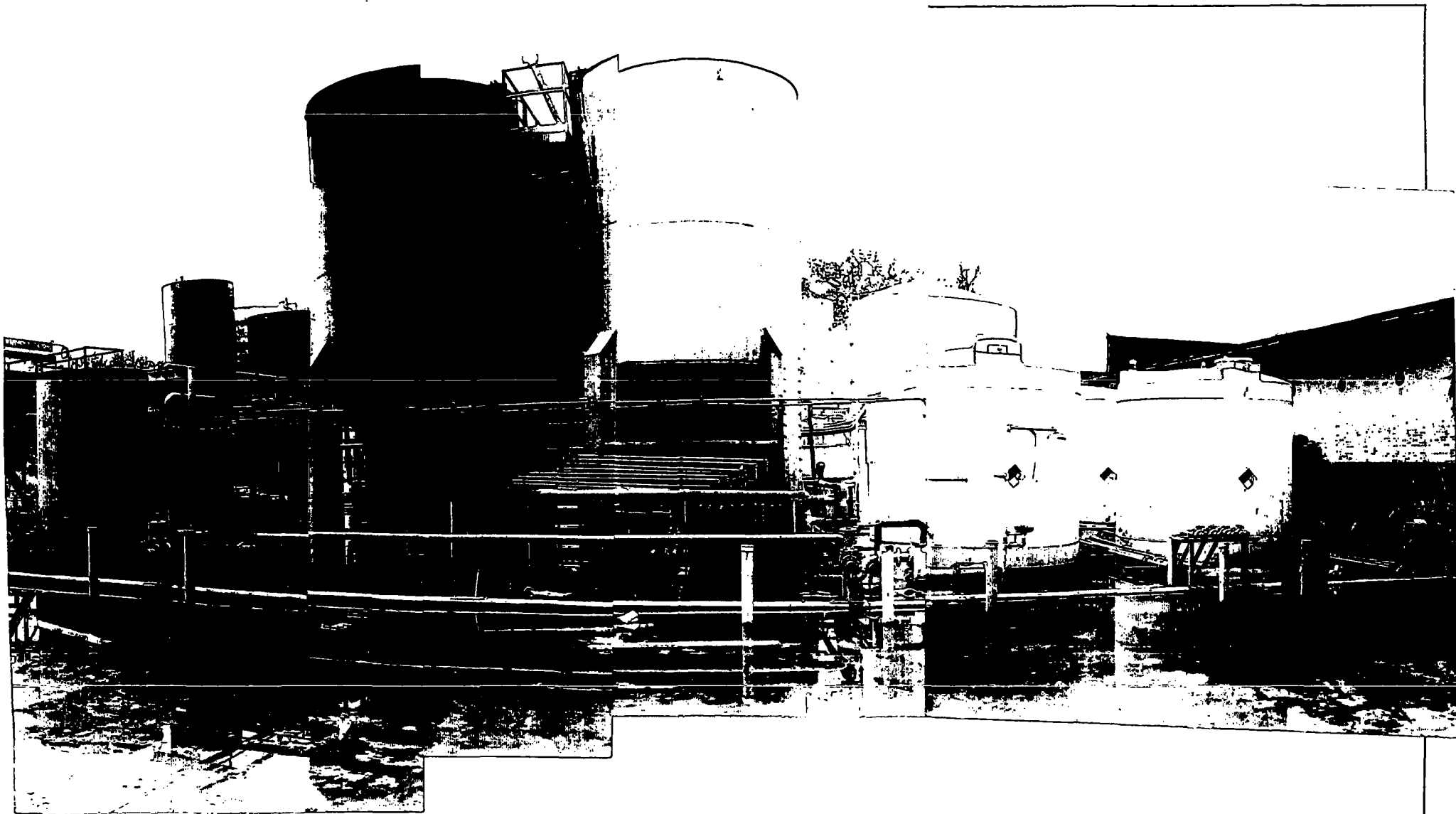
Seven Out LLC SI Reconnaissance Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801



**Picture:** 9, 10 and 11 of 45 **Date:** 6/15/2006 **Time:** 12:55 pm **Direction:** looking SW from Folks Street **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View of Seven Out LLC Tank Farm (Treatment Plant) at 3 Folks Street and CSX Gate (on left) to former Frac Tank Staging Area on Glenmore Avenue.



**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 12, 13, 14, 15 and 16 of 45 Date: 6/15/2006 Time: 12:57 pm Direction: looking W from Folks Street Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of Seven Out LLC Tank Farm (Treatment Plant) at 3 Folks Street and back wall of the Sports Shop (on right). Reflection in foreground is due to standing rainwater in the secondary containment**

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture:** 17 of 45 **Date:** 6/15/2006 **Time:** 1:00 pm **Direction:** looking W from Folks Street **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View of area between Seven Out LLC Tank Farm (Treatment Plant) and back wall of the Sports Shop (on right) where low wall of secondary containment was overflowed.

Seven Out LLC SI Reconnaissance Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801

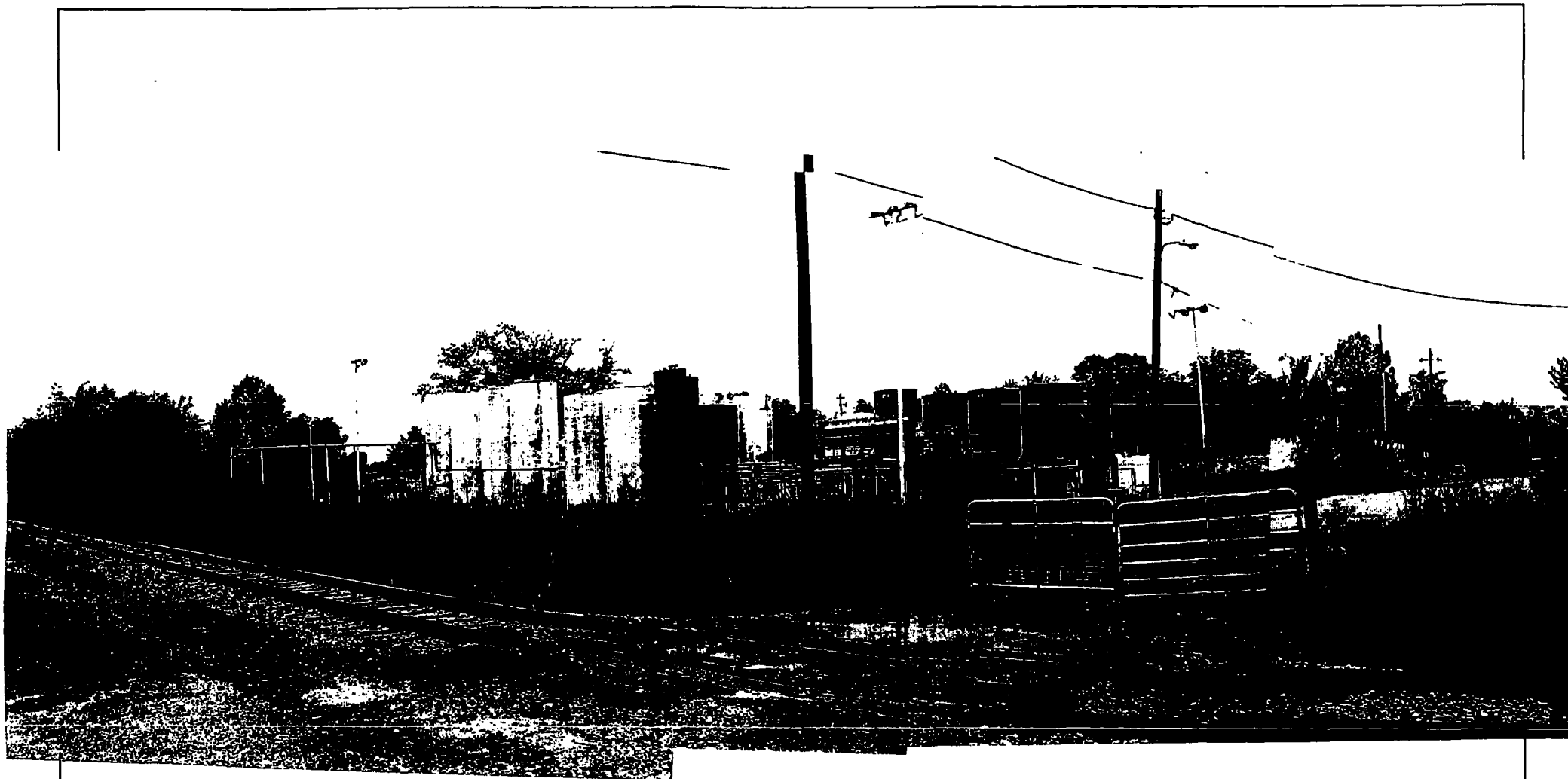


**Picture:** 18 of 45 **Date:** 6/15/2006 **Time:** 1:02 pm **Direction:** looking NW from Folks Street **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View of area between Seven Out LLC Tank Farm (Treatment Plant) and back wall of the Sports Shop (on right) where low wall of secondary containment was overflowed. Collected rainwater clearly shows risk of an overflow.



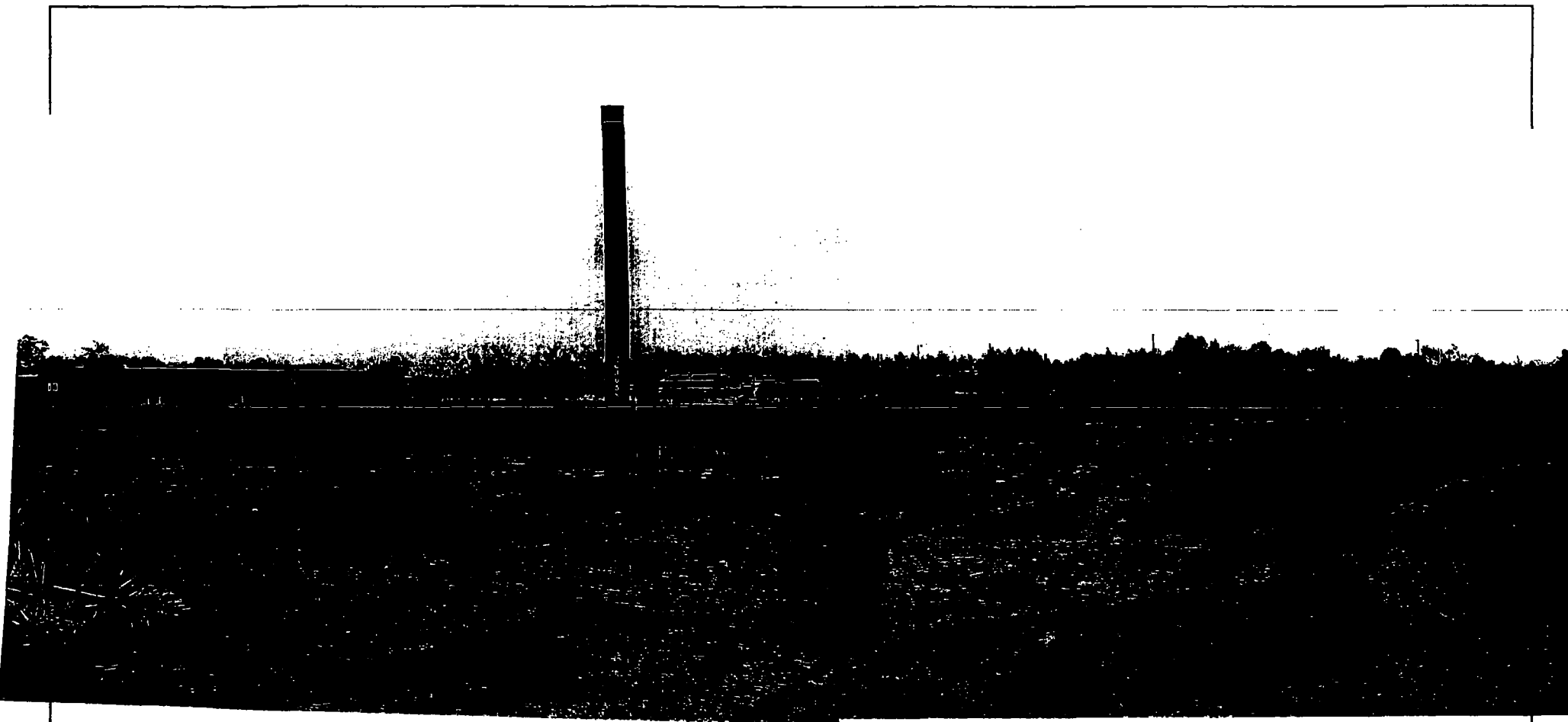
**Picture:** 19 of 45 **Date:** 6/15/2006 **Time:** 1:04 pm **Direction:** looking E from Folks Street **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** Gravel drive that connects back of Tank Farm parcel (3 Folks Street) to 901 Francis Street Parcel and Folks Street

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture:** 20, 21, 22 and 23 of 45 **Date:** 6/15/2006 **Time:** 1:05 pm **Direction:** looking NW from Frac Tank Staging Area (Glenmore Avenue)  
**Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View of Tank Farm (Treatment Plant),  
Folks Street, CSX Rail area Gate. (Red tile roof is 901 Francis Street building). Drainage Ditch is between vegetated hill and rail lines.

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture:** 24, 25 and 26 of 45 **Date:** 6/15/2006 **Time:** 1:07 pm **Direction:** looking S from CSX Gate **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View of former Frac Tank Staging Area on CSX Rail Property. Gravel road curving to right is Glenmore Avenue.

Seven Out LLC SI Reconnaissance Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801



**Picture: 27 of 45** Date: 6/15/2006 Time: 1:10 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of former rail line area between tank farm (Treatment Plant) and existing rail lines.



**Picture: 28 of 45** Date: 6/15/2006 Time: 1:10 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of former rail line area between tank farm (Treatment Plant) and existing rail lines.

Seven Out LLC SI Reconnaissance Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801



Picture: 29 of 45 Date: 6/15/2006 Time: 1:14 pm Direction: looking West Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of drainage ditch behind tank farm (Treatment Plant), alongside railroad. PIPELINE IS AT PUMP STATION THAT GOES TO TANK FARM.



Picture: 30 of 45 Date: 6/15/2006 Time: 1:14 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of drainage culvert in drainage ditch behind tank farm (Treatment Plant)

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



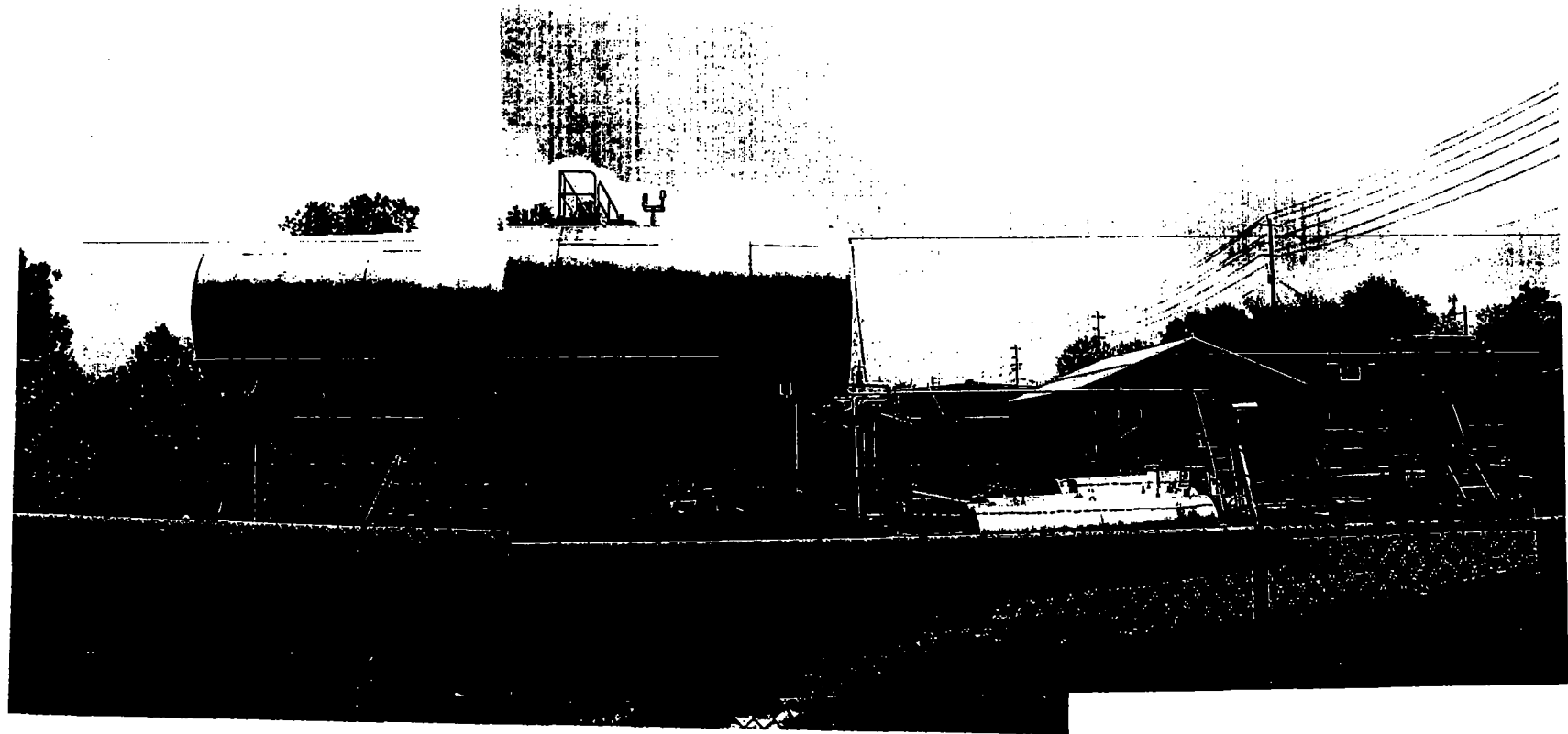
**Picture: 31 of 45 Date: 6/15/2006 Time: 1:16 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of another culvert drain in drainage ditch behind tank farm (Treatment Plant), alongside railroad. Pipeline is unknown.**



**Picture: 32 of 45 Date: 6/15/2006 Time: 1:16 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of corrugated pipe drain culvert in drainage ditch behind tank farm (Treatment Plant)**



Seven Out LLC SI Reconnaissance Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801



**Picture:** 33 and 34 of 45 **Date:** 6/15/2006 **Time:** 1:30 pm **Direction:** NA **Agency:** Georgia Hazardous Waste Management Branch  
**Photographer:** Eddie Williams **Subject:** View of C & M Oil Company, along the drainage ditch pathway (north of the railway tracks) to the PPE.

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 35 of 45 Date: 6/15/2006 Time: 1:45 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of the PPE to the perennial Surface Water Pathway (at rail crossing about one block south of the current Waycross Coca Cola Distribution facility).**



**Picture: 36 of 45 Date: 6/15/2006 Time: 1:45 pm Direction: looking South Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View from the PPE rail crossing of the former BP fuel tank farm.**

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture:** 37 of 45 **Date:** 6/15/2006 **Time:** 1:50 pm **Direction:** NA **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View of the former BP Fuel Tank Farm just south (upgradient) of the PPE to the perennial Surface Water Pathway

Seven Out LLC SI Reconnaissance Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801

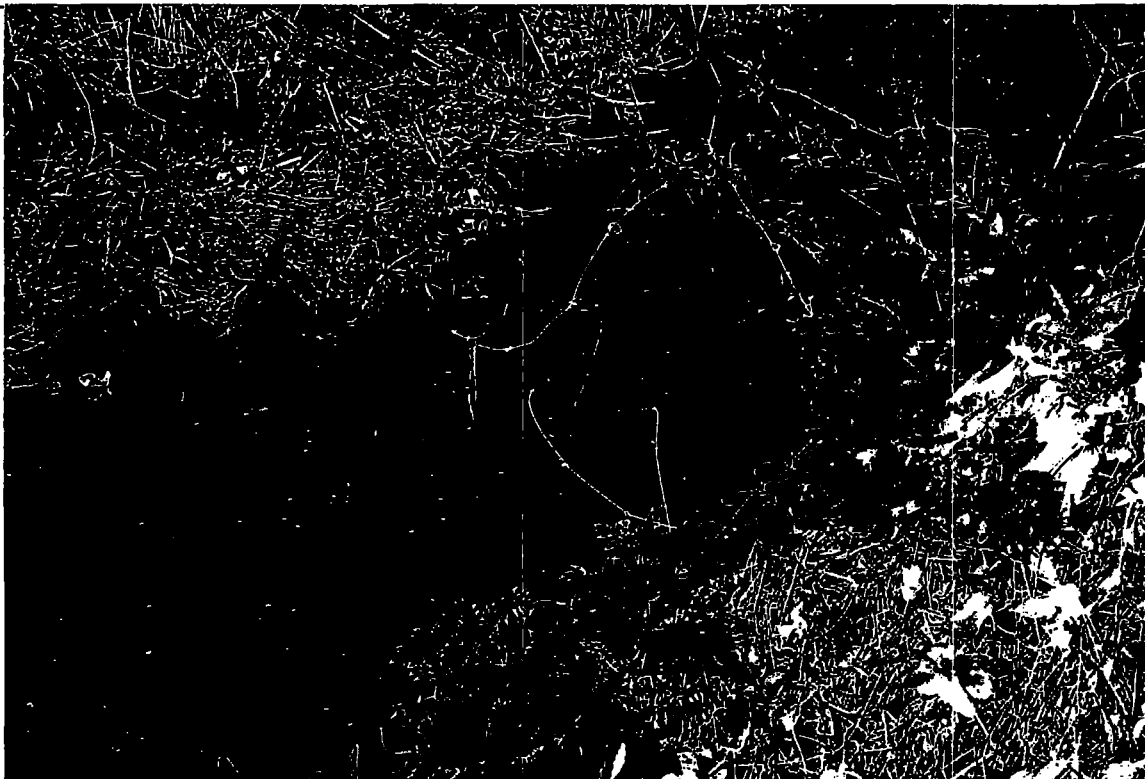


**Picture:** 38, 39 and 40 of 45 **Date:** 6/15/2006 **Time:** 2:00 pm **Direction:** looking N **Agency:** Georgia Hazardous Waste Management Branch  
**Photographer:** Eddie Williams **Subject:** View of the former BP Fuel Tank Farm just south (upgradient) of the PPE to the perennial Surface Water Pathway

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 41 of 45 Date: 6/15/2006 Time: 2:00 pm Direction: looking N Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View the junk fuel pump storage building at the former BP Fuel Tank Farm.**



**Picture: 42 of 45 Date: 6/15/2006 Time: 3:20 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of the Waycross Drainage Canal behind Capt. Joe's Seafood Restaurant at 2010 Plant Avenue (U.S. 84), southeast of downtown Waycross).**

Seven Out LLC SI Reconnaissance Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801



Picture: 43 of 45 Date: 6/15/2006 Time: 3:30 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View the Satilla River at the U.S. 84 bridge crossing, just upstream from the confluence with the City of Waycross Drainage Canal.



Picture: 44 of 45 Date: 6/15/2006 Time: 3:30 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Fish bait containers under the U.S. 84 bridge at the Satilla River crossing.

**Seven Out LLC SI Reconnaissance Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture:** 45 of 45 **Date:** 6/15/2006 **Time:** 3:30 pm **Direction:** NA **Agency:** Georgia Hazardous Waste Management Branch **Photographer:** Eddie Williams **Subject:** View fishing bait container along the edge of the Satilla River at the U.S. 84 bridge crossing, just upstream from the confluence with the City of Waycross Drainage Canal.

167410

167432

Warehouse

Banks  
Boxes

one 11 x 13.5 x 17



walls 8.5' high

HEIGHT  
8.5'

Door

34

15

28

5

6.5

# Items to Evaluate For Seven Out LLC

- ① Remaining wastes in all tanks
- ② Tank dimensions / capacities
- ✓ ③ Square footage of contaminated soil areas
- ✓ ④ Capacity of waste in ditches
- ✓ ⑤ Location of ditch contribution samples
- ✓ ⑥ Locations of other soil samples
- ⑦ Locations of groundwater samples
- ✓ ⑧ Identify footprint of foundry if possible
- ✓ ⑨ Surface Water Attribution Samples & Background samples
- ✓ ⑩ Evaluate integrity asphalt & concrete pad
- ✓ ⑪ Look for evidence of fishing in SATULA River including consumption

Seven Out LLC Site Rec. 12:30 pm 6/15/06

Leaving Site @ 3:05 to check SW Path

- ⑫ Ask about time Coca Cola changed buildings 1955
- ✓ ⑬ Ask about Coca Cola water supply well - no party used
- ✓ ⑭ List of local Druses
- ✓ ⑮ Check w/ local DNR office on Fishing



Front Door 901 (Coke Bldg)

31 12 28.2

82 21 52.0

PHIL DEMARCO 912/550-9478

BACK GATE OF COKE Bldg

31 12 26.9

82 21 51.5

Tank Farm @ SH-3 & SH-4

31 12 26.6

82 21 48.7

Fence Tank Area

63 x 53 \* 180 x 50 \* 123 (lowered)

CENTER OF OLD FOUNDRY

31 12 27.6

82 21 50.2

Secondary Containment

99' x 182'

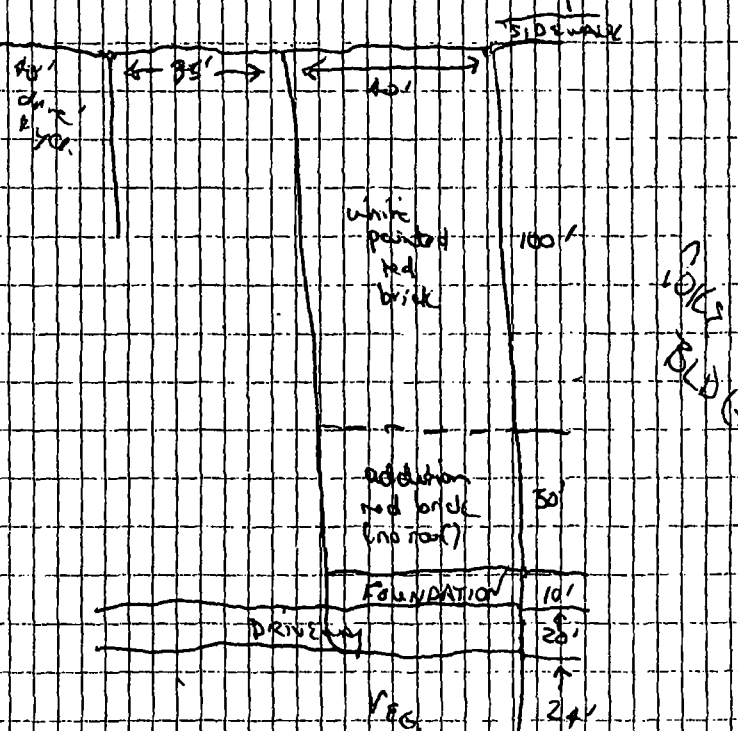
Contaminated Soil next to Tank Farm

2279' x 51'

DRAINAGE DITCH

300' (behind tank farm)

220' (behind coke coke bldg)



Soil sample b/n SPORTSHOP &

TANK FARM

31 12 27.1

82 21 47.5

Soil Sample backside of TANK FARM S.C.

31 12 25.8

82 21 47.8

Soil Sample at railroad pipe hook-up

31 12 25.4

82 21 48.3

Soil Sample @ front tank

31 12 24.2

82 21 46.4

UPPERMOST DITCH SW/SE Sample

31 12 25.2

82 21 46.5

DITCH SW/SE Sample

31 12 25.2

82 21 48.3

Storm Drain Outfall behind Faculty

31 12 25.3

82 21 51.2

SW/SE Backg. - Near CBX Rail  
behind current Coca-Cola Bldg Co. (current)

31 12 28.8

82 22 52.1

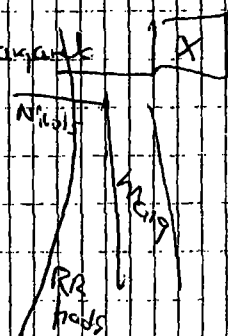
Cem oil & Nicolls & Mangat

Soil @ Curvet in Parking Lot

31 12 26.2

82 2 51.0

water oak is 11' circumf.



SUS Pathway goes underground behind  
 135 Christian Church at Corner of Folks  
 Isabella

NAY Newman Drilling Co. 912/285-9379  
 NAY MOC Drilling Co. Inc. 283-0530  
 PATTISON DANIELS Well Drilling 449-6004  
 Blackster LARRY ALTMAN Drilling 285-2524  
 THREFT Well Drilling 285-8874

NEWMAN 3" Shallow  
 4" + Large Deep.  
 DANIELS 4" + Deep

WAYCROSS Coca-Cola 283-3525  
 GA DNR Fisheries 285-6094

Tax Commission 800 Church St.  
 Board of Assessors 215 Oak Street  
 Wayne County Bldg. Mnt 315 Oak Street  
 287-4480

Wayne County Police Dept. 201 State St.  
 287-4335

Public Works 3649 Harris Rd.  
 (Trans Vehicle 287-4404/06  
 " " " " " "

Wayne County Sheriff's Office 3487 Harris Rd.  
 a Jail & C.I. 287-4326

Wayne County Bld. Education  
 1301 Bailey St. 283-8656  
 PRINT SHOP 287-2305

TRANSPORTATION/GARAGE 287-2318/19  
 1370 W. Waycross Dr.

Maintenance 287-2303  
 1301 Bailey St.

Waycross City of  
 Bldg. Mnt. Dept. <sup>TRAFFIC ENGR.</sup> Memorial St. 287-2939  
 City Garage 714 Pendergast St. 287-2963  
 Police Dept. 512 Oak St. 287-2921  
 Public Works 417 Pendleton St. 287-2955

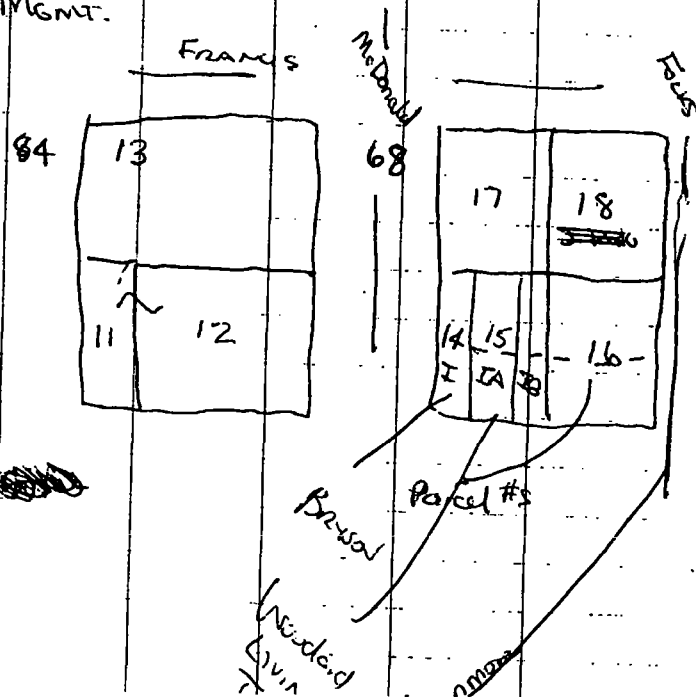
Waycross College  
 2001 S. GA. Pkwy. 285-6133

COM Oil Co 201 S. Nichols St. 283-8008  
 BAPTIST Village Retirement Communities  
 " " " " " "

DRAINAGE CANAL CUTS UNDER 82  
just north of Ricardo St / Plant Ave  
intersection

One BRANCH crosses 82 just  
South of CAPT. JOFFE

Black Sitters on ~~Chavez~~ <sup>N of SATIA</sup>  
none of drainage canal  
Chad Sexton - TECHNICIAN w/ Fisheries  
Mgmt.



WA 11-06-010 .46 acres

Seven OUT WA 11-06-012 ✓ .46 acres  
WA 11-06-009 ✓ .87 acres  
WA 11-06-010 ✓ .46 acres  
WA 11-06-020 ✓ .26 acres

0 Folsom St.

0 Folsom St.

901 Francis St.

903 Francis

Altman, Larry 300' residential house  
placene (above mine)

810 Elizabeth St.  
RAY HARRIS 30'-40' 912/285-9998

2100 Suminda Trail  
Irene CRAWFORD 20'-40' 900' away

Timberlin

20'

6/20/06 40' 18

Shallow 60' sand 40'-60'

Unstable 180'-200' to 300'

Deep 40'-800' Fluvial

Mark  
well  
drilling

## REFERENCE 5


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## Outdoor

## eTrex Vista C

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## eTrex Vista C



Product Images



The eTrex Vista® C is Garmin's exciting, new, pocket-sized handheld that brings color, automatic routing, longer battery life, plus more to our popular-selling eTrex Vista. You won't miss a thing when you take this colorful, lightweight, easy-to-use handheld out hiking, biking, boating or even geocaching. The eTrex Vista C along with the eTrex Legend C are Garmin's smallest, least expensive products to combine a color TFT display and advanced GPS routing capabilities in a waterproof design.

In addition to its distinguishing features — barometric altimeter and electronic compass — outdoor enthusiasts will love the latest improvements made to the eTrex Vista C:

## Package Includes:

- eTrex Vista C
- One basemap below:
  - Americas: [Americas Recreational](#)
  - Europe: [Atlantic Recreational](#)
  - Australia: [Pacific Recreational](#)
- [MapSource® Trip & Waypoint Manager CD](#)
- PC/USB interface cable
- Wrist strap
- Quick reference guide
- Owner's manual

- 256-color, sunlight-readable display makes it easy to distinguish map details and see where you're going
- Automatic route generation, off-route recalculation, turn-by-turn directions with alert tones, and icon-driven menus for finding points of interest (when combined with Garmin's optional MapSource® CDs) navigate you safely to your destination
- Longer battery life for more hours of outdoor enjoyment
- Mini-USB port for fast, convenient download of map data from Garmin's entire library of optional MapSource CDs using a PC

Of course the eTrex Vista C still includes those popular features that users have come to love and expect in the eTrex product line, such as a compact, lightweight, waterproof design and user-friendly interface. It is WAAS-enabled, and like all eTrex units, the primary controls are oriented on the side of the unit, so the user can conveniently operate it with one hand. Also, an innovative rocker switch is located on the face of the unit that enables the user to input data easily, scroll through menus, or pan the map page.

Garmin part number: 010-00368-00

## Suggested Retail Price:

\$374.99 U.S.D. (for domestic US market only)

## eTrex Family Quick Links

[eTrex](#)  
[eTrex Camo](#)  
[eTrex Summit](#)  
[eTrex Venture](#)  
[eTrex Legend](#)  
[eTrex Vista](#)  
[eTrex Legend C](#)

## eTrex Family Showcase

Which eTrex is right for you?  
View 360 images and compare features. [Launch Showcase](#)

\*requires [flash player](#)

## eTrex Extras

[Product Comparison](#)

## MapSource Compatibility

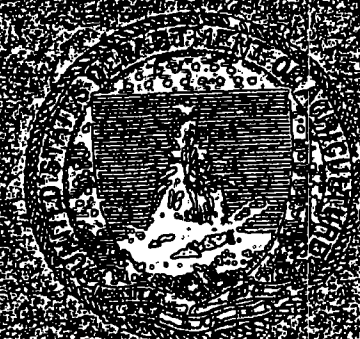
Garmin Recommends:  
Select MapSource Product

[Go](#)

\* denotes limitations

## REFERENCE 6

U.S. DEPARTMENT OF THE ARMY  
OFFICE OF THE CHIEF OF ENGINEERS  
WASHINGTON, D.C.



WASHINGTON, D.C.



the second division of the Atlantic Coast Line, a large steam-pressure turpentine extracting plant, and several smaller enterprises. There is now (April, 1906) in process of construction the repair shops of all of the lines of the Atlantic Coast Line south of Savannah. It is said that these shops will be the largest in the South, costing about \$500,000, and will employ from 1,500 to 2,000 men. Manor, Millwood, and Waresboro are towns of a few hundred population, located in some of the best farming sections of the county, and are important country trading points. Bickley, in the northwestern part of the area, the only post-office not on the railroad, is located in a good farming section. Fairfax and Beach are sawmill towns. At these and other points both in the interior and on the railroads are located numerous turpentine stills. The operation of these stills, the cutting of railroad cross-ties, firewood, etc., are extensively carried on.

Ample transportation facilities are afforded for all parts of the area. The Atlantic Coast Line has lines to Savannah and the markets of the North, to the coast at Brunswick and Jacksonville, to the interior of the State at Albany, and to Montgomery and the West and Florida west coast points by the same line as far as Dupont. On all of these lines fast and efficient schedules are maintained, especially over the main line to Savannah and the North. As all these lines belong to the same system there is an utter lack of competition. The northern part of the area is traversed by a branch of the Atlanta, Birmingham and Atlantic Railroad, which makes connections at Nichols for Brunswick, Atlanta, and Birmingham.

The county roads are far above the average for a "piney-woods" section. In the last few years the county officials have taken advantage of a State law allowing them to employ the county convicts for public-road improvements. Already many of the main roads have been straightened, cleared, and graded, and many of the larger streams bridged. This road-building work is still in progress, and it is likely that many of the roads mapped in this survey will be changed as the work progresses. These good roads enable the farmer to reach the market at Waycross easily and also to haul his produce to railroad points for shipment to the coast or to the northern cities.

#### CLIMATE.

The climate of Ware County is similar to that of southern South Carolina, southeastern Georgia, and northeastern Florida. The winters are mild and open, snow rarely falling, and the summers are long and hot. Farm work can be carried on during the whole of the year, and no shelter for stock is necessary.

The following table gives the normal monthly and annual tem-

*Normal monthly and annual temperature and precipitation.*

Month.	Waycross.		Month.	Waycross.	
	Temper- ature.	Precipi- tation.		Temper- ature.	Precipi- tation.
	<sup>°</sup> F.	Inches.		<sup>°</sup> F.	Inches.
January.....	50.0	3.17	August.....	81.5	6.16
February.....	52.6	3.82	September.....	76.7	4.85
March.....	59.4	4.44	October.....	68.1	2.93
April.....	65.9	2.80	November.....	57.9	1.40
May.....	74.8	2.75	December.....	51.5	3.82
June.....	80.3	5.14	Year.....	66.7	46.73
July.....	82.2	5.45			

From this table it is readily seen that the rainfall is ample and is evenly distributed through the year, the greatest precipitation occurring during the summer months or growing season. The summer is practically eight months long, there being five months of excessively hot weather. July is the hottest month, with a normal temperature of 82.2° F., while May, June, August, and September are only a few degrees cooler. The extreme heat is tempered to a large extent by the movements of air currents, and oppressive nights are almost unknown. The winter months are not cold, although the humidity makes the cold more penetrating than the same temperature at higher altitudes. January, the coldest month, has a normal temperature of 50° F. The growing of winter truck crops, such as lettuce, radishes, onions, etc., can be carried on successfully during the winter.

The following table gives the dates of the first killing frosts in fall and the last in spring:

*Dates of first and last killing frost.*

Year.	Waycross.		Year.	Waycross.	
	Last in spring.	First in fall.		Last in spring.	First in fall.
1899.....	Mar. 9	.....	1898.....	Apr. 8	.....
1900.....	Mar. 4	Nov. 10	1903.....	Feb. 19	Nov. 19
1901.....	Mar. 17	Nov. 17	1904.....	Feb. 14	Nov. 15
1902.....	Mar. 20	Nov. 28	Average.....	Mar. 9	Nov. 18

From this table it is seen that killing frosts are likely to occur during four months of the year, from the middle of November to the middle of March. This period is very frequently shortened in the spring from ten to forty days, and only once in the last seven years has it been lengthened. The earliest frost occurred in the fall was on November 10, 1900, the latest in the spring was April 2

These soils are derived from the Columbian and the Lafayette formations. The thickness of the Columbian formation is variable, but it is rather thin and superficial as a whole, since the Lafayette is exposed in many cuts only a little beneath the surface. The unconsolidated material of these two formations taken together is of considerable thickness. A well at Waycross passed through 333 feet of unconsolidated Columbian, Lafayette, and older deposits, at which depth a cherty limestone rock, probably the Vicksburg-Jackson, was encountered. It is believed, however, that the depth of these formations is considerably less in the northern part of the area.

The Norfolk soils are the result of the establishment of better drainage and the consequent greater erosion. The two sandy loams of this series are the results of erosive agencies cutting through the superficial Columbian sands and the commingling of the materials of both the Columbian and Lafayette formations. The Norfolk soils are the trucking soils of the Atlantic coast and are widely distributed. The soils of the Portsmouth series are composed of the Columbian sands, with scarcely any modification, except what has resulted through the accumulation of organic matter. Drainage has not become well established, and the consequent accumulation of decaying vegetation has made the surface soil dark colored. These soils are of wide extent and usually but little cultivated. Swamp represents a still more imperfect condition of drainage and a consequent greater accumulation of organic matter in various stages of decomposition. Sandhill is quite likely wash material deposited at a time when the river was at a considerably higher base level than now, while Meadow is the present river bottom and overflow land. In addition to the fact that they are derived from two distinct though somewhat similar geological formations, the soils of the Waycross area are separated into two series, because of the difference in drainage conditions and of their different value for agriculture. Their separation into types just pointed out depends upon differences in texture. These two series of soils occur throughout the greater part of the Atlantic and Gulf coastal plains.

#### NORFOLK SAND.

The surface soil of the Norfolk sand as it occurs in this area is a gray or brown medium to coarse sand, with a depth of about 7 inches. It is almost always loose and incoherent, and a good tilth is easily secured. The subsoil from 7 to 36 inches is a loose incoherent yellow sand, usually coarser and lighter in texture than the soil. The color is sometimes brown, and whether brown or yellow is often mottled with red in its lower depths. The structure is generally more open than that of the soil—the latter showing the binding effect of the accumulation of small quantities of organic matter—and offers little resistance to the movement of the ground water. In both soil and

subsoil there is usually a noticeable quantity of fine quartz gravel and very coarse sand, which are left on the surface when the finer particles are washed away by heavy rains, and make the soil appear coarser than it really is. This coarse material is either pink or white in color and the particles are angular in shape. In many places where this soil borders on the sandy loam and also in some of the isolated areas the subsoil becomes slightly sticky at 36 inches, a sandy clay being found at no great depth below. In other places the whole section is a loose sand to a considerable depth. That body of Norfolk sand mapped in the southeastern part of the area differs from the typical section in that there is developed in the subsoil the brown crust characteristic of the Portsmouth fine sand.

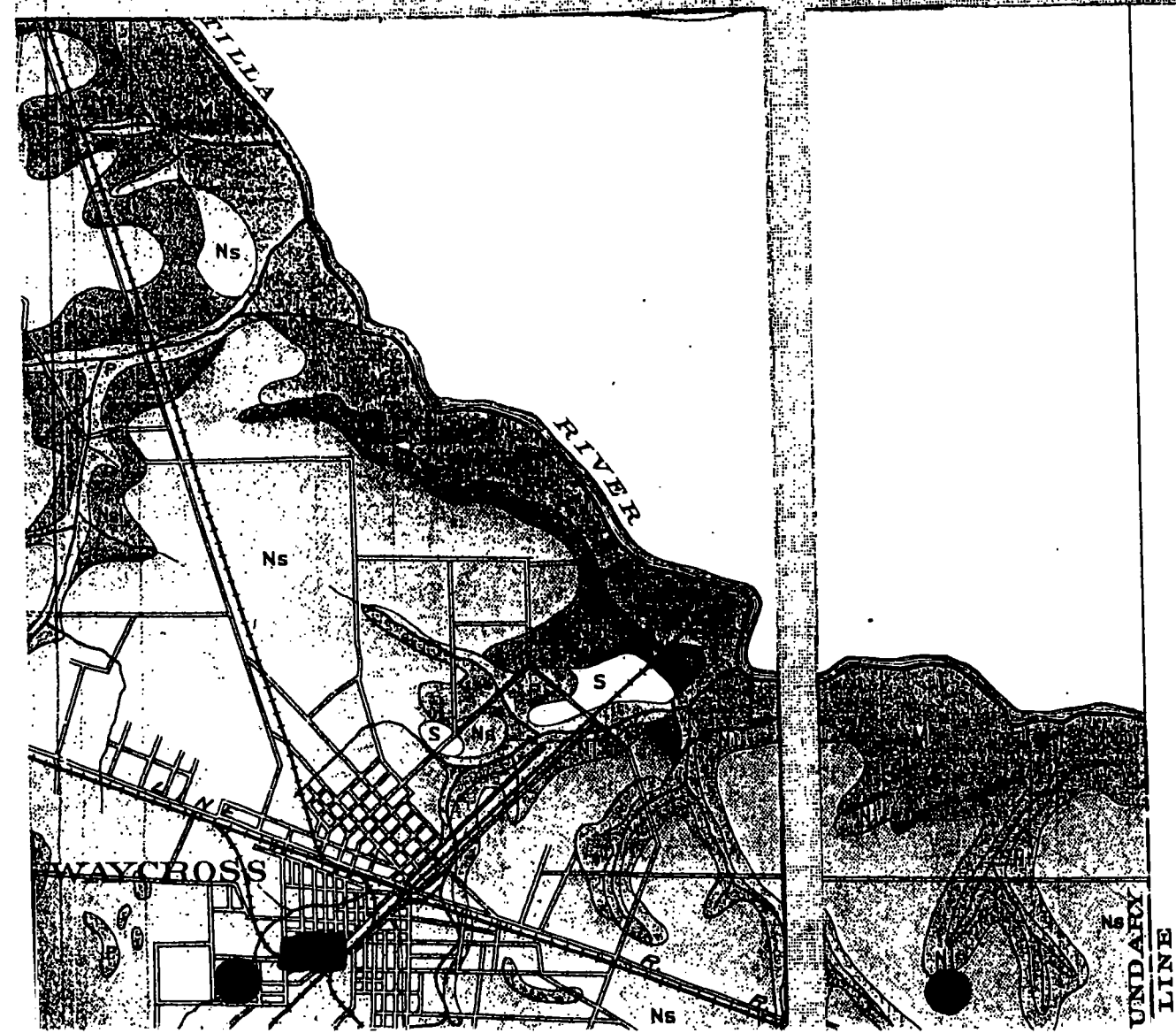
The largest areas of the Norfolk sand occur in irregular shaped bodies along the river and its tributaries, and are associated with the Norfolk sandy loam on the one side and the Portsmouth fine sand on the other. There are also several isolated bodies located southwest of Waresboro, along the old stage road. The isolated areas are almost level and slightly higher than the surrounding country. The topography of those areas lying along the stream courses is almost level to slightly rolling. The topographic position insures adequate drainage, and this with the open texture and structure of the soil and subsoil makes the Norfolk sand a warm, early soil, and one susceptible to drought. On the level areas of the type skillful management in the way of drainage would insure a better control of the moisture conditions, and render it possible to maintain a fair moisture content until late in the season.

The isolated areas owe their origin directly to the deposition of the coarser materials in local areas at the time of the laying down of the surface materials whose weathering gives rise to the soils of the area. The remainder of the type has been developed largely by erosion and the establishment of better drainage conditions.

The native vegetation originally consisted of long-leaf yellow pine with some oaks, with a thin sod of wire grass and an underbrush of palmetto and gall-berry bushes.

The Norfolk sand is peculiarly adapted to the growing of early truck crops rather than the general farm crops. Such crops as lettuce, radishes, peas, beans, early Irish potatoes, cantaloupes, watermelons, strawberries, etc., should do well and prove profitable with good care and judicious fertilization. In fact any crop which must be liberally fertilized and forced to an early maturity would do well on this soil.\*

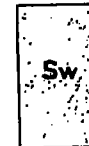
\* Large samples of this soil from the neighborhoods of Waycross, Braganza, and Waltham were the subject of a study by the wire-basket method to determine the local manurial requirements of this type of soil. Two of the samples were collected from fields that had been cleared for about sixty years, one of them, although at present idle, had been for many



Sandhill



Meadow



Swamp

## REFEREBCE 7

# AVERAGE ANNUAL RAINFALL AND RUNOFF IN GEORGIA, 1941-70

ROBERT F. CARTER  
AND  
HAROLD R. STILES

Prepared as part of the  
Accelerated Ground-Water Program  
in cooperation with the  
Department of the Interior  
United States Geological Survey

Department of Natural Resources  
Joe D. Tanner, Commissioner  
Environmental Protection Division  
J. Leonard Ledbetter  
Georgia Geologic Survey  
William H. McLamore

ATLANTA

1983

 HYDROLOGIC ATLAS 9 

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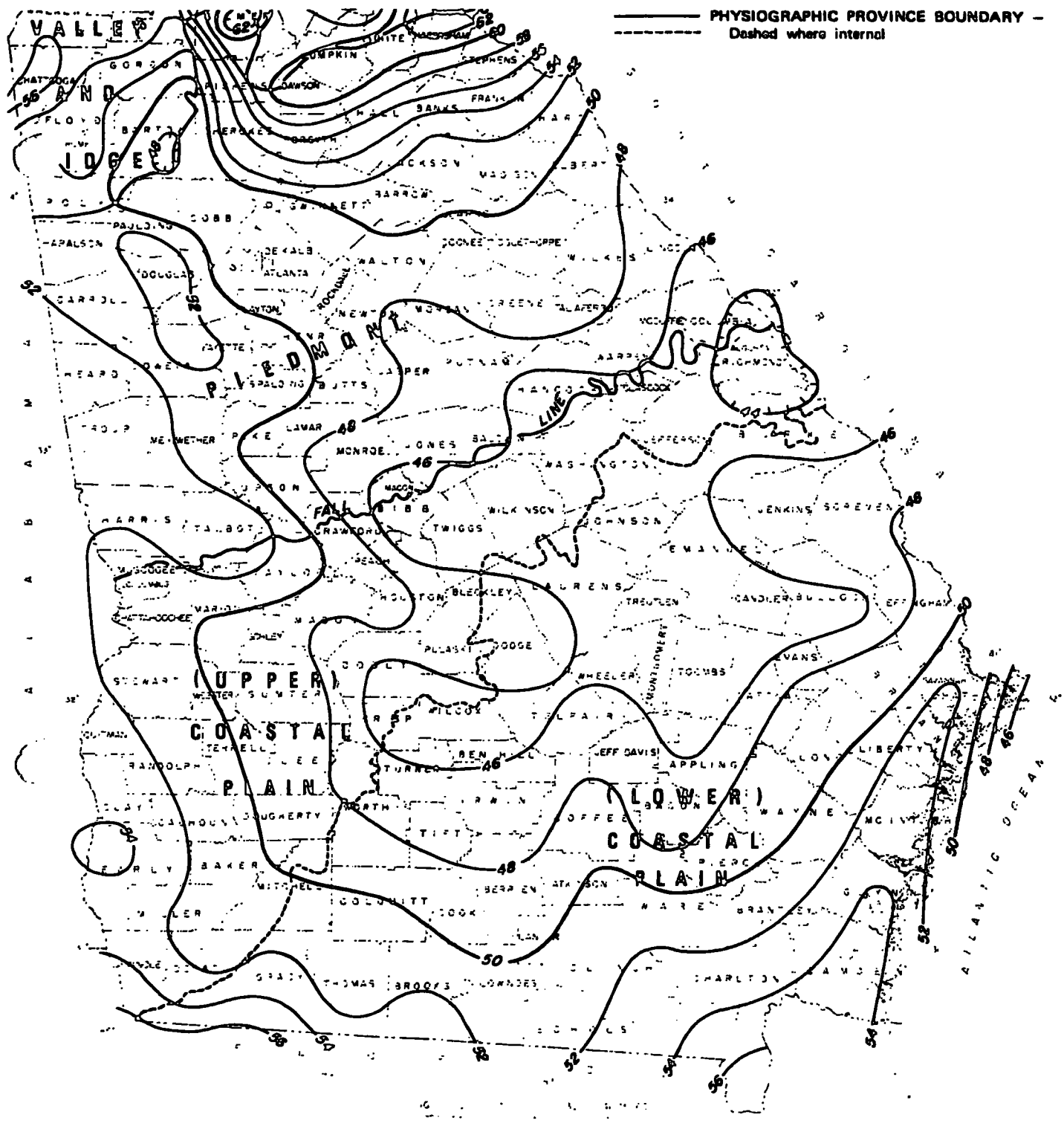


Figure 1.—Average annual rainfall in Georgia, 1831-70, and physiographic provinces.

The State received an average of 50 inches of rainfall per year, which varied locally from less than 44 inches to more than 70 inches. It also varied greatly from year to year.

The map was prepared from data furnished by the National Weather Service and was reviewed by that agency. Rainfall data are cited at specific points, well distributed throughout the State, and valid point samples of the amount of rainfall that occurred. From

these samples, data interpolations and extrapolations were made and approximate lines of equal value were drawn. This process is similar to the method of compiling topographic maps using locally distributed points of known land elevation. The map of average annual rainfall shown here is a reconstructed representation of average annual rainfall for the State during the indicated time period, but caution should be used in interpolating between lines of equal value on the map, particularly in mountainous areas.

## REFERENCE 8

**WARE COUNTY**

Georgia

**Real Property****BASE INFORMATION**

- Base
- Residential
- Sales
- Other Improvements

**Parcel**

Parcel ID: WA1106 017  
Property Address: 0 FOLKS-FRANCIS ST  
Zoning Code: Commercial  
Tax District: 02 - City  
Home Exempt: S0 - No Homestead Exemption  
Value: \$8,200.00

**Ownership**

Owner: BRYSON ANTHONY A  
Mailing Address: 405 MAGNOLIA ST  
WAYCROSS GA 31501

**Legal Description**

FOLKS-FRANCIS ST B68 L2

**Basic Residential**

No Data Available

**Land**

Acres: 0  
Total Depth: 100  
Front Feet: 100  
Sq Feet: 0  
Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
9/30/1997	\$0.00	BRYSON ANOHONY A	ZACHRY R B JR



## WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 014  
 Property Address: 0 FOLKS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$9,575.00

## Ownership

Owner: BRYSON ANTHONY A  
 Mailing Address: 405 MAGNOLIA ST  
 WAYCROSS GA 315013428

Legal Description  
 FOLKS ST B68 L1

Basic Residential  
 No Data Available

Land  
 Acres: 0  
 Total Depth: 32  
 Front Feet: 100  
 Sq Feet: 0  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
9/30/97	\$30,000.00	BRYSON ANTHONY A	UNKNOWN

*Gen. Miles  
 912/338-9191*

# WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 010  
 Property Address: 0 FRANCIS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$6,500.00

### Ownership

Owner: SEVEN OUT LLC A FLORIDA LC COMPANY  
 Mailing Address: 1859 E ADAMS STREET  
 JACKSONVILLE FL 32202

### Legal Description

FRANCIS ST B84 L1

### Basic Residential

No Data Available

Land  
 Acres: 0.46  
 Total Depth: 200  
 Front Feet: 100  
 Sq Feet: 20000  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
3/7/00	\$0.00	RAULERSON WADE	HARRELL L B
5/2/02	\$125,000.00	STRINGER RONALD A	RAULERSON WADE
12/5/02	\$0.00	SEVEN OUT LLC A FLORIDA LC COMPANY	STRINGER RONALD A

# WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 020  
 Property Address: 903 FRANCIS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$6,500.00

### Ownership

Owner: SEVEN OUT LLC A FLORIDA LL COMPANY  
 Mailing Address: 1859 E ADAMS STREET  
 JACKSONVILLE FL 32202

### Legal Description

FRANCIS ST 903 B128

### Basic Residential

No Data Available

Land  
 Acres: 0.28  
 Total Depth: 200  
 Front Feet: 60  
 Sq Feet: 12000  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
3/7/00	\$6,500.00	RAULERSON WADE	HARRELL L B
5/2/02	\$0.00	STRINGER RONALD A	RAULERSON WADE
12/5/02	\$0.00	SEVEN OUT LLC A FLORIDA LL COMPANY	STRINGER RONALD A

# WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 009  
 Property Address: 901 FRANCIS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$191,373.00

## Ownership

Owner: SEVEN OUT LLC A FLORIDA LC COMPANY  
 Mailing Address: 1859 E ADAMS STREET  
 JACKSONVILLE FL 32202

## Legal Description

FRANCIS ST 901 B128 LA

## Basic Residential

No Data Available

Land  
 Acres: 0.87  
 Total  
 Depth: 201  
 Front  
 Feet: 188  
 Sq Feet: 37788  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
6/12/85	\$43,000.00		
7/15/85	\$53,000.00		
7/16/96	\$0.00	RAULERSON W WADE	
7/29/96	\$0.00	RAULERSON W WADE	WAYCROSS WARE CO DEV
2/22/02	\$0.00	RAULERSON W WADE	RAULERSON W WADE
		SEVEN OUT LLC A	RAULERSON W

## WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 013  
 Property Address: 801 FRANCIS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$48,370.00

## Ownership

Owner: JAMES BENNIE T  
 Mailing Address: P O BOX 715  
 WAYCROSS GA 31502

## Legal Description

FRANCIS ST 801 B84 L2

## Basic Residential

No Data Available

## Land

Acres: 0  
 Total Depth: 100  
 Front Feet: 200  
 Sq Feet: 0  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
4/23/86	\$43,333.00		
8/21/02	\$0.00	BENNETT T JAMES	WAYCROSS WARE COUNTY DEV AUTHORITY
1/29/03	\$65,000.00	CARDEN FERRELL J	BENNETT T JAMES

# WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 016  
 Property Address: 611 FRANCIS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$1,969.00

### Ownership

Owner: WOODARD LIVING TRUST  
 Mailing Address: 1315 HOUK DR  
 WAYCROSS GA 31503

### Legal Description

FRANCIS ST 611 B68 L6-8

### Basic Residential

No Data Available

### Land

Acres: 0  
 Total: 165  
 Depth: 165  
 Front Feet: 100  
 Sq Feet: 0  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
8/1/82	\$0.00		
12/26/86	\$5,000.00		
1/10/90	\$2,000.00	WOODARD LAWRENCE	
1/16/01	\$0.00	WODOARD LIVING TRUST	WOODARD LAWRENCE
10/26/01	\$0.00	WOODARD LIVING TRUST	WODOARD LIVING TRUST

*Lawrence Woodard  
 912/283-8739  
 1:00*

# WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 017  
 Property Address: 0 FOLKS-FRANCIS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$8,200.00

### Ownership

Owner: BRYSON ANTHONY A  
 Mailing Address: 405 MAGNOLIA ST  
 WAYCROSS GA 31501

### Legal Description

FOLKS-FRANCIS ST B68 L2

### Basic Residential

No Data Available

### Land

Acres: 0  
 Total Depth: 100  
 Front Feet: 100  
 Sq Feet: 0  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
9/30/97	\$0.00	BRYSON ANOHONY A	ZACHRY R B JR

# WARE COUNTY

Georgia

## Real Property

## BASE INFORMATION

- Base
- Residential
- Sales
- Other Improvements

Parcel  
 Parcel ID: WA1106 012  
 Property Address: 0 FOLKS ST  
 Zoning Code: Commercial  
 Tax District: 02 - City  
 Home Exempt: S0 - No Homestead Exemption  
 Value: \$16,801.00

Ownership  
 Owner: SEVEN OUT LLC  
 Mailing Address: 1859 E ADAMS ST  
 JACKSONVILLE FL 32202

Legal Description  
 FOLKS ST #3 B84 L3,4

Basic Residential  
 No Data Available

Land  
 Acres: 0.46  
 Total Depth: 200  
 Front Feet: 100  
 Sq Feet: 20000  
 Lots: 0

Most Recent Sales(s)			
Date	Amount	Grantee	Grantor
12/3/97	\$14,500.00	BRYSON ANTHONY ALLEN	LOTT JOHN E
9/8/00	\$25,000.00	BCX INC	BRYSON ANTHONY ALLEN
4/3/02	\$30,000.00	SEVEN OUT LLC	BCX INC





## REFERENCE 9



**Basic Search**

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**Author** Georgia. Dept. of Natural Resources. Historic Preservation Division.

**Published** Atlanta, GA

**Issue** Aug. 1998

**Notes** 2 pages in 1 PDF file

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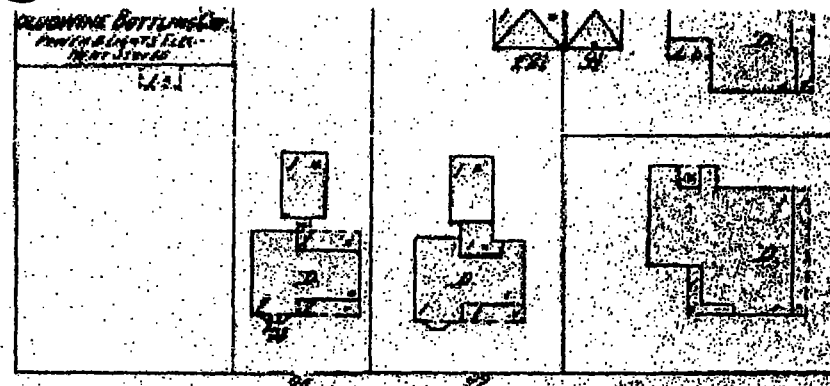
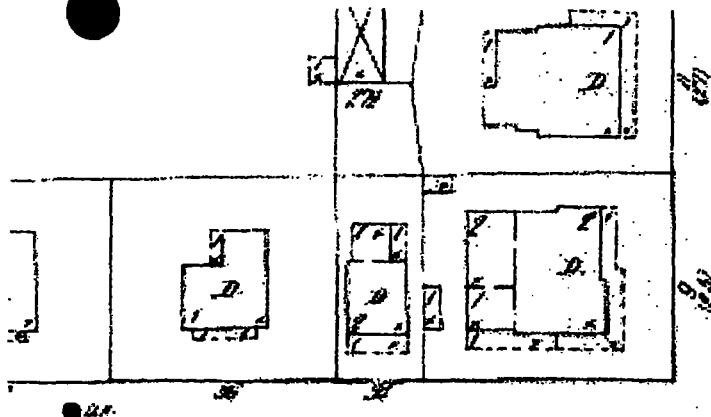
M1

1998

S2

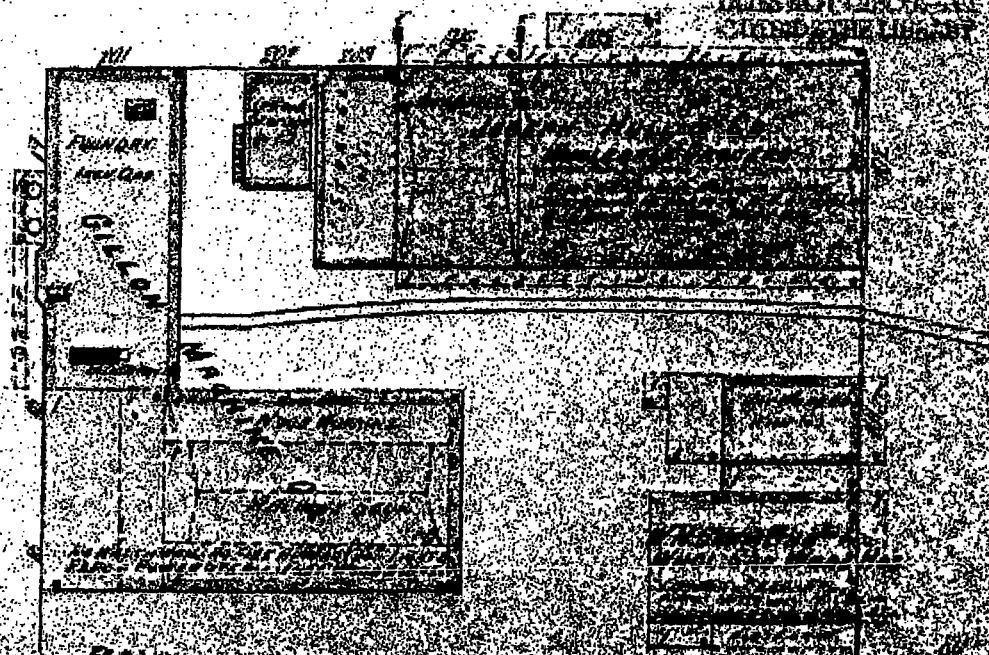
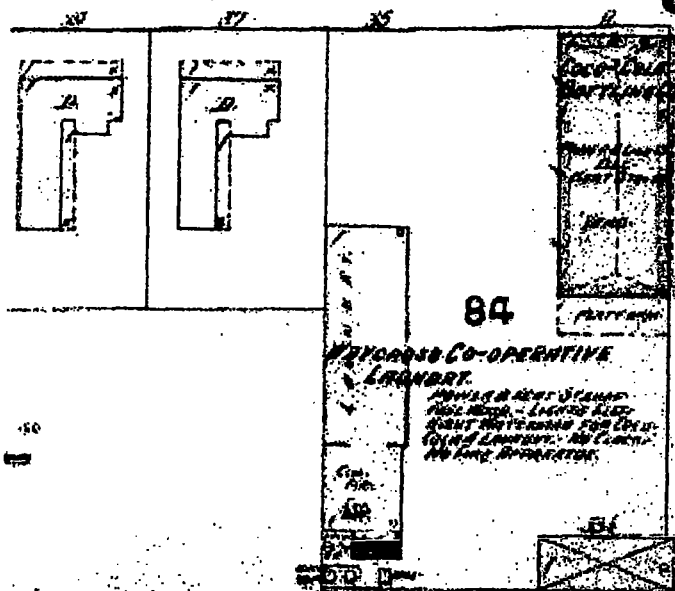
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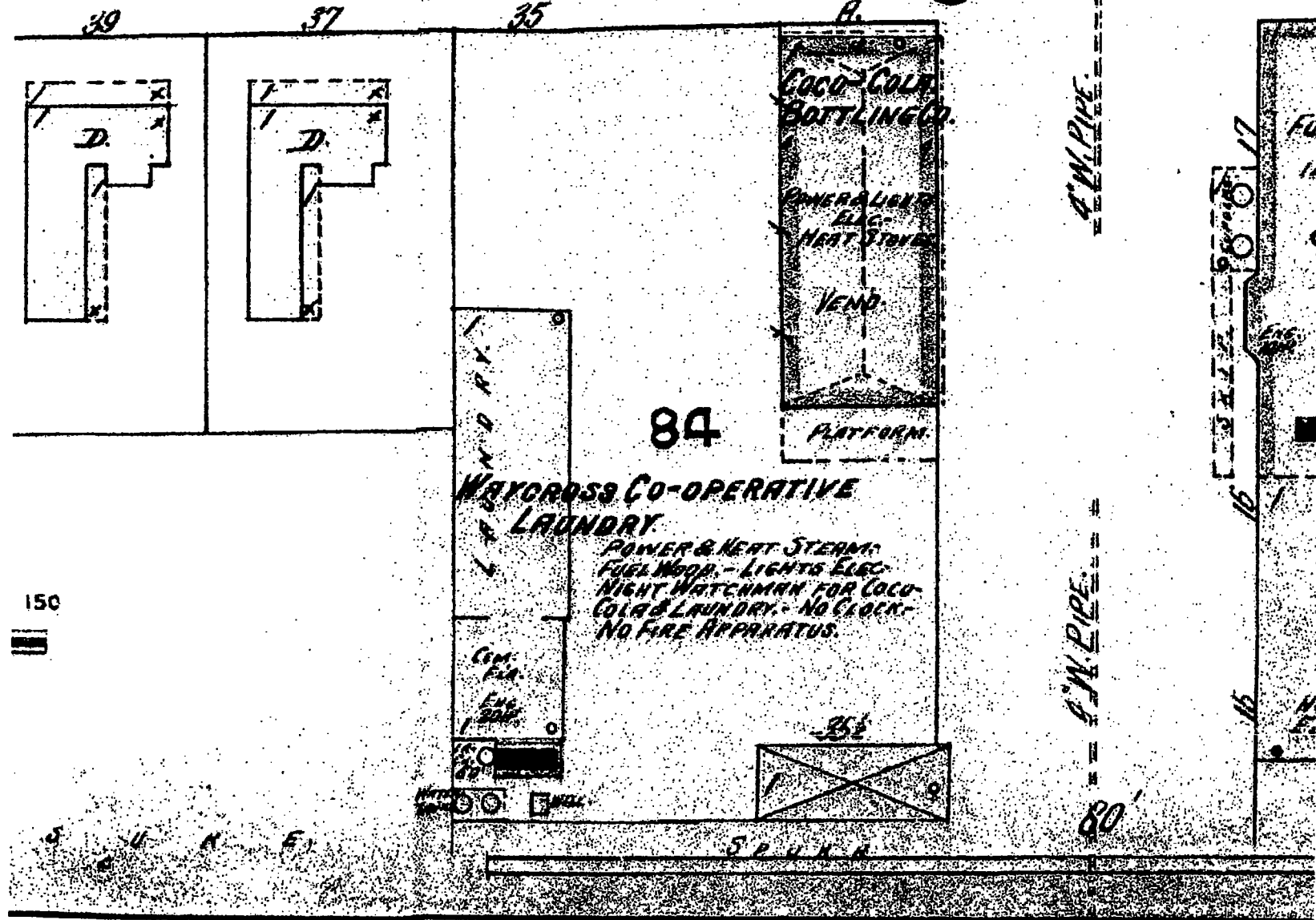
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FRANCES



J.H. Gillon & Co. - Sanborn Fire Insurance Map 1913

# FRANCES



**CODE STRUCTURAL UNIT**

## REFERENCE 10

**Basic Search**

**Precision Search**

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**Published** Atlanta, GA

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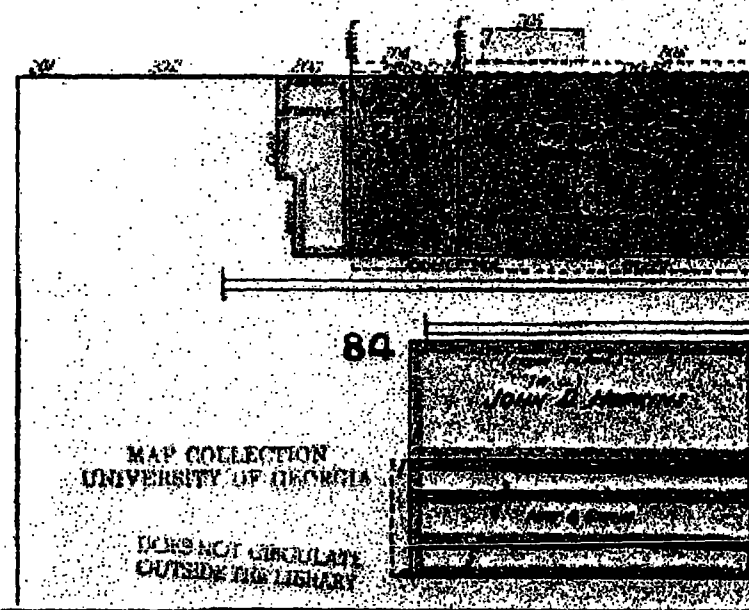
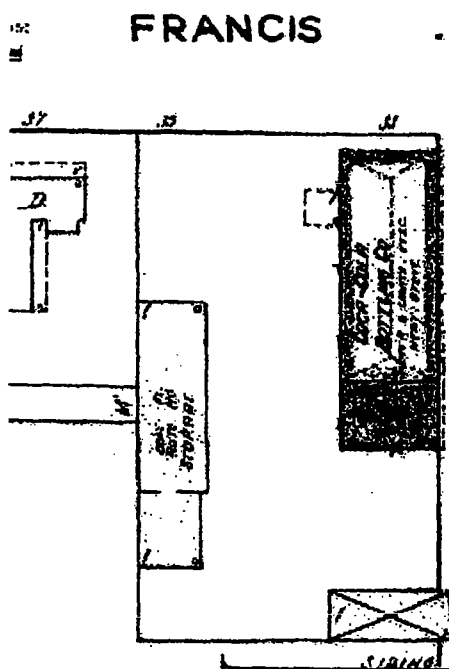
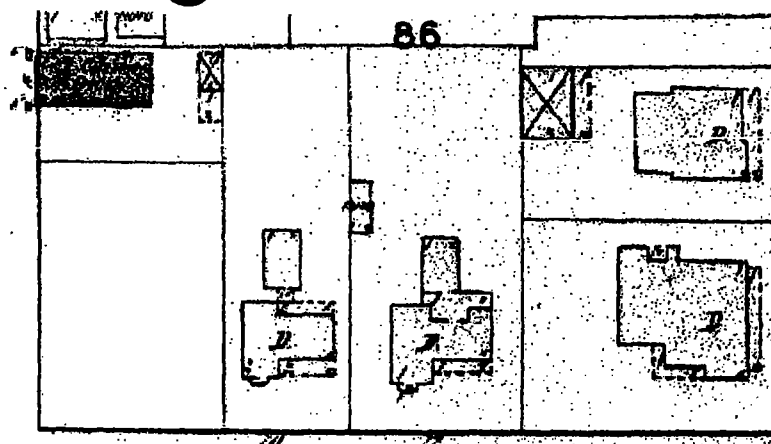
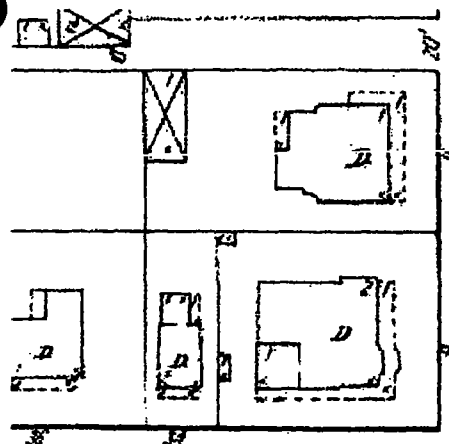
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FRANCIS

84

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# KEY

	Fireproof construction (or fire-resistant construction)		Window openings in first story
	Adobe building		Window openings in second and third stories
	Stone building		Window openings in second and fourth stories
	Concrete, lime and/or cement blocks		Windows with wired glass
	Hollow concrete or cement block construction		Windows with iron or iron clad shutters
	Concrete or reinforced concrete construction		Window openings tenth to twenty-second stories
	Iron building		
	Brick building with frame cornice		
	Brick veneered building and frame building		with traps
	Frame building		self-closing traps
	Iron building		Concrete block enclosed elevator with traps
	Frame building covered with asbestos		Frame enclosed elevator with self-closing traps
	Brick building with brick or metal cornice		Brick enclosed alley with wired glass door
	Fire wall		
	Figure 18		
	Figure 24		Block out
	Figure 36		Vertical pipe or stand pipe
	Figure 45		Automatic fire alarm
	Figure 46		Independent electric plant
	Figure 47		Automatic sprinklers
	Figure 48		Automatic chemical sprinklers
	Figure 49		Automatic sprinklers in part of building only (not shown in block out or corrected portion of building)
	Figure 50		Non-sprinklered
	Figure 51		Outside vertical pipe on fire escape
	Figure 52		Fire alarm box
	Figure 53		Single hydrant
	Figure 54		Double
	Figure 55		Triple
	Figure 56		Quadruple hydrant of the High Pressure Fire Service
	Figure 57		Fire alarm box of the High Pressure Fire Service
	Figure 58		Water pipes of the High Pressure Fire Service and hydrants of the High Pressure Fire Service as shown on key map
	Figure 59		Water pipes and size in inches
	Figure 60		Water pipes of private supply
	Figure 61		House numbers shown nearest to buildings are official or actually up on buildings
	Figure 62		Old house numbers shown furthest from buildings

CODING OF STRUCTURAL UNITS FOR FIREPROOF AND NON-COMBUSTIBLE BUILDINGS		
FRAMING	FLOORS	ROOF
CODE STRUCTURAL UNIT	CODE STRUCTURAL UNIT	CODE STRUCTURAL UNIT

CODING OF STRUCTURAL UNITS FOR FIREPROOF AND NON-COMBUSTIBLE BUILDINGS

FRAMING CODE STRUCTURAL UNIT	FLOOR CODE STRUCTURAL UNIT	ROOF CODE STRUCTURAL UNIT
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1998

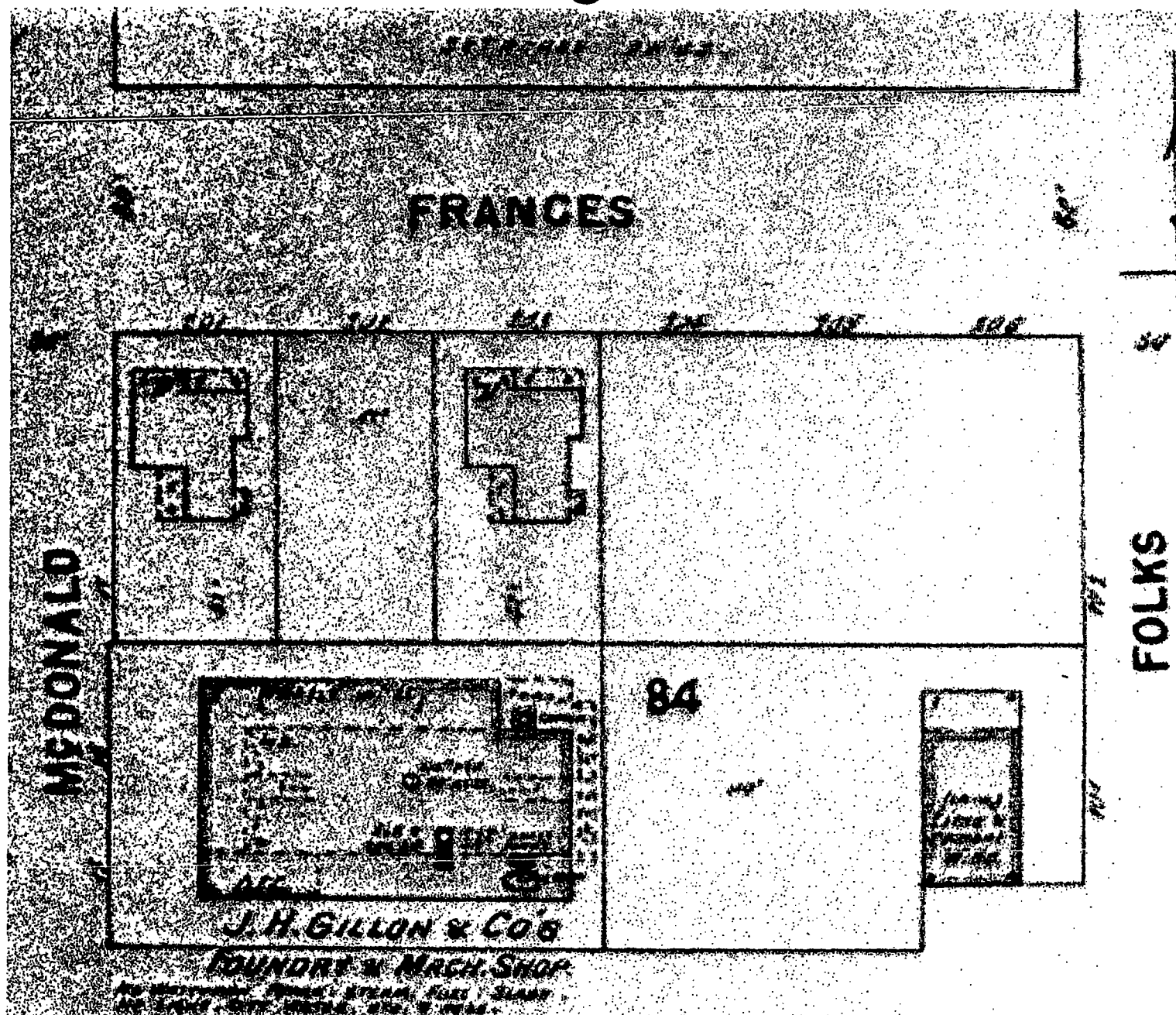
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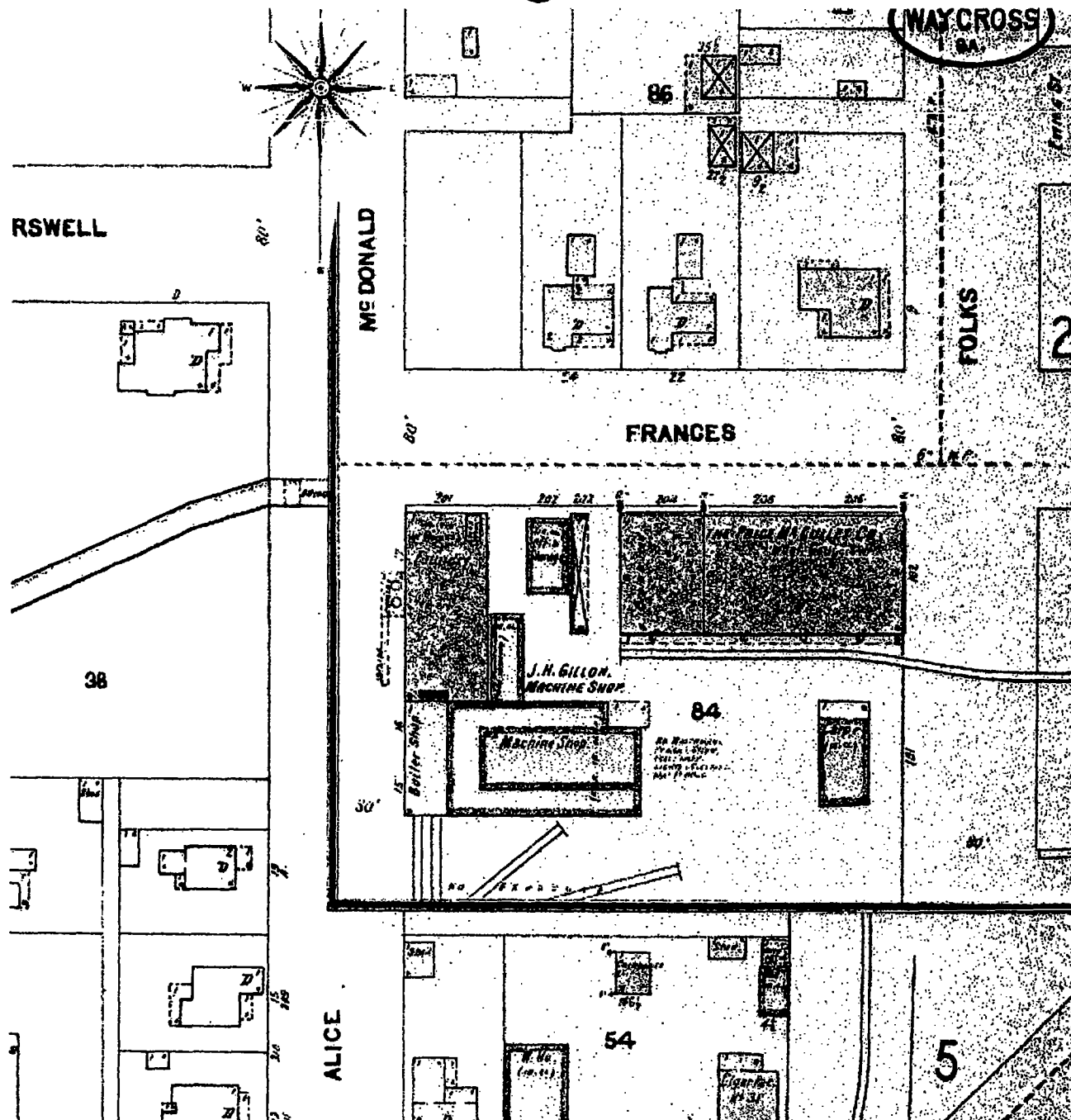
# KEY

	Fireproof construction (or fire-resistive construction)		Window openings in first story	
	Adobe building		Window openings in second and third stories	
	Stone building		Window openings with iron or tin clad shutters	
	Concrete frame building or cement block construction		Window openings with iron or tin clad shutters	
	Hollow concrete or cement block construction		Window openings with iron or tin clad shutters	
	Concrete or reinforced concrete construction		Window openings with iron or tin clad shutters	
	Brick veneered building		Window openings with iron or tin clad shutters	
	Brick and frame building		Window openings with iron or tin clad shutters	
	Frame building with brick trim		Window openings with iron or tin clad shutters	
	Frame building		Window openings with iron or tin clad shutters	
	Iron building		Window openings with iron or tin clad shutters	
	Iron building		Window openings with iron or tin clad shutters	
	Iron building		Window openings with iron or tin clad shutters	
	Iron building		Window openings with iron or tin clad shutters	
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	Iron building		Window openings with iron or tin clad shutters	



**J.H. Gillon & Co. - Sanborn Fire Insurance Map - Waycross, GA 1897**





J.H. Gillon & Co. Sanborn Fire Insurance Map – Waycross, GA 1903

## REFERENCE 12



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**Published** Atlanta, GA

**Issue** Aug. 1998

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1998

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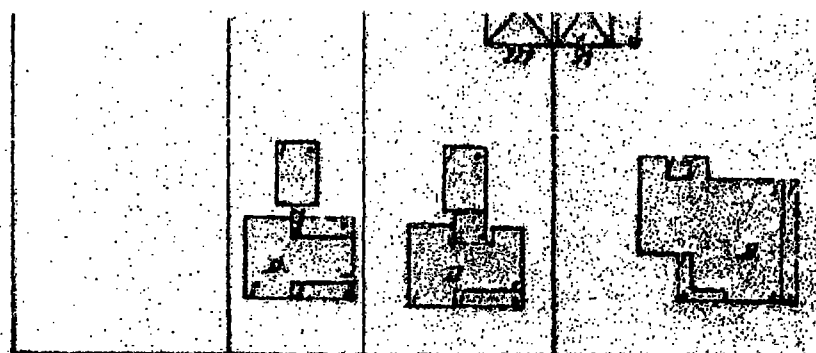
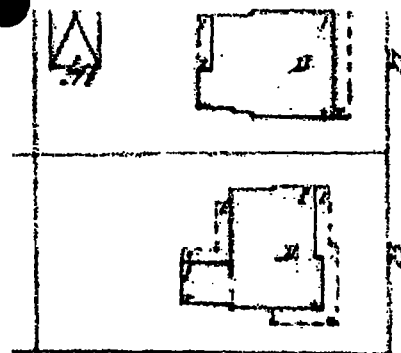
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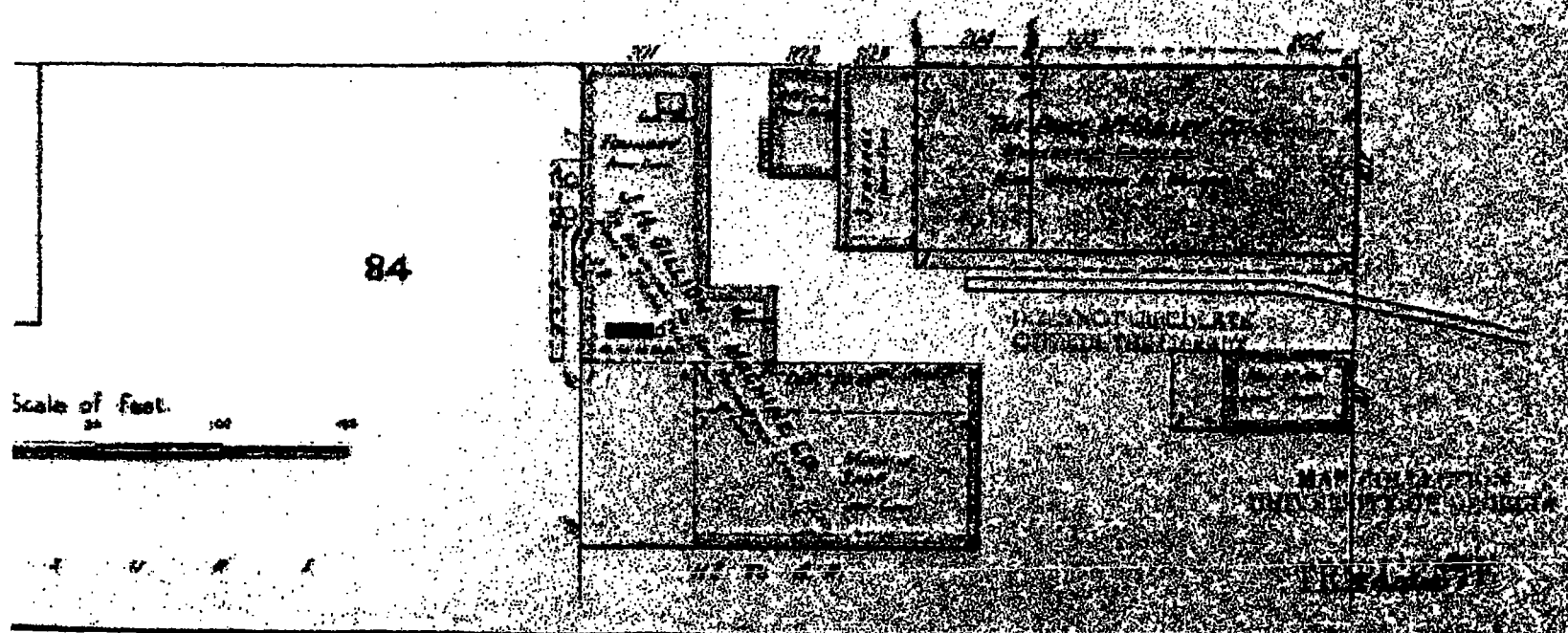
	Fire proof construction (on fire resistance test)		Window opening in first story
	Adobe building		Window openings in second and third stories
	Stone building		Window openings in second and fourth stories
	Concrete frame and order		Window openings with wired glass
	Hollow concrete or cement block construction		Window openings with iron or iron clad shutters
	Concrete or reinforced concrete construction		Window openings in light to twenty second stories
	Iron building		Open elevator
	Brick building with frame or iron frame side		Frame enclosed elevator
	Brick veneered building and frame building		Concrete block enclosed elevator with iron frame
	Frame building with iron metal clad		Brick enclosed elevator with wired glass door
	Frame building		Block number
	Iron building		Vertical pipe or stand pipe
	Various mechanical and electrical symbols		Automatic fire alarm
	Brick building with back iron metal cornice		Independent electric plant
	Fire wall 6 inches above roof		Automatic sprinkler
	Fire wall 12 inches above roof		Automatic chemical sprinkler
	Fire wall 18 inches above roof		Automatic sprinkler in apartment buildings only
	Fire wall 24 inches above roof		Non-sprinklered
	Walls with openings and size in inches		Outside vertical pipe on fire escape
	Walls with openings on floors as designated		Fire alarm box
	Openings with steel iron or iron clad doors		Single hydrant
	Openings with wired glass doors		Double hydrant
	Drive or passage way		Triple hydrant
	Stable		Quadruple hydrant of the High Pressure Fire Service
	Auto house or private garage		Fire alarm box of the High Pressure Fire Service
	Solid brick with interior walls of C.B. or E.B. and brick mixed		Water pipes of the High Pressure Fire Service and hydrants of the High Pressure Fire Service as shown on key map
	Mixed construction of C.B. and brick with one wall of solid brick		Water pipes and size in inches
	Mixed construction of C.B. and brick with one wall faced with 2 inch brick		Water pipes of hydrant supply
	Mixed construction of C.B. and brick throughout		House numbers shown nearest to buildings are official or actually upon buildings
			Old house numbers shown furthest from buildings

CODING OF STRUCTURAL UNITS FOR FIRE PROOF AND NON-COMBUSTIBLE BUILDINGS

FRAMING	FLOOR	ROOF
CODE STRUCTURAL UNIT	CODE STRUCTURAL UNIT	CODE STRUCTURAL UNIT



FRANCES



J.H. Gillon & Co. - Sanborn Fire Insurance Map - 1908

## REFERENCE 13

June 1930

[illegible]

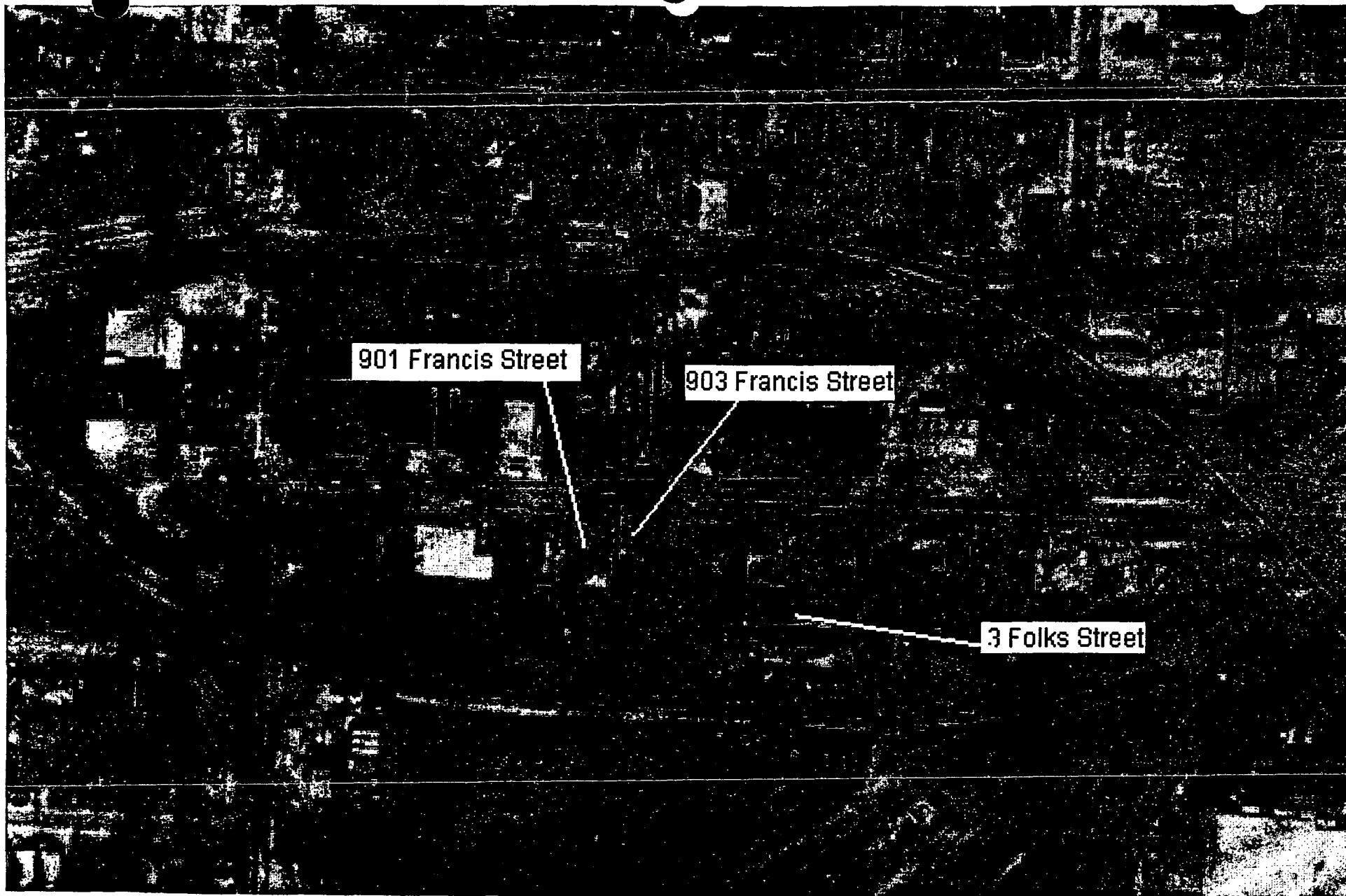
## REFERENCE 14







## REFERENCE 15



Seven Out Parcels by Address. Modified from U.S. Geological Survey Aerial Photograph, dated February 5, 1999, accessed at <http://stevemorse.org/jcal/map.html> on June 10, 2006.

## REFERENCE 16

**REMOVAL ASSESSMENT REPORT**  
**SEVEN OUT, LLC SITE**  
**WAYCROSS, WARE COUNTY, GEORGIA**

Prepared for  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
Region 4  
Atlanta, Georgia 30303

<b>Contract No.</b>	:	<b>68-W-00-120</b>
<b>TDD No.</b>	:	<b>4T-04-07-A-011</b>
<b>Date Prepared</b>	:	<b>December 9, 2004</b>
<b>EPA Task Monitor</b>	:	<b>Terry Stillman</b>
<b>Telephone No.</b>	:	<b>(404) 562-8748</b>
<b>Prepared by</b>	:	<b>Tetra Tech EM Inc.</b>
<b>START Project Manager</b>	:	<b>Randy Nattis</b>
<b>Telephone No.</b>	:	<b>(404) 225-5530</b>

## 1.0 INTRODUCTION

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) received Technical Direction Document (TDD) No. 4T-04-07-A-011 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W-03-120. Under this TDD, START assisted EPA in conducting removal assessment (RA) activities at the Seven Out, LLC Site, which is operating under the facility name of BCX Corporation. The facility is located in Waycross, Ware County, Georgia.

### 1.1 REPORT STRUCTURE

This RA Report provides a review of the objectives of the RA, discusses the field and fixed laboratory activities that were performed, and presents and discusses the fixed laboratory analytical results of tank and soil samples that were collected at the site. The report is organized as follows:

- Section 1.0 presents the RA Report's structure and the RA objectives;
- Section 2.0 provides facility background information;
- Section 3.0 describes the field and fixed laboratory activities conducted during this RA, and presents the fixed laboratory analytical results;
- Section 4.0 presents conclusions regarding the results of the RA; and
- Section 5.0 provides a list of references.

Appendices to this report present figures (Appendix A), fixed laboratory data tables (Appendix B), tank inventory logs (Appendix C), the fixed laboratory analytical data as presented by the laboratory (Appendix D), logbook notes (Appendix E), a photographic log (Appendix F), a table of witnesses (Appendix G), and the data validation report and qualified fixed laboratory analytical data tables (Appendix H).

## **1.2 REMOVAL ASSESSMENT OBJECTIVES**

The primary objectives of this RA were to: (1) collect information on current site conditions, including information regarding the presence and nature of contamination, (2) and to conduct RA sampling activities in support of assessing the need for a removal action at the site.

Planned RA activities included the following:

- Collect environmental samples;
- Interview the site owner and State representatives;
- Screen the site using air monitoring instruments;
- Photograph site features and sampling locations;
- Collect and prepare samples for fixed laboratory analysis;
- Prepare field sampling and chain-of-custody documentation; and
- Provide technical support for assessing the need for a removal action.

## **2.0 FACILITY BACKGROUND**

The Seven Out site is located at 901 Francis Street in Waycross, Ware County, Georgia. Appendix A, Figure 1 presents a topographic map of the area around the facility. The facility is less than 2 years old and operates as an industrial wastewater treatment facility. The property has 37 storage/treatment tanks and 4 frac tanks with a combined capacity of over 450,000 gallons. Wastewater is treated in batch mode. The treatment process is adjusted for each batch to ensure that the effluent meets pre-treatment standards. The facility uses sodium hydroxide, aluminum sulfate, ferric acid, and sulfuric acid to remove components of the wastewater through precipitation; these chemicals are stored on site in bulk tanks. Precipitated solids are sent to a filter press, after which the pressed solids are sent to the Broadhurst Environmental landfill in Screvin, Georgia. The treated wastewater is discharged to the City of Waycross publicly owned treatment works (POTW) using the City's collection system.

The City of Waycross issued Notices of Violation and an Administrative Order to the facility due to many exceedances of the company's pre-treatment permit. The facility received eight enforcement letters between May 2003 and December 2003 from the City of Waycross. The facility voluntarily ceased accepting industrial wastewater and stopped discharging to the Waycross POTW on March 1, 2004.

The BCX plant manager informed Georgia Department of Natural Resources (GADNR) personnel that no

documentation was available to demonstrate the exact contents of each tank. Some information on past customers and waste profiles were provided by GADNR to EPA, however, information on the current contents of the tanks was not available when preparing this RA report.

### 3.0 FIELD AND FIXED LABORATORY ACTIVITIES

The Tetra Tech START team mobilized to the site on August 23, 2004, and performed field activities through the morning of August 24, 2004. Field activities focused on collecting samples from onsite storage and treatment tanks, with an emphasis on the heavier fractions and sludges that might be present inside the tanks. Appendix A, Figure 2 presents the site layout, and shows the locations of many of the tanks from which samples were collected. Appendix C presents the tank inventory logs. Appendix E presents the field logbook notes that summarize the field activities. Appendix F contains a photographic log of specific site locations and activities.

Field activities were performed in accordance with the EPA Science and Ecosystem Support Division (SESD) Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISOPQAM) (Ref. 1). This guidance document specifically addresses sample types, sampling procedures, and field quality assurance and quality control samples. In addition, the Sampling and Analysis Plan prepared for this RA was also used as a guidance document when performing the RA activities (Ref. 2).

#### 3.1 SAMPLING LOCATIONS

The tanks at the facility were labeled with designations specific to each tank. Samples collected from the tanks were named by using these tank designations, although in many cases the sample names contain additional lettering to provide further information about the sample. In particular, the letter "S" was appended to many sample names to indicate that the sample was taken from a sludge layer. In addition, the tank designated "DP-1" contained two layers from which samples were collected; the sample from the top layer was named "DP-1-S layer A", and the sample from the bottom layer was named "DP-1-S layer B." A total of 33 tank samples were collected.

Four surface soil samples were also collected for fixed laboratory analysis during the field investigation. A background soil sample was collected from a nearby private residential property located about 1,000 feet



west of the site (named "SO-BG.") Because discolored soil was observed in some areas, soil samples were collected from the following locations: a drainage ditch (named "SO-DD"), the frac tank area (named "SO-FRT"), and at the south wall of the tank farm (named "SO-SW). It is believed that one of the frac tanks discharged some of its contents and was the source of the soil discoloration that can be seen in Photograph No. 10 and Photograph No. 11

Quality control samples collected in the field included one trip blank sample (named "TB-1") that was analyzed for volatile organic compounds (VOC). In addition, one tank sample (named "CT-6-S") and one soil sample (named "SO-FRT") were designated on the chains-of-custody (COC) forms as samples to be analyzed as matrix spike and matrix spike duplicate (MS and MSD) samples, in addition to their routine analyses. In addition, selected samples were used for laboratory duplicate sample analysis for some analytical parameters.

The samples were preserved, packaged, and submitted to Analytical Environmental Services, Inc. (AES) in Atlanta, Georgia for analysis for various parameters.

### **3.2 FIXED LABORATORY ANALYTICAL RESULTS**

Appendix D contains a compact disc that presents in electronic form the entire AES data package, including all of the analytical results and raw data. The fixed laboratory (AES) analytical data were subjected to a data validation process; Appendix H presents the data validation report and a table containing the validation-qualified data. Appendix B, Tables 1 and 2 present a summary of the qualified fixed laboratory analytical results for the soil and tank samples. These tables summarize the positive analytical results and therefore do not contain all of the analytical results presented in Appendices D and H.

The following discussion of the data presented in Tables 1 and 2 summarizes the positive results and those results that exceeded certain remediation goals. In particular, the analytical results (excluding the toxicity characteristic leaching procedure [TCLP] results) presented in Table 1 for the soil samples were compared to the EPA Region 9 Preliminary Remediation Goals (PRG) for residential and industrial soils (Ref. 3); the PRGs appropriate to each analyte are included in Table 1 for convenience. As stated in the Region 9 website (provided in Ref. 3), the Region 9 PRGs "are risk-based concentrations that are intended to assist risk assessors and others in initial screening-level evaluations of environmental measurements. The PRGs contained in the Region 9 PRG Table are generic; they are calculated without site specific information". The website also states that "PRGs should be viewed as Agency guidelines, not legally enforceable

standards. They are used for site 'screening' and as initial cleanup goals, if applicable. PRGs are not *de facto* cleanup standards and should not be applied as such. However, they are helpful in providing long-term targets to use during the analysis of different remedial alternatives."

In addition, the TCLP analytical results presented in Appendix B, Tables 1 and 2 were compared to the appropriate maximum concentrations found in Table 1 of Title 40 of the Code of Federal Regulations, Part 261, Section 261.24 (40 CFR 261.24).

The surface soil analytical results presented in Appendix B, Table 1 show that measurable concentrations of TCLP lead were detected in sample SO-DD and SO-SW; the TCLP lead concentration in sample SO-DD (8.13 milligrams per liter [mg/L]) exceeded the TCLP maximum concentration standard presented in 40 CFR 261.24. Total metals were found at detectable concentrations in all four soil samples, and the background sample generally had the lowest metals concentrations among the sample set. Sample SO-SW contained total arsenic at a concentration (151 milligrams per kilogram [mg/kg]) that exceeded both the residential soil and industrial soil Region 9 PRGs. In addition, sample SO-SW contained total lead at a concentration (264 mg/kg) that exceeded the residential soil Region 9 PRG. The results for the analysis of the soil samples for volatile organic compounds (VOC) showed measurable concentrations of benzene (32 micrograms per kilogram [ $\mu\text{g/kg}$ ]) and carbon disulfide (10  $\mu\text{g/kg}$ ) in sample SO-DD; these concentrations are below the associated Region 9 PRGs for residential and industrial soils. Polynuclear aromatic hydrocarbons (PAH) were found at measurable concentrations in samples SO-DD and SO-SW. The concentrations of benz(a)anthracene, benzo(a)pyrene, benzo(k)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene in sample SO-SW exceeded both the residential soil and industrial soil Region 9 PRGs for those compounds. In addition, the concentration of benzo(b)fluoranthene in sample SO-SW exceeded the residential soil Region 9 PRG for this compound. Note that the reporting limits for arsenic, benzo(a)pyrene, and dibenz(a,h)anthracene for samples SO-BG, SO-DD, and SO-FRT are above the associated Region 9 PRGs for residential and industrial soils; it is therefore possible that these samples contain these analytes at concentrations above the PRGs.

The tank analytical results presented in Appendix B, Table 2 show that measurable concentrations of TCLP metals, total metals, VOCs and semivolatile organic compounds (SVOC) were detected in many of the samples collected from the tanks and frac tanks. None of the TCLP metals results presented in Table 2 exceeded the maximum concentrations for the toxicity characteristic for these analytes provided in 40 CFR 261.24.

Notable results among the four samples that were analyzed as solid samples (samples CD-1-S, CD-3-S, SH-4-S, and SS-2-S) include the following: sample SH-4-S contained lead at a concentration of 14 mg/kg; mercury was detected (at up to 0.00982 mg/kg) in all four samples; vanadium was detected at a concentration of 41 mg/kg in sample CD-3-S; acetone was detected (at up to 74,000 µg/kg in sample SH-4-S) in three of the four samples; sample SH-4-S also contained benzene at a concentration of 2,600 µg/kg; samples CD-3-S and SS-2-S contained measurable concentrations of 2-methylnaphthalene and phenanthrene; and sample SS-2-S contained a measurable concentration of naphthalene.

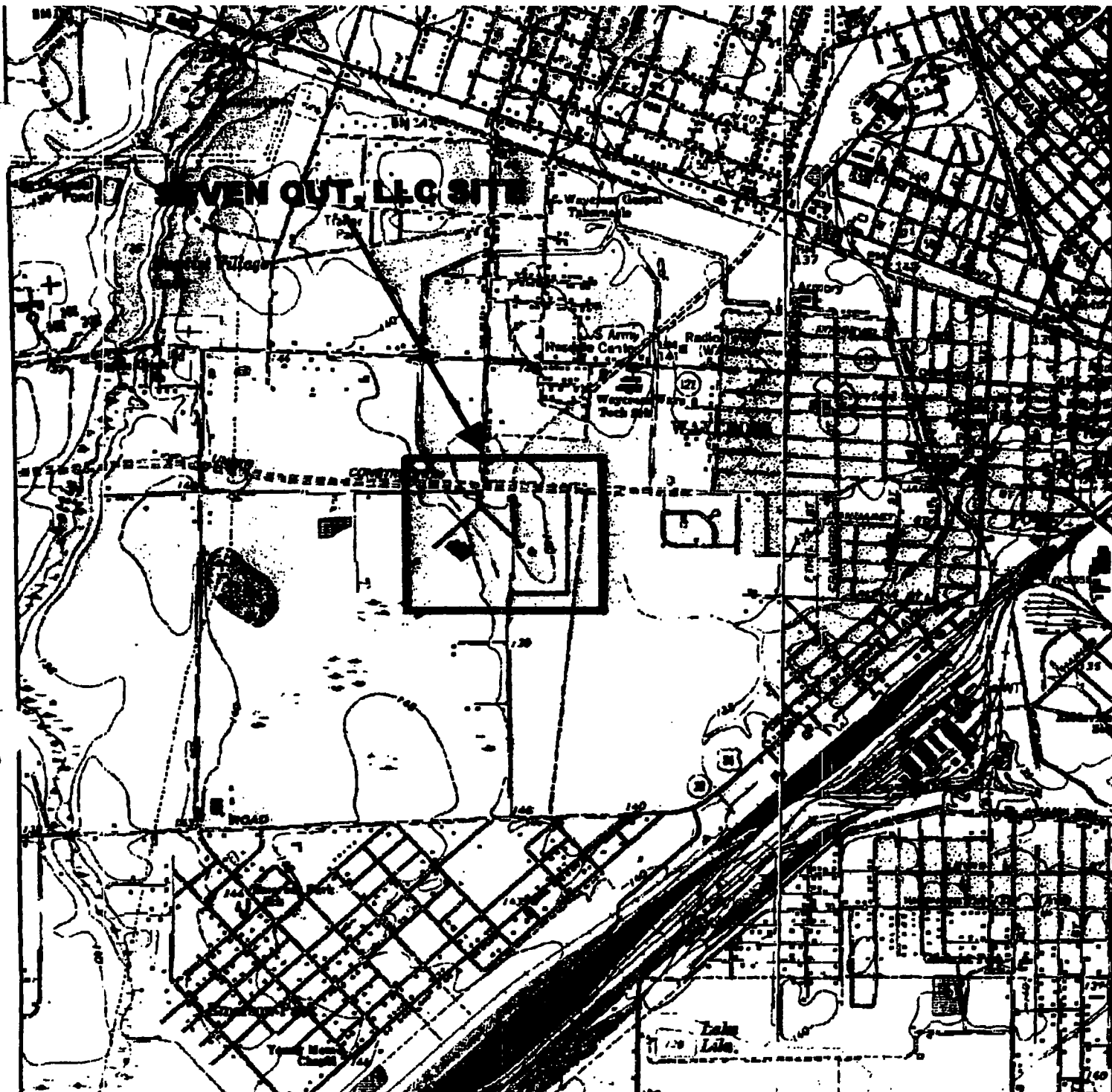
Notable results among the samples analyzed as liquid samples include the following: 2-butanone, 4-methyl-2-pentanone, acetone, and benzene were detected in many of the samples (with acetone at 270,000 micrograms per liter [µg/L] in sample SH-3-S and benzene at 2,300 µg/L in sample ST-1); xylenes and toluene were detected in sample DP-1-S layer B; sample OP-4-S contained phenol at a concentration of 180,000 µg/L; and sample CT-1-S contained several SVOCs, many at the highest concentrations detected for this set of samples.

#### **4.0 CONCLUSIONS**

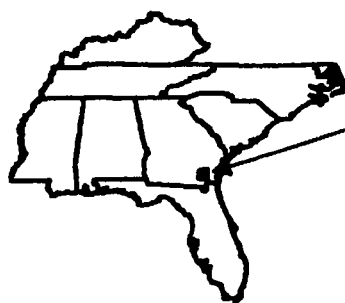
From August 23 through 26, 2004, the Tetra Tech START team collected 33 tank and frac tank samples and 4 surface soil samples from the Seven Out, LLC Site in Waycross, Ware County, Georgia. The samples were analyzed for TCLP metals, total metals, VOCs and SVOCs. According to the National Contingency Plan (NCP), 40 CFR 300.415(b)(1), at any release, regardless of whether or not the site is included on the National Priorities List (NPL), where the lead agency makes the determination that there is a threat to public health or welfare of the United States or the environment, the lead agency may take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate or eliminate the release or the threat of release. Based on the NCP and the fixed laboratory analytical results presented in this report, future removal activities may be justified at this site, at the discretion of the EPA.

## 5.0 REFERENCES

1. U.S. Environmental Protection Agency, Science and Ecosystem Support Division (SESD) Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISOFQAM), May 1996, Includes 1997 Revisions.
2. Tetra Tech EM, Inc., Removal Assessment, Sampling and Analysis Plan, Seven Out, LLC Site, Waycross, Ware County, Georgia, prepared for U.S. Environmental Protection Agency, Region 4, August 19, 2004.
3. U.S. Environmental Protection Agency, Region 9, Preliminary Remediation Goals Table, October 2004. This table can be found at the following web address:  
<http://www.epa.gov/region09/waste/sfund/prg/index.htm>.



SOURCE: MODIFIED FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE: WAYCROSS EAST, GA, 1982; WAYCROSS WEST, GA, 1983



Waycross, Ware County  
Georgia

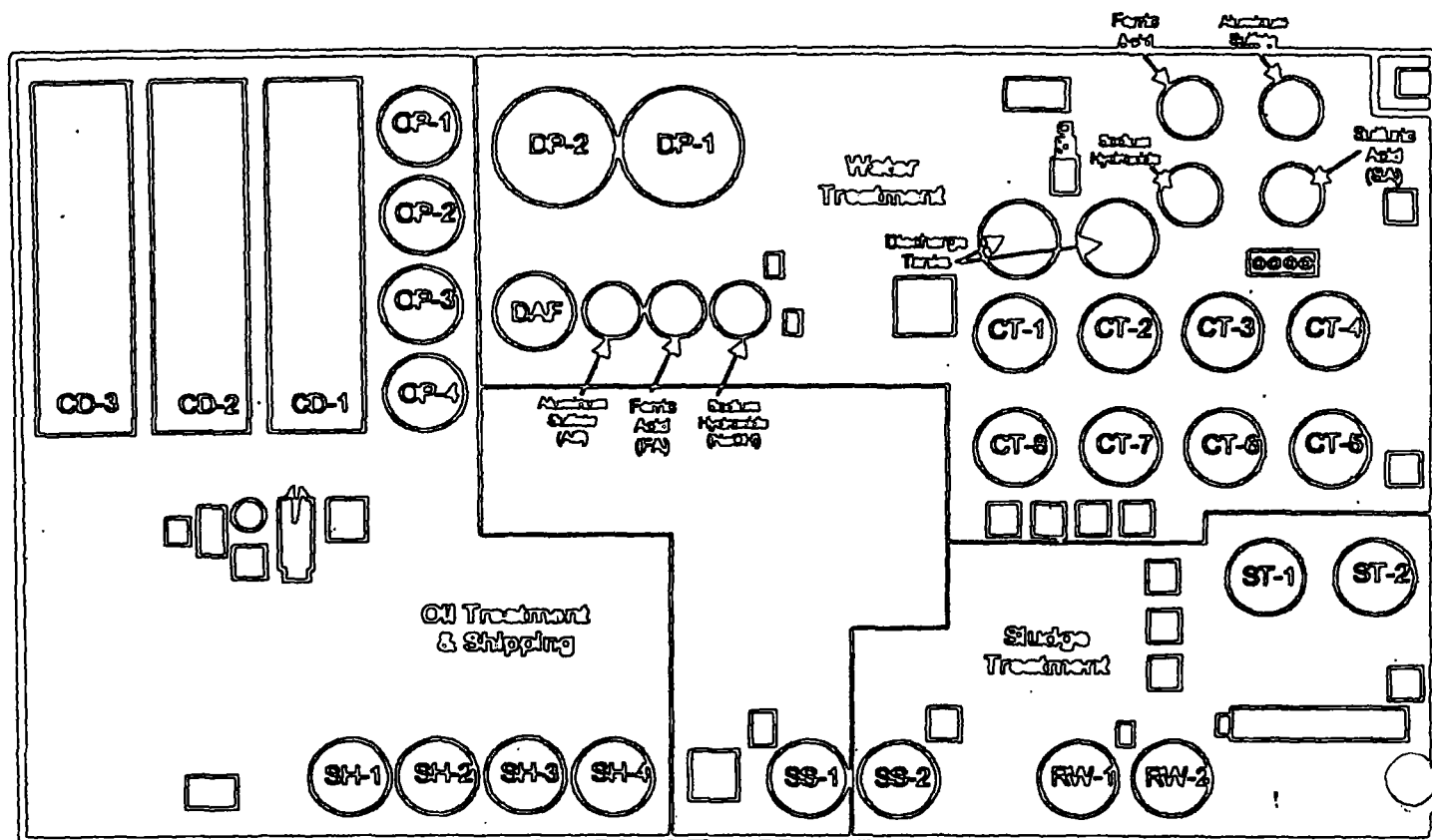


0 0.25 0.5 1 Miles

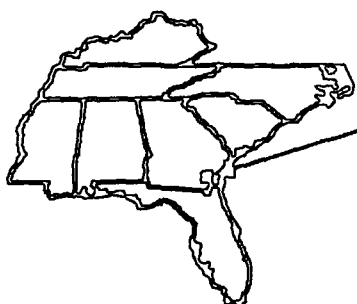
**SEVEN OUT, LLC SITE**  
**WAYCROSS, WARE COUNTY, GEORGIA**  
**TDD No. 4T-04-07-A-011**

**FIGURE 1**  
**FACILITY LOCATION MAP**

**Tt Tetra Tech EM Inc.**



NOT TO SCALE

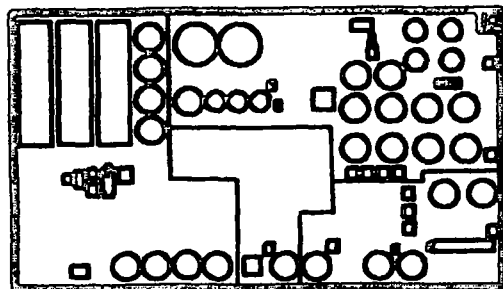


Waycross, Ware County  
Georgia

SEVEN OUT, LLC SITE  
WAYCROSS, WARE COUNTY, GEORGIA  
TDD No. 4T-04-07-A-011

FIGURE 2  
FACILITY LAYOUT MAP

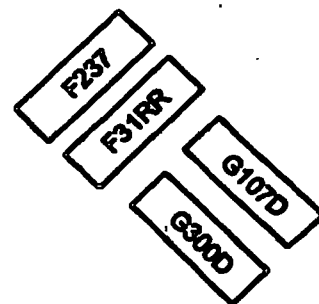
 Tetra Tech EM Inc.



SO-SW

SO-DD

SO-FRT

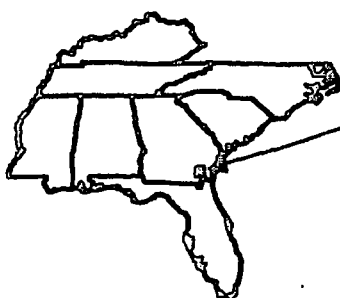


# LEGEND

- ⊙ Soil sample
- ▭ FRAC Tank

NOT TO SCALE

SO-8G1 is the background oil sample and was sampled off site.  
The sample location is not depicted on this figure



Waycross, Ware County  
Georgia

SEVEN OUT  
WAYCROSS, WARE COUNTY, GEORGIA  
TDD No. 4T-04-07-A-011

FIGURE 3 - FRAC TANKS  
AND SOIL SAMPLE LOCATIONS



Tetra Tech EM Inc.

**APPENDIX B**

**TABLES**

**(9 Sheets)**



**TABLE 1**  
**SURFACE SOIL ANALYTICAL RESULTS**

PARAMETER	Region 9 PRG	Sample Identification			
	Residential/Industrial Soil Screening Levels	SO-BG	SO-DD	SO-FRT	SO-SW
ICLPL Metals (mg/L)					
Lead	5.0 <sup>a</sup>	0.0500 U	8.1300	0.0500 U	0.0690
Metals (mg/kg)					
Aluminum	76,100 / 100,000	623	1860	586	2180
Arsenic	0.0616 <sup>b</sup> / 0.251 <sup>b</sup>	3.93 U	3.59 UJ	3.75 U	151
Barium	5,370 / 66,600	3.93 U	15.5	7.11	75.2
Calcium	NSA / NSA	234	7740	1530	3130
Chromium	211 / 448	1.96 U	7.93	1.87 U	8.69
Cobalt	903 / 1,920	1.96 U	1.8 U	1.87 U	3.46
Copper	3,130 / 40,900	1.96 U	59.2	17.8	107
Iron	23,500 / 100,000	596	4910	1080	10800
Lead	150 <sup>b</sup> / 800	3.93 U	17.7	10.8	264
Magnesium	NSA / NSA	39.3 U	507	58.5	143
Manganese	1,760 / 19,500	4.26	74.7	8.22	169
Nickel	1,560 / 20,400	3.93 U	3.59 U	3.75 U	4.62
Potassium	NSA / NSA	78.5 U	80.3 J	74.9 U	92.1 J
Sodium	NSA / NSA	247	470	389	204
Vanadium	78.2 / 1,020	3.93 U	5.34	3.75 U	8.58
Zinc	23,500 / 100,000	4.11	32.3	8.32	518
Mercury	23.5 / 307	0.0987 U	0.0992 U	0.0994 U	0.350
Volatile Organic Compounds (µg/kg)					
Benzene	643 / 1,410	6.6 UJ	32 J	5.3 U	3.8 UJ
Carbon disulfide	355,000 / 720,000	13 UJ	10 J	11 U	7.6 UJ
Semivolatile Organic Compounds (µg/kg)					
2-Methylnaphthalene	NSA / NSA	330 U	610	330 U	330 U
Acenaphthylene	NSA / NSA	330 U	330 U	330 U	1300
Anthracene	21,900,000 / 100,000,000	330 U	330 U	330 U	1000
Benz(a)anthracene	621 / 2,110	330 U	330 UJ	330 U	2400
Benzo(a)pyrene	62.1 / 211	330 U	330 U	330 U	2800
Benzo(b)fluoranthene	621 / 2,110	330 U	330 U	330 U	1800
Benzo(g,h,i)perylene	NSA / NSA	330 U	330 U	330 U	2400
Benzo(k)fluoranthene	378 <sup>b</sup> / 1,280 <sup>b</sup>	330 U	330 U	330 U	3200
Carbazole	24,300 / 86,200	330 U	330 U	330 U	370
Chrysene	3,780 <sup>b</sup> / 12,800 <sup>b</sup>	330 U	330 UJ	330 U	3100
Dibenz(a,h)anthracene	62.1 / 211	330 U	330 U	330 U	650
Di-n-butyl phthalate	6,110,000 / 61,600,000	330 U	1100	330 U	330 U
Fluoranthene	2,290,000 / 22,000,000	330 U	330 U	330 U	4600
Indeno(1,2,3-cd)pyrene	621 / 2,110	330 U	330 U	330 U	3000
Phenanthrene	NSA / NSA	330 U	400	330 U	1800
Pyrene	2,320,000 / 29,100,000	330 U	330 UJ	330 U	4000

**Notes:**

Values in bold = value is greater than the residential PRG for soil but less than the industrial PRG for soil.

Values in bold italics = value is greater than the residential and industrial PRGs for soil

\* = value exceeds the maximum concentration for the toxicity characteristic.

a = Maximum concentration for the toxicity characteristic, (see 40CFR261.24, Table 1)

b = CAL-Modified PRG value presented in the Region 9 PRG table.

BG = Background

DD = Drainage ditch

Seven Out, LLC Site  
Waycross, Ware County, Georgia

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

mg/L = Milligrams per liter

NSA = No standard available

PRG = Preliminary remedial goal

SO = Soil

SW = South wall of the tank farm

TCLP = Toxicity characteristic leaching procedure

U = Analyte was analyzed for but not detected at or above the associated value.

UJ = Analyte was analyzed for but not detected at or above the associated value, which is estimated

FRT = Frac tank area

**TABLE 2**  
**DRUMS AND TANKS ANALYTICAL RESULTS**

PARAMETERS	Sample Identification/Tank Identifier								
	AS-S/ AS	CD-1-S/ CD-1	CD-2-S/ CD-2	CD-3-S/ CD-3	CT-1-S/ CT-1	CT-2-S/ CT-2	CT-3-S/ CT-3	CT-4-S/ CT-4	CT-5-S/ CT-5
<b>TCLP Metals (mg/L)</b>									
Chromium	0.0500 U	0.1120	0.0500 U	0.0500 U	0.4520	0.0708	0.0500 U	0.0500 U	0.0500 U
Lead	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Metals	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/L	mg/L	mg/L
Aluminum	1.59 J	58	18 J	120	73.4 J	3.37 J	1.44 J	0.2 UJ	1.35 J
Antimony	0.0200 U	0.9800 U	0.0200 U	1.2000 U	0.0208	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Barium	0.0457 J	1.6	0.0854 J	3.7	0.135 J	0.0329 J	0.0502 J	0.0279 J	0.428 J
Cadmium	0.0050 U	0.4900 U	0.0080	0.5900 U	0.0278	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Calcium	124 J	340	377 J	130	370 J	382 J	691 J	269 J	416 J
Chromium	0.0190	0.4900 U	0.0743	0.6100	1.9200	0.1330	0.0469	0.0133	0.0413
Cobalt	0.0200 U	0.4900 U	0.0552	0.4900 U	0.0588	0.0200 U	0.0229	0.0200	0.0200 U
Copper	0.716	0.89	1.9	14	31.7	4.65	3.3	0.4	1.19
Iron	29.3	110	253	40	431	36	18.4	6.15	101
Lead	0.0200	0.9800 U	0.0173	2.6000	0.0388	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Magnesium	22.8	9.8 U	44.3	12 U	25.7	14.4	54.3	42.5	27.1
Manganese	0.968	1.3	6.95	1.2 U	6.5	1.96	2.83	0.444	2.4
Nickel	0.108	0.98 U	0.301	1.2 U	1.65	0.209	0.227	0.17	0.141
Potassium	36.0	400.0	342.0	240.0	51.5	47.0	123.0	126.0	64.0
Selenium	0.0200 U	0.9800 U	0.0200 U	1.2000 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Sodium	434	3300	3680	1700	1460	1950	3190	2620	2000
Vanadium	0.0100 U	0.9800 U	0.0100 U	41.0000	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Zinc	0.356	2.5 J	5.96	6.3 J	9.52	2.27	1.38	1.19	5.58
Mercury	0.000244	0.00981 U	0.0002 U	0.00934 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Volatile Organic Compounds	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Dichlorobenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	100 U	5000 U	250	5000 U	100 U	100 U	100 U	460	100 U
4-Methyl-2-pentanone	310	5000 U	110	5000 U	100 U	330	390	550	120
Acetone	3800	11000	11000 J	10000 U	700	1300	2200	2000	1000
Benzene	50 U	2500 U	640	2500 U	310	54	57	50 U	190
Carbon disulfide	50 U	5000 U	50 U	5000 U	140	50 U	50 U	50 U	50 U
Chloroform	50 U	2500 U	62	2500 U	50 U	50 U	50 U	50 U	50 U
Isopropylbenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
m,p-Xylene	100 U	5000 U	100 U	5000 U	100 U	100 U	100 U	100 U	100 U
Methyl tert-butyl ether	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
o-Xylene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Toluene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U

**TABLE 2**  
**DRUMS AND TANKS ANALYTICAL RESULTS**

PARAMETERS	Sample Identification/Tank Identifier								
	AS-S/ AS	CD-1-S/ CD-1	CD-2-S/ CD-2	CD-3-S/ CD-3	CT-1-S/ CT-1	CT-2-S/ CT-2	CT-3-S/ CT-3	CT-4-S/ CT-4	CT-5-S/ CT-5
Semivolatile Organic Compounds	ug/L	mg/kg	ug/L	mg/kg	ug/L	ug/L	ug/L	ug/L	ug/L
1,1'-Biphenyl	100 U	96 U	200 U	98 U	490	100 U	100 U	100 U	500 U
2-Methylnaphthalene	100 U	96 U	1900	450	4000	120	290	100 U	1300
4-Methylphenol	410	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Bis(2-ethylhexyl)phthalate	110	96 U	880	98 UJ	2400	100 U	100 UJ	100 U	500 UJ
Diethyl phthalate	100 U	96 U	2400	98 U	420	170	370	160	500 U
Dimethyl phthalate	100 U	96 U	200 U	98 U	200 U	100 U	270	100 U	500 U
Di-n-butyl phthalate	100 U	96 U	200 U	98 U	2200	100 U	230	100 U	680
Fluorene	100 U	96 U	200 U	98 U	1200	100 U	100 U	100 U	500 U
Isophorone	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Naphthalene	100 U	96 U	1000	98 U	1000	100 U	110	100 U	500
Phenanthrene	100 U	96 U	200 U	260	1000	100 U	100 U	100 U	500 U
Phenol	100 U	96 U	11000	98 U	5900	5300	27000	40000	14000
Pyrene	100 U	96 U	200 U	98 UJ	1400	100 U	100 UJ	100 U	500 UJ

**Notes:**

J = The associated value is the approximate concentration of the analyte in the sample.

ug/Kg = Micrograms per kilogram

ug/l. = Micrograms per liter

mg/Kg = Milligrams per kilogram

mg/l. = Milligrams per liter

NA = The analyte was not analyzed for

TB-1 = Trip blank

TCLP = Toxicity characteristic leaching procedure

U = Analyte was analyzed for but not detected at or above the associated value

UJ = Analyte was analyzed for but not detected at or above the associated value, which is estimated

**TABLE 2**  
**DRUMS AND TANKS ANALYTICAL RESULTS**

PARAMETERS	Sample Identification/Tank Identifier							
	CT-6-S/ CT-6	CT-7/ CT-7	CT-8/ CT-8	DAF-S/ DAF	DP-1-S layer A/ DP-1	DP-1-S layer B/ DP-1	DP-2-S/ DP-2	F237/ F237
<b>TCLP Metals (mg/L)</b>								
Chromium	0.0500 U	0.0500 U	0.0655	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Lead	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0630
Metals	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Aluminum	0.2 UJ	1.16 J	3.43 J	0.2 UJ	6.62 J	92 J	0.2 UJ	1 UJ
Antimony	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.1000 U	0.0200 U	0.1000 U
Barium	0.0312 J	0.0536 J	0.0542 J	0.02 UJ	0.063 J	0.55 J	0.02 UJ	0.1 UJ
Cadmium	0.0050 U	0.0050 U	0.0088	0.0050 U	0.0050 U	0.0250 U	0.0050 U	0.0250 U
Calcium	60.8 J	730 J	573 J	21.3 J	716 J	989 J	22.1 J	7.23 J
Chromium	0.0104	0.0113	0.1330	0.0100 U	0.0387	0.1830	0.0100 U	0.0500 U
Cobalt	0.0200 U	0.0200 U	0.0506	0.0200 U	0.0315	0.1000 U	0.0200 U	0.1000 U
Copper	0.437	2.25	3.3	0.01 U	11	13.1	0.353	0.142
Iron	2.52	16.1	40.5	7.05	31.3	232	2.38	11.1
Lead	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0386	0.1070	0.0100 U	0.0500 U
Magnesium	56.5	41.2	37.3	1.99	43.7	69.8	36.2	0.902
Manganese	0.396	1.39	2.33	0.0726	2.16	4.45	0.218	0.112
Nickel	0.124	0.203	1.44	0.0338	0.203	0.326	0.0753	0.1 U
Potassium	93.1	125.0	70.5	3.4	385.0	477.0	110.0	7.2
Selenium	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.1000 U	0.0200 U	0.1000 U
Sodium	1960	3030	2080	23.3	2290	3150	1660	1450
Vanadium	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0500 U
Zinc	0.222	1.8	4.1	0.02 U	2.58	3.01	0.108	2.03
Mercury	0.0002 U	0.000443	0.0002 U	0.0002 U	0.000203	0.00029	0.0002 U	0.0002 U
<b>Volatiles Organic Compounds</b>								
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2-Dichlorobenzene	50 U	50 U	50 U	5 U	560	100 U	100 U	100 U
1,4-Dichlorobenzene	50 U	50 U	50 U	5 U	100 U	780	100 U	100 U
2-Butanone	440	100 U	100 U	10 U	350	970	200 J	200 U
4-Methyl-2-pentanone	290	300	400	10 U	480	200 U	200 UJ	200 U
Acetone	3000	3700	1500	20 UJ	28000	52000	7300 J	400 U
Benzene	50 U	370	82	5 U	920	1600	120 J	100 U
Carbon disulfide	91	50 U	200	5 U	100 U	550	360 J	100 U
Chloroform	50 U	50 U	50 U	5 U	100 U	100 U	100 UJ	100 U
Isopropylbenzene	50 U	50 U	50 U	5 U	420	770	100 U	100 U
m,p-Xylene	100 U	100 U	100 U	10 U	200 U	240	200 UJ	200 U
Methyl tert-butyl ether	50 U	50 U	50 U	5 U	100 U	100 U	100 UJ	100 U
o-Xylene	50 U	50 U	50 U	5 U	400	440	100 UJ	100 U
Toluene	50 U	50 U	50 U	5 U	100 U	130	100 UJ	100 U

**TABLE 2**  
**DRUMS AND TANKS ANALYTICAL RESULTS**

PARAMETERS	Sample Identification/Tank Identifier							
	CT-6-S/ CT-6	CT-7/ CT-7	CT-8/ CT-8	DAF-S/ DAF	DP-1-S layer A/ DP-1	DP-1-S layer B/ DP-1	DP-2-S/ DP-2	F237/ F237
Semivolatile Organic Compounds	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1'-Biphenyl	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	100 U
2-Methylnaphthalene	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	100 U
4-Methylphenol	1700	1000 U	1000 U	100 U	1000 UJ	5000 UJ	100 U	100 U
Bis(2-ethylhexyl)phthalate	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	100 U
Diethyl phthalate	100 U	1000 U	1000 U	100 U	1000 UJ	5700	100 U	100 U
Dimethyl phthalate	100 U	1000 U	1000 U	160 U	1000 UJ	5000 U	510	100 U
Di-n-butyl phthalate	100 U	1000 U	1000 U	100 U	1000 UJ	12000	100 U	100 U
Fluorene	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	100 U
Isophorone	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	150
Naphthalene	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	100 U
Phenanthrene	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	100 U
Phenol	20000	48000 J	15000 J	100 U	1000 UJ	12000 J	1300	260
Pyrene	100 U	1000 U	1000 U	100 U	1000 UJ	5000 U	100 U	100 U

**Notes:**

J - The associated value is the approximate concentration of the analyte in the sample.

ug/Kg - Micrograms per kilogram

ug/l. - Micrograms per liter

mg/Kg - Milligrams per kilogram

mg/l. - Milligrams per liter

NA - The analyte was not analyzed for

TB-1 - Trip blank

TC1.P - Toxicity characteristic leaching procedure

U - Analyte was analyzed for but not detected at or above the associated value

UJ - Analyte was analyzed for but not detected at or above the associated value, which is estimated

**TABLE 2**  
**DRUMS AND TANKS ANALYTICAL RESULTS**

PARAMETERS	Sample Identification/Tank Identifier								
	FA-S/ FA	G107D/ G107D	G300D/ G300D	NAOH/ NAOH	OP-4-S/ OP-4	RW-1-S/ RW-1	RW-2-S/ RW-2	SH-1-S/ SH-1	SH-2-S/ SH-2
<b>TCLP Metals (mg/L)</b>									
Chromium	0.0500 U	0.0500 U	0.0500 U	NA	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.3020
Lead	0.0500 U	0.0500 U	0.0724	NA	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0590
Metals	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Aluminum	0.287 J	2.22 J	1 UJ	2 UJ	2.9 J	0.795 J	0.948 J	1.48 J	400 J
Antimony	0.0200 U	0.0200 U	0.1000 U	0.2000 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Barium	0.02 UJ	0.175 J	0.1 UJ	0.2 UJ	0.0733 J	0.02 UJ	0.0221 J	0.095 J	0.0461 J
Cadmium	0.0050 U	0.0050 U	0.0250 U	0.0500 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0177
Calcium	164 J	182 J	8.73 J	528 J	420 J	381 J	770 J	473 J	360 J
Chromium	0.0100 U	0.0100 U	0.0500 U	0.1000 U	0.0253	0.0100 U	0.0100 U	0.0276	0.3430
Cobalt	0.0200 U	0.0200 U	0.1000 U	0.0200 U	0.0250	0.0200 U	0.0200 U	0.0301	0.0716
Copper	0.0388	0.13	0.05 U	0.18	0.45	0.0488	0.119	0.172	10.9
Iron	5.53	140	5.47	20.5	116	19.1	4.47	68.2	700
Lead	0.0100 U	0.0100 U	0.0500 U	0.1000 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0589
Magnesium	25.1	26.1	1.25	42.2	49.7	7.72	4.56	59.6	114
Manganese	1.36	3.09	0.123	2.77	6.42	0.343	0.411	3.87	9.71
Nickel	0.109	0.139	0.1 U	0.2 U	0.374	0.0718	0.0475	0.223	0.371
Potassium	42.1	94.1	8.3	62.3	216.0	82.3	32.4	249.0	312.0
Selenium	0.0200 U	0.0200 U	0.1000 U	0.2000 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Sodium	507	3640	1120	727	2780	1660	1550	3390	3380
Vanadium	0.0100 U	0.0100 U	0.0500 U	0.1000 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Zinc	0.111	1.38	0.7	0.425	4.05	0.38	0.766	4.67	13.8
Mercury	0.0002 U	0.0002 U	0.0016 U	0.0016 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
<b>Volatile Organic Compounds</b>									
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Dichlorobenzene	50 U	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene	50 U	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	100 U	180	200 U	200 U	2200	440	100 U	380	220
4-Methyl-2-pentanone	100 U	100 U	200 U	850	510	340	100 U	410	420
Acetone	3700	8600	400 U	6100	51000 J	10000	1100	34000	21000
Benzene	50 U	50 U	100 U	500	1200	160	50 U	860	790
Carbon disulfide	74	50 U	100 U	770	50 U	50 U	50 U	50 U	50 U
Chloroform	50 U	50 U	100 U	100 U	93	50 U	50 U	50 U	50 U
Isopropylbenzene	50 U	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U
m,p-Xylene	100 U	100 U	200 U	200 U	100 U	100 U	100 U	100 U	100 U
Methyl tert-butyl ether	50 U	50 U	100 U	100 U	89	50 U	50 U	78	50 U
o-Xylene	50 U	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U
Toluene	50 U	50 U	100 U	100 U	50 U	50 U	50 U	50 U	54

**TABLE 2  
DRUMS AND TANKS ANALYTICAL RESULTS**

PARAMETERS	Sample Identification/Tank Identifier								
	FA-S/ FA	G107D/ G107D	G300D/ G300D	NAOH/ NAOH	OP-4-S/ OP-4	RW-1-S/ RW-1	RW-2-S/ RW-2	SH-1-S/ SH-1	SH-2-S/ SH-2
Semivolatile Organic Compounds	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1'-Biphenyl	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U
2-Methylnaphthalene	1000 U	1000 U	100 U	1000 U	100 U	190	100 U	1000 U	1000 U
4-Methylphenol	1000 U	1000 U	100 U	3800	100 U	100 U	100 U	1000 U	1000 UJ
Bis(2-ethylhexyl)phthalate	1000 U	1000 U	100 U	1600	170	100 U	100 U	1000 UJ	1000 UJ
Diethyl phthalate	1000 U	1000 U	100 U	1000 U	320	100 U	100 U	1000 U	1000 U
Dimethyl phthalate	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U
Di-n-butyl phthalate	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1500
Fluorene	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U
Isophorone	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U
Naphthalene	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U
Phenanthrene	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U
Phenol	1000 U	30000 J	170	1000 U	180000 J	11000	770	14000	1000 UJ
Pyrene	1000 U	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 UJ	1000 UJ

**Notes:**

J - The associated value is the approximate concentration of the analyte in the sample.

ug/Kg - Micrograms per kilogram

ug/l. - Micrograms per liter

mg/Kg - Milligrams per kilogram

mg/L - Milligrams per liter

NA - The analyte was not analyzed for

TB-1 - Trip blank

TCLP - Toxicity characteristic leaching procedure

U - Analyte was analyzed for but not detected at or above the associated value

UJ - Analyte was analyzed for but not detected at or above the associated value, which is estimated

**TABLE 2**  
**DRUMS AND TANKS ANALYTICAL RESULTS**

PARAMETERS	Sample Identification/Tank Identifier							
	SH-3-S/ SH-3	SH-4-S/ SH-4	Sodium Hydroxide/ Sodium Hydroxide	SS-1-S/ SS-1	SS-2-S/ SS-2	ST-1/ ST-1	Sulfuric Acid/ Sulfuric Acid	TB-1/ (not applicable)
<b>TCLP Metals (mg/L)</b>								
Chromium	0.0500 U	0.0500 U	NA	0.0500 U	0.0500 U	NA	NA	NA
Lead	0.0500 U	0.0500 U	NA	0.0500 U	0.0500 U	NA	NA	NA
Metals	mg/L	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/L	NA
Aluminum	0.746 J	63	2 UJ	63.7 J	390	268 J	3.2 J	NA
Antimony	0.0200 U	1.0000 U	0.2000 U	0.0200 U	0.9778 U	0.2000 U	0.2000 U	NA
Barium	0.0455 J	1.2	0.2 UJ	0.281 J	4.8 J	2.4 J	0.2 UJ	NA
Cadmium	0.0050 U	0.5000 U	0.0500 U	0.0064	0.4889 U	0.0806	0.0500 U	NA
Calcium	405 J	610	2.86 J	503 J	510	480 J	8.49 J	NA
Chromium	0.0292	0.5000 U	0.1000 U	0.0299	0.4889 U	6.3800	0.9310	NA
Cobalt	0.0200 U	0.5000 U	0.2000 U	0.0200 U	0.4889 U	0.2000 U	0.2000 U	NA
Copper	0.0662	13	0.1 U	1.12	18	14.4	0.1 U	NA
Iron	5.59	160	3.58	221	100	2200	20	NA
Lead	0.0100 U	14.0000	0.1000 U	0.0100 U	0.9778 U	0.4310	0.1000 U	NA
Magnesium	45.5	59	1 U	60.5	18	64.2	2.81	NA
Manganese	2.3	7.9	0.05 U	5.76	3.5	29.3	0.23	NA
Nickel	0.145	1 U	0.2 U	0.137	0.977842 U	3.43	0.738	NA
Potassium	367.0	320.0	113.0	115.0	890.0	76.3	5.0 U	NA
Selenium	0.0200 U	1.0000 U	0.2000 U	0.0200 U	0.9778 U	0.2000 U	0.7250	NA
Sodium	4170	1600	188000	2040	6800	1780	10 U	NA
Vanadium	0.0100 U	1.0000 U	0.1000 U	0.0100 U	1.9000	0.1000 U	0.1000 U	NA
Zinc	0.437	2.8 J	0.2 U	9.16	2.3 J	21	0.2 U	NA
Mercury	0.0002 U	0.00979 U	0.00218	0.0002 U	0.009823 U	0.00277	0.0057	NA
Volatile Organic Compounds	mg/L	mg/kg	NA	mg/L	mg/kg	mg/L	NA	mg/L
1,2-Dichlorobenzene	50 U	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,4-Dichlorobenzene	50 U	2500 U	NA	50 U	2500 U	100 U	NA	5 U
2-Butanone	400	5000 U	NA	140	5000 U	200 U	NA	10 UJ
4-Methyl-2-pentanone	420	5000 U	NA	300	5000 U	200 U	NA	10 U
Acetone	270000 J	74000	NA	19000	18000	860	NA	20 UJ
Benzene	290	2600	NA	900	2500 U	2300	NA	5 U
Carbon disulfide	50 U	5000 U	NA	110	5000 U	850	NA	5 U
Chloroform	50 U	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Isopropylbenzene	50 U	2500 U	NA	50 U	2500 U	100 U	NA	5 U
m,p-Xylene	100 U	5000 U	NA	100 U	5000 U	200 U	NA	10 U
Methyl tert-butyl ether	50 U	2500 U	NA	50 U	2500 U	100 U	NA	5 U
o-Xylene	50 U	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Toluene	50 U	2500 U	NA	50 U	2500 U	100 U	NA	5 U



## DRUMS AND TANKS ANALYTICAL RESULTS

PARAMETERS	Sample Identification/Tank Identifier							
	SH-3-S/ SH-3	SH-4-S/ SH-4	Sodium Hydroxide/ Sodium Hydroxide	SS-1-S/ SS-1	SS-2-S/ SS-2	ST-1/ ST-1	Sulfuric Acid/ Sulfuric Acid	TB-1/ (not applicable)
Semivolatile Organic Compounds	ug/L	mg/kg	ug/L	ug/L	mg/kg	ug/L	ug/L	NA
1,1'-Biphenyl	1000 U	93 U	1000 U	1000 U	97.08738 U	1000 U	1000 U	NA
2-Methylnaphthalene	1000 U	93 U	1000 U	1000 U	440	2000	1000 U	NA
4-Methylphenol	1000 UJ	93 U	1000 U	1000 U	97.08738 U	1000 U	1000 U	NA
Bis(2-ethylhexyl)phthalate	1000 U	93 U	1000 U	1000 UJ	97.08738 U	1000 U	1100	NA
Diethyl phthalate	2100	93 U	1000 U	1000 U	97.08738 U	1000 U	1000 U	NA
Dimethyl phthalate	1000 U	93 U	1000 U	1000 U	97.08738 U	1000 U	1000 U	NA
Di-n-butyl phthalate	1000 U	93 U	1000 U	1000 U	97.08738 U	1000 U	1000 U	NA
Fluorene	1000 U	93 U	1000 U	1000 U	97.08738 U	1000 U	1000 U	NA
Isophorone	1000 U	93 U	1000 U	1000 U	97.08738 U	1000 U	1000 U	NA
Naphthalene	1000 U	93 U	1000 U	1000 U	170	1000 U	1000 U	NA
Phenanthrene	1000 U	93 U	1000 U	1000 U	140	1000 U	1000 U	NA
Phenol	40000 J	93 U	1000 U	18000	97.08738 U	1000 U	1000 U	NA
Pyrene	1000 U	93 U	1000 U	1000 UJ	97.08738 U	1000 U	1000 U	NA

## Notes:

J - The associated value is the approximate concentration of the analyte in the sample.

ug/Kg - Micrograms per kilogram

ug/l. - Micrograms per liter

mg/Kg - Milligrams per kilogram

mg/l. - Milligrams per liter

NA - The analyte was not analyzed for

TB-1 - Trip blank

TCLP - Toxicity characteristic leaching procedure

U - Analyte was analyzed for but not detected at or above the associated value

UJ - Analyte was analyzed for but not detected at or above the associated value, which is estimated

**APPENDIX C**  
**TANK INVENTORY LOGS**  
**(33 Sheets)**



# DRUM INVENTORY LOG

Drum Number: <u>CT-1</u>	Sampler: <u>A. WHITE</u>	Time: <u>1605</u>
Site Name:	Location: <u>Leak Farm</u>	Date: <u>8/23/2004</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis		
L	L	S	G	S	use standard colors	C	C	O	(Inches)	pH	PID	
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID	
A	X				colorless	X			13 FT		Drum Labels / Markings	
B					Brown-green		X		5 FT		DOT	
C											UN / NA	

Mfg. Name and Address:			
Chemical Name:			
Additional Information:	<u>LFI 9 inches from Top</u>		

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com bust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
A																			
B																			
C																			

PCB Concentration	Other Test:	Spilfyter Strip:
Comments		

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>CT-2</u>	Sampler: <u>A WHITT</u>	Time: <u>0800</u>
Site Name:	Location: <u>Leak Free</u>	Date: <u>8/24/04</u>
TDD 0:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top: Present / Missing
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:	
Drum Size:	110	85	55	42	30	18 10 5 Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4 <1/4 Other
Overpacked:	No	Yes	Overpack Type:		Steel	Poly Fiber Overpack Size:

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				calm	X			13.8T	Drum Labels / Markings	
B					Brown-gum		X		5A	DOT	
C										UN / NA	

Mfg. Name and Address:

Chemical Name:

Additional Information: 1H 10 inches from top

Hazcat Data										Hazard Category:																			
Radiation					Positive *					Negative					MREM / HR					Analyst:					Date Performed:				
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com-bust										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludge		lear	loudy	paque												+	+	+	+	+	+	+	+	+	+
A																													
B																													
C																													

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>CT-3</u>	Sampler: <u>A. White</u>	Time: <u>0830</u>
Site Name:	Location: <u>Tank Farm</u>	Date: <u>8/24/2004</u>
TDD #:	Weather/Temperature:	

Drum Color:								
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel		
Lid Type:	Ring-top	Closed-top	Bungs: Present / Missing			Ring-top:	Present / Missing	
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:			
Drum Size:	110	85	55	42	30	18	10	5 Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other
Overpacked:	No	Yes	Overpack Type: Steel		Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Colorless</u>	X			<u>13 FT</u>	Drum Labels / Markings	
B					<u>Red-Brown</u>		X		<u>5 FT</u>	DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: 2 FT from Top

Hazcat Data										Hazard Category:																			
Radiation					Positive *					Negative					MREM / HR					Analyst:					Date Performed:				
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal.	Com										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or	or									
A										Water	unit	I	-	-	-	-	-	-	-										
B																													
C																													

PCB Concentration	Other Test:	Spillfyer Strip:
Comments		

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.

U2

# DRUM INVENTORY LOG

Drum Number: <u>67-4</u>	Sampler: <u>A whole</u>	Time: <u>0900</u>
Site Name:	Location: <u>Rock Creek</u>	Date: <u>8/24/04</u>
TDD 0:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Miss.		
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				colorless		X		12 ft		
B										Drum Labels / Markings	
C										DOT	
										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: 15 ft 7 inches

Hazcat Data										Hazard Category:									
Radiation Positive * Negative										MREM / HR									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com-bust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>LT-5-5</u>	Sampler: <u>A WHITT</u>	Time: <u>0915</u>
Site Name:	Location:	Date: <u>9/24/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis		
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID	
ayer	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID	
A				X	Brown - sludge			X	lin		Drum Labels / Markings	
B	X				colorless	X			17PT	DOT		
C				X	Brown		X		5PT	UN / NA		

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:									
Radiation					Positive * Negative					MREM / HR					Analyst:				
Date Performed:																			
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ayer	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration: \_\_\_\_\_

Other Test: \_\_\_\_\_

Spillfyer Strip: \_\_\_\_\_

Comments: \_\_\_\_\_

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>OP-4</u>	Sampler: <u>A VHS</u>	Time: <u>11:00</u>
Site Name:	Location:	Date: <u>8/24/04</u>
TOO #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	18	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				colorless	X					
B	X				Brown				4 ft	DOT	
C				X					5 inch	UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:									
Radiation Positive ° Negative MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com-bust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	+	+	+	+	+	+	+
A																			
B																			
C																			

PCB Concentration	Other Test:	Spillfyer Strip:
Comments		

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

" material is Positive for radioactivity or reactivity, perform no further tests.





## DRUM INVENTORY LOG

Drum Number: <u>SH-1-S</u>	Sampler: <u>A WHITT</u>	Time: <u>1320</u>
Site Name:	Location: <u>Tank Farm</u>	Date: <u>8/24/04</u>
TDD #:	Weather/Temperature:	

Drum Color:								
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel		
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Missing	
Drum Condition:	Meet DOT Spec.		Good	Fair	Poor	Explain:		
Drum Size:	110	85	55	42	30	16	10	5 Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>colorless</u>	X			<u>All</u>	Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:																			
Radiation					Positive *					Negative					MREM / HR					Analyst:					Date Performed:				
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or	or									
A																													
B																													
C																													

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>SH-2-S</u>	Sampler: <u>A WHIT</u>	Time: <u>1350</u>
Site Name:	Location: <u>Rock Island</u>	Date: <u>8/24/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	18	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A											
B											
C											

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:																			
Radiation					Positive *					Negative					MREM / HR					Analyst:					Date Performed:				
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludge		lear	loudy	paque																					
A																													
B																													
C																													

PCB Concentration \_\_\_\_\_

Other Test: \_\_\_\_\_

Spillfyter Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: \_\_\_\_\_

Waste Stream: \_\_\_\_\_

Bulk Group Number: \_\_\_\_\_

Waste Stream Number: \_\_\_\_\_

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>SH-3-S</u>	Sampler: <u>A w/ H</u>	Time: <u>1420</u>							
Site Name:	Location: <u>Tank farm</u>	Date: <u>8/24/04</u>							
TDD #:	Weather/Temperature:								
Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Black</u>			X		Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:									
Radiation Positive * _____ Negative _____ MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
A																			
B																			
C																			

PCB Concentration _____	Other Test: _____	Spillfyer Strip: _____
Comments _____		
_____		
_____		

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>SH-4-S</u>	Sampler: <u>A V Holt</u>	Time: <u>1518</u>
Sko Name:	Location: <u>Pointe du Lac</u>	Date: <u>8/24/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Black</u>			X	<u>1 in</u>		
B	X				<u>Colorless</u>	X					
C											

Drum Labels / Markings

DOT

UN / NA

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:											
Radiation										Analyst:											
Positive *										Date Performed:											
Negative										MREM / HR											
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust		
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+		
ayers	iquid	olid	el	ludge		lear	loudy	paque		Water	or	std.	or	+	+	+	+	+	+	+	
A																					
B																					
C																					

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>RW-2</u>	Sampler: <u>A. White</u>	Time: <u>1800</u>
Site Name:	Location: <u>Tank Farm</u>	Date: <u>8/24/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>colorless</u>		X				
B										Drum Labels / Markings	
C										DOT	
										UN / NA	

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:																			
Radiation: Positive * Negative										Analyst:																			
MREM / HR										Date Performed:																			
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludge		lear	loudy	paque																					
A																													
B																													
C																													
PCB Concentration										Other Test:										Spillfytter Strip:									
Comments																													

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>DP-1</u>	Sampler: <u>A White</u>	Time: <u>1815</u>
Site Name:	Location: <u>Park Forest</u>	Date: <u>5/24/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayer	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				white		X		2.2 ft		
B	X				Black			X	2 ft		
C											

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Corr
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ayer	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration _____	Other Test: _____	Spillfyer Strip: _____
Comments _____		
_____		
_____		

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>DP-2</u>	Sampler: <u>A W HETT</u>	Time: <u>1850</u>
Site Name:	Location: <u>East Farm</u>	Date: <u>8/24/04</u>
TDD #:	Weather/Temperature:	

Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs: Present / Missing		Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type: Steel		Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(Inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Black</u>			X			
B										Drum Labels / Markings	
C										DOT	
										UN / NA	

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst:									
										Date Performed:									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration

Other Test:

Spilfyter Strip:

Comments

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>Alum Sulfate (AS)</u>	Sampler: <u>A 1st</u>	Time: <u>1300</u>
Site Name:	Location: <u>Point A</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	<u>Full</u>	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ay	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Colorless</u>	X					
B											
C											

Other \_\_\_\_\_

Drum Labels / Markings \_\_\_\_\_

DOT \_\_\_\_\_

UN / NA \_\_\_\_\_

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:									
Radiation Positive * _____										Analyst: _____									
Negative _____										Date Performed: _____									
MREM / HR																			
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ay	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.





## DRUM INVENTORY LOG

Drum Number: <u>peric Acid (EA)</u>	Sampler: <u>A vltA</u>	Time: <u>1315</u>
Site Name:	Location: <u>task farm</u>	Date: <u>10/8/25/64</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present \ Missing		
Drum Condition:	Meet DOT Spec.		Good	Fair	Poor	Explain:			
Drum Size:	110	85	55	42	30	18	10	5	Other
Drum Contents:	<u>Ful</u>	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	<input checked="" type="checkbox"/>				<u>Bluish</u>		<input checked="" type="checkbox"/>			Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:																			
Radiation					Positive *					Negative					MREM / HR					Analyst:					Date Performed:				
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com bust										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	+	+	+	+	+	+	+	+									
A																													
B																													
C																													

PCB Concentration \_\_\_\_\_

Other Test: \_\_\_\_\_

Spilfyter Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>NA OH</u>	Sampler: <u>A white</u>	Time: <u>1330</u>
Site Name:	Location: <u>Took from</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present \ Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	<u>Full</u>	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayer	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	<u>X</u>				<u>Black</u>		<u>X</u>				
B											
C											

Drum Labels / Markings

DOT

UN / NA

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:									
Radiation					Positive *					Analyst:									
					Negative					Date Performed:									
					MREM / HR														
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayer	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyter Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>F-1RR</u>	Sampler: <u>A white</u>	Time: <u>1530</u>
Site Name:	Location: <u>Free tank</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Missing		
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<u>1/2</u>	Other	<u>MT</u>
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayer	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A										Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: could not open - Empty

Hazcat Data										Hazard Category:									
Radiation Positive * _____ Negative _____ MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayer	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	+	+	+	+	+	+	+
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spill/Leak Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.

# DRUM INVENTORY LOG

Drum Number: <u>R6-1</u>	Sampler: <u>A WHH</u>	Time: <u>0900</u>
Site Name:	Location: <u>Tech Area</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH <u>7</u>	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Brown</u>		X			Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst:									
										Date Performed:									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
A																			
B																			
C																			

PCB Concentration

Other Test:

Spillfyer Strip:

Comments

Bulk Group:

Waste Stream:

Bulk Group Number:

Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>CT-7</u>	Sampler: <u>AL</u>	Time: <u>1800</u>
Site Name:	Location: <u>South Farm</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Missing		
Drum Condition:	Meet DOT Spec.		Good	Fair	Poor	Explain:			
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	<u>(Full)</u>	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludg		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Brown</u>		X			Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address:

Chemical Name:

Additional Information:

2 ft below from top of tank

Hazcat Data										Hazard Category:																			
Radiation					Positive *					Negative					MREM / HR					Analyst:					Date Performed:				
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com bust										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludg		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or	or									
A										Water	unit	I	-	-	-	-	-	-	-										
B																													
C																													

PCB Concentration

Other Test:

Spillfyer Strip:

Comments

Bulk Group:

Waste Stream:

Bulk Group Number:

Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>67-9</u>	Sampler: <u>A WH</u>	Time: <u>1830</u>
Site Name:	Location: <u>back fence</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top: Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	<u>Full</u>	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	/				<u>Brown</u>		X				
B										Drum Labels / Markings	
C										DOT	
										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: 2 ft from top of tank

Hazcat Data										Hazard Category:									
Radiation: Positive * Negative										Analyst: _____									
MREM / HR										Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com bust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
A										Water	unit	I	-	-	-	-	-	-	-
B																			
C																			

PCB Concentration \_\_\_\_\_

Other Test: \_\_\_\_\_

Spillfyter Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>ST-1</u>	Sampler: <u>A white</u>	Time: <u>1845</u>
Site Name:	Location: <u>timber</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Missing		
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				colorless	X					
B	X				Brown		X		2 ft		
C											

Drum Labels / Markings

DOT

UN / NA

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst:									
Date Performed:																			
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration

Other Test:

Spillfyer Strip:

Comments

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>CT-6</u>	Sampler: <u>A White</u>	Time: <u>1730</u>
Site Name:	Location: <u>Joint Base</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	<u>Full</u>	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A										Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

2nd from the top (CAS / MSD)

Hazcat Data										Hazard Category:									
Radiation Positive * _____										Analyst: _____									
Negative _____ MREM / HR										Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.





CS/ALERT  
DATE: 11/16/04 (12)

# DRUM INVENTORY LOG

Drum Number: <u>AA-011</u> <small>SECTION HYDRO 100</small>	Sampler: <u>A. White</u>	Time: <u>1430</u>
Site Name:	Location: <u>Leak Farm</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:

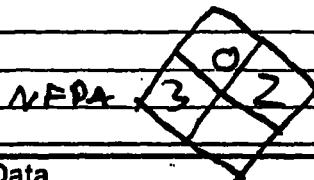
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	(1/2)	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
a	l	o	e	l		l	p	CGI		OVA / FID	
y	u	l		e		e	Other				
e	i	d		e		y					
A	X				<u>colorless</u>	X				Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address:

Chemical Name:

Additional Information:



Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst:									
										Date Performed:									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com bust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
a	l	o	e	l		e	p	or		std.	or	or	or	or	or	or	or	or	or
y	u	l		e		y	Water	unit		l	-	-	-	-	-	-	-	-	
e	i	d		e															
A																			
B																			
C																			

PCB Concentration	Other Test:	Spillfyer Strip:
Comments		

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>Sulfuric Acid (SA)</u>	Sampler: <u>A. White</u>	Time: <u>1345</u>
Site Name:	Location: <u>Tank Farm</u>	Date: <u>8/25/64</u>
TOD #:	Weather/Temperature:	

Drum Color:

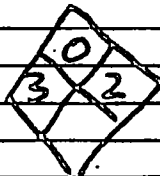
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top: Present \ Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	<u>1/2</u>	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		COI	OVA / FID
A										Drum Labels / Markings	
B										DOT	
C										UN: NA	

Mfg. Name and Address:

Chemical Name:

Additional Information:

NEPA =

Hazcat Data										Hazard Category:																			
Radiation					Positive *					Negative					MREM / HR					Analyst:					Date Performed:				
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust										
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+										
ayers	iquid	olid	el	ludge		lear	loudy	paque																					
A																													
B																													
C																													

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spilltyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>6107D</u>	Sampler: <u>A 461H</u>	Time: <u>1630</u>
Site Name:	Location: <u>Free Tanks</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:							
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel	
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Missing
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:		
Drum Size:	110	85	55	42	30	18	10 5 Other
Drum Contents:	<u>Full</u>	3/4	2/3	1/2	1/3	1/4	<1/4 Other
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber Overpack Size:

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>Black</u>			X	<u>1H</u>		
B	X				<u>Brown</u>		X				
C											
										Drum Labels / Markings	
										DOT	
										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
A																			
B																			
C																			
PCB Concentration _____										Other Test: _____									
Spillfyer Strip: _____																			
Comments _____																			

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



# DRUM INVENTORY LOG

Drum Number: <u>6300D</u>	Sampler: <u>A White</u>	Time: <u>5:15:10</u>
Site Name:	Location: <u>San Jacinto</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	18	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis		
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID	Other
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID	
A	X				Red		X					
B												
C												

Mfg. Name and Address:

Chemical Name:

Additional Information:

Line 1 of Barium

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst: Date Performed:									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	+	+	+	+	+	+	+
A																			
B																			
C																			

PCB Concentration	Other Test:	Spillfyer Strip:
Comments		

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <b>F 237</b>	Sampler: <b>A white</b>	Time: <b>1535</b>
Site Name:	Location: <b>Frac tank</b>	Date: <b>8/25/04</b>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	<b>3/4</b>	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	<b>X</b>				<b>Black purple</b>			<b>X</b>			
B										Drum Labels / Markings	
C										DOT	
										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:										
Radiation		Positive *		Negative		MREM / HR		Analyst:		Date Performed:										
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust	
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+	
ayers	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or	or
A																				
B																				
C																				

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>DAF-5</u>	Sampler: <u>A White</u>	Time: <u>1240</u>
Site Name:	Location: <u>Imp Site</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	<u>1/2</u>	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				<u>colorless</u>	X					
B										Drum Labels / Markings	
C										DOT	
										UN / NA	

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst:									
										Date Performed:									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com bust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	\$ or I	+	+	+	+	+	+	+
ayers	iquid	olid	el	ludge		lear	loudy	paque											
A																			
B																			
C																			

PCB Concentration	Other Test:	Spilltyer Strip:
Comments		

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>12-1-3</u>	Sampler: <u>A with</u>	Time: <u>1020</u>
Site Name:	Location: <u>Tank Farm</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Missing		
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	eel	ludge		lear	loudy	paque		CGI	OVA / FID
A										Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: Crust on top

Hazcat Data										Hazard Category:									
Radiation		Positive *		Negative		MREM / HR				Analyst:		Date Performed:							
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	eel	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>LD-3</u>	Sampler: <u>A 10/11</u>	Time: <u>1040</u>
Site Name:	Location: <u>Dark Forest</u>	Date: <u>8/25/04</u>
TDD #:	Weather/Temperature:	

Drum Color:									
Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:		Present / Missing	Ring-top:	Present / Missing		
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:		Steel	Poly	Fiber	Overpack Size:	

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayers	iquid	olid	oil	ludge		lear	loudy	paque		CGI	OVA / FID
A	X				Black			X	1/2 inch	Drum Labels / Markings	
B	X				Amber		X		Rest of bottom	DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

1/2 inch oil layer on top.

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
ayers	iquid	olid	oil	ludge		lear	loudy	paque		Water	or std. unit	or	or	or	or	or	or	or	or
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_

Other Test: \_\_\_\_\_

Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: _____	Waste Stream: _____
Bulk Group Number: _____	Waste Stream Number: _____

\* If material is Positive for radioactivity or reactivity, perform no further tests.





## DRUM INVENTORY LOG

Drum Number: <u>L D-2</u>	Sampler: <u>A Whitt</u>	Time: <u>1100</u>
Site Name:	Location: <u>Tuck Farm</u>	Date: <u>8/25/04</u>
TOD #:	Weather/Temperature: <u>original Lys but Recreated on Nov 22nd</u>	

Drum Color:		<u>by Randy Skellis (from memo)</u>	
Drum Type:	Poly-lined    Fiber    Steel    Poly    Stainless Steel    Nickel		
Lid Type:	Ring-top    Closed-top	Bungs:	Present / Missing    Ring-top: Present / Missing
Drum Condition:	Meet DOT Spec.    Good    Fair    Poor	Explain:	
Drum Size:	110    85    55    42    30    16    10    5    Other		
Drum Contents:	Full    3/4    2/3    1/2    1/3    1/4    <1/4    Other		
Overpacked:	No    Yes	Overpack Type:	Steel    Poly    Fiber    Overpack Size:

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH	PID
ayer	iquid	olid	el	ludge		lear	loudy	paque		CGI	OVA / FID
A										Drum Labels / Markings	
B										DOT	
C										UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_  
1/2 inch oil layer on top

Hazcat Data										Hazard Category:												
Radiation    Positive *    Negative    MREM / HR										Analyst: _____ Date Performed: _____												
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Com-bust			
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+			
ayer	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or	or		
A										Water	unit	I	-	-	-	-	-	-	-			
B																						
C																						

PCB Concentration \_\_\_\_\_ Other Test: \_\_\_\_\_ Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>SS-1-S</u>	Sampler: <u>A Whiff</u>	Time: <u>1600</u>
Drum Name:	Location: <u>Tank Room</u>	Date: <u>8/24/04</u>
DOT:	Weather/Temperature:	
Drum Color:		
Drum Type:	Poly-lined    Fiber    Steel    Poly    Stainless Steel    Nickel	
Drum Type:	Ring-top    Closed-top    Bungs:    Present / Missing    Ring-top:    Present / Missing	
Drum Condition:	Meet DOT Spec.    Good    Fair    Poor    Explain:	
Drum Size:	110    85    55    42    30    16    10    5    Other	
Drum Contents:	Full    3/4    2/3    1/2    1/3    1/4    <1/4    Other	
Overpacked:	No    Yes    Overpack Type:    Steel    Poly    Fiber    Overpack Size:	

Physical State				Color	Clarity			Layer Thickness	Field Analysis	
Liquid	Solid	Gel	Sludge	use standard colors	Clear	Cloudy	Opaque	(inches)	pH _____ PID _____	
									CGI _____ OVA / FID _____	
									Other _____	
<input checked="" type="checkbox"/>				<u>Brown</u>			<input checked="" type="checkbox"/>	<u>1"</u>	Drum Labels / Markings	
<input checked="" type="checkbox"/>				<u>Colorless</u>		<input checked="" type="checkbox"/>		<u>Rest</u>	DOT _____	
									UN / NA	

Mfg. Name and Address: \_\_\_\_\_

Chemical Name: \_\_\_\_\_

Additional Information: \_\_\_\_\_

Hazcat Data										Hazard Category:									
Radiation    Positive " _____ Negative    MREM / HR										Analyst: _____ Date Performed: _____									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air	use	S	+	+	+	+	+	+	+
iquid	iquid	olid	el	ludge		lear	loudy	paque		or	std.	or	or	or	or	or	or	or	or
s	d	d		e		r	y	e		Water	unit	l	-	-	-	-	-	-	-
A																			
B																			
C																			

PCB Concentration \_\_\_\_\_

Other Test: \_\_\_\_\_

Spillfyer Strip: \_\_\_\_\_

Comments \_\_\_\_\_

Bulk Group: \_\_\_\_\_

Waste Stream: \_\_\_\_\_

Bulk Group Number: \_\_\_\_\_

Waste Stream Number: \_\_\_\_\_

\* If material is Positive for radioactivity or reactivity, perform no further tests.



## DRUM INVENTORY LOG

Drum Number: <u>CS-2</u>	Sampler: <u>A Whit</u>	Time: <u>1720</u>
Site Name:	Location: <u>Tank farm</u>	Date: <u>8/24/04</u>
TDD #:	Weather/Temperature:	

## Drum Color:

Drum Type:	Poly-lined	Fiber	Steel	Poly	Stainless Steel	Nickel			
Lid Type:	Ring-top	Closed-top	Bungs:	Present / Missing	Ring-top:	Present / Missing			
Drum Condition:	Meet DOT Spec.	Good	Fair	Poor	Explain:				
Drum Size:	110	85	55	42	30	16	10	5	Other
Drum Contents:	Full	3/4	2/3	1/2	1/3	1/4	<1/4	Other	
Overpacked:	No	Yes	Overpack Type:	Steel	Poly	Fiber	Overpack Size:		

Physical State					Color	Clarity			Layer Thickness	Field Analysis	
L	L	S	G	S	use standard colors	C	C	O	(inches)	pH <u>11A</u>	PID
ayer	iquid	olid	el	ludge							
A	X				<u>Black</u>			X			
B											
C											

Drum Labels / Markings

DOT

UN / NA

Mfg. Name and Address:

Chemical Name:

Additional Information:

Hazcat Data										Hazard Category:									
Radiation Positive * Negative MREM / HR										Analyst: Date Performed:									
Physical State					Color	Clarity			Water Sol	React	pH	Hex Sol	Per	Ox	CN	Sul	PCB	Hal	Combust
L	L	S	G	S	use standard colors	C	C	O	S, PS, or I	Air or Water	use std. unit	S or I	+	+	+	+	+	+	+
ayer	iquid	olid	el	ludge															
A																			
B																			
C																			

PCB Concentration

Other Test:

Spillfyer Strip:

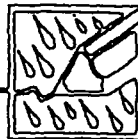
Comments

Bulk Group:	Waste Stream:
Bulk Group Number:	Waste Stream Number:

\* If material is Positive for radioactivity or reactivity, perform no further tests.

**APPENDIX E**  
**LOGBOOK NOTES**  
**(9 Sheets)**

"Rite in the Rain"  
ALL-WEATHER WRITING PAPER



## HORIZONTAL LINE

All-Weather Notebook  
No. 391

SEVEN-OUT LLC WAYCROSS GA
(BCX CORP.)

4 1/2" x 7" - 48 Numbered Pages

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PAGE

REFERENCE

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T. S. L. M. W. M. 561-512-4122 8748

P. D. W. M. 678 778-0792

WHITT 678 510-1750

WHITT 678 687-1965

GLYER 404 667-7111

WHITT 404 888-2624

HOTEL: 912 888-5515

ADDRESS: 4150 BROWNIE HWY.

AES LAB. 778 457-8177 ALWISOW C. 2288

AES B. W. L. 229-382-5177 B. L. C.

- MON. 8/23/04 SEVEN OUT LOG SEE
- 0800-CONTINUED EQUIPMENT LOAD OUT.
- 0845-DEPARTED START OFFICE (A. WATTS J. MATHIAS)
- 0945-START REP. R. MATHIAS PICKED UP  
ALONG THE WAY TO SITE.
- 1345-ARRIVED O/S.
- 1415-PREPARING TO DO PERIMETER AIR  
MONITORING w/ TVA 1000 & HCN MON
- 1500-AIR READINGS AT CT-1/8 TANKS  
ARE BACKGROUND.
- 1505-OSC T. STILLMAN O/S & CAPNR  
HAZ WASTE DIVISION REP. FRED BUNN  
O/S.
- 1605 CT-1 TANK SAMPLED - INVENTORY  
LOG SHEET USED TO DOCUMENT  
INFO (PH/PHASES/VOLUME ETC.)
- 1700 RAIN STOPS WORK TEMPORARILY  
A+S RENTAL O/S WITH MANLIFT  
AND LADDERS.
- 1730 40' EXTENSION LADDER IS TESTED  
TO SEE IF ACCESS CAN BE MADE  
TO TANKS 07-1/4.
- 1800 LADDER USE ON THE 35' TANKS  
DOES NOT APPEAR GOOD.
- 1830 DEVELOPING PLAN FOR GETTING  
THE MANLIFT INSIDE TANK FARM.

1900 EQUIPMENT IS SECURED INSIDE  
THE ELECTRICAL SWITCH ROOM  
O/S. BASIC SUPPORT ITEMS ARE  
TO BE KEPT THERE OVERNIGHT.  
PLAN IS MADE FOR A RAMP  
SYSTEM OVER THE SECONDARY  
CONFINEMENT WALL USING  
LUMBER CONCRETE BLOCKS &  
HEAVY DUTY CAR RAMPS.  
CREW DEPARTS SITE

John M.



WX: HOT HUMID &  
OVERCAST, 4.540WVGS

TUES. 8/24/04

0730 START PERSONNEL O/S.

0800 R. NATIS & J. WHITE TO RESUME  
SAMPLING OF CT TANKS.

MITCHELL GOES TO LOWES FOR  
RAMP SUPPLIES. CT-2 SAMPLED - PHOTOS

0830 CT-3 SAMPLED

0845 MITCHELL BACK O/S.

0900 CT-4 SAMPLED

0915 CT-5 SAMPLED.

1000 MANLIET DRIVEN INTO THE  
TANK FARM AREA.

1045 TANK SAMPLING OF OP 1-4 TANKS  
PLANNED. OP-4 HAS CLOSEST ACCESS.

1100 OP-4 SAMPLED.

1130 OP-2 & 3 ARE INACCESSABLE DUE  
TO PIPE RUNS AND VENT LOCATION  
THAT PREVENT SAFE USE OF  
SCAFOLD SECTIONS.

1200 LUNCH BREAK

1320 SH-1-S SAMPLE COLLECTED

1350 SH-2-S SAMPLE COLLECTED.

OSC STILLMAN IDENTIFIES SOIL SAMPLE  
LOCATIONS AROUND THE PROPERTY.

4 SAMPLES PLANNED - 1 OUTFALL

1 - ADJACENT 1 - NEAR KAC TANKS & BK6.

1420 SH-3-S SAMPLER WITH SPICER.  
1510 SH-4-S SAMPLER COLLECTED.  
1600 SS-1-S SAMPLE COLLECTED.  
1615 RAIN; LIGHTNING STOPS WORK  
TEMPORARILY.  
1720 SS-2 SAMPLE COLLECTED  
1800 RW-2 SAMPLE COLLECTED  
1815 DP-1 SAMPLE COLLECTED - TWO  
PHASES A (TOP) 22' WHITE  
+ 350-5m B (BOTTOM) 2' BLACK  
BESS BLYLER O/S - 1700  
1850 DP-2 SAMPLE COLLECTED  
1900 COOLERS WITH SAMPLES AND  
GLASSWARE ARE LOADED INTO  
THE VAN. SITE ACTIVITIES  
TO RESUME AT 0800.  
1930 START & GA DNR DEPART SITE.

*[Signature]*  
8-24-04

WED. 8/28/04

0800 START PERSONNEL O/S. GADNR O/S  
EQUIPMENT SET-UP AND RELOCATING  
OF THE MANLIFT OUTSIDE SECONDARY  
CONTAINMENT.

0900 RW-1 SAMPLE COLLECTED

0930 CD-5 SAMPLE COLLECTED - BESS BLECK  
IS WORKING ON SAMPLE MANAGEMENT  
ACTIVITIES. J. MITCHELL MAKES SUPPLY  
RUN FOR BAGS (1-GAL & 30-GAL) COOLER,  
PLASTIC PIPE, CLOTHES, ETC.

1020 LD-1-S SAMPLE COLLECTED.

1040 CD-3 SAMPLE COLLECTED.

1100 GADNR REP. FRED DUNN DEPARTS  
SITE. GADNR REP. J. MITCHELL  
TALKED WITH MR. BILLY E. GLESSBY  
ABOUT USING HIS PROPERTY FOR  
A BACKGROUND SAMPLE. HIS PROPERTY  
IS 1017 GEORGIA ST.

1115 LUNCH BREAK

1200 BACK O/S.

1240 DAF-5 SAMPLE COLLECTED.

1300 ALUM SULFATE (AS) SAMPLE COLLECTED.

1315 FERRIC ACID (EA) SAMPLE COLLECTED.

1330 NAOH SAMPLE COLLECTED.

1345 Sodium Hydroxide & Sulfuric Acid  
sample collected.

1520 Trip Blank Sample processed.

1630 G-1070 SAMPLE COLLECTED

1470 - WASH SAMPLE COLLECTED

SODIUM HYDROXIDE TANK IS

SLOWLY RISING. PH AROUND

STANDING. HAD INSIDE CONTAINMENT

IS 13 w/ PH METER.

1530 FRAC TANK SAMPLING

CONDUCTED. FSIRR TOP

WAS SEALED SHUT. ACCESS

WITH ROPE ONLY CONFIRMED

TANK WAS EMPTY.

1745 SOIL SAMPLING ACTIVITIES

INITIATED AT SOUTH WALL OF

TANK FARM/ DRAINAGE DITCH

AND FRAC TANK AREA.

1845 G1-1 SAMPLE COLLECTED.

1900 SAMPLE MANAGEMENT

ACTIVITIES AND LOADING

THE VAN WITH COLLECTED

SAMPLES.

1935 DEPARTED SITE FOR THE

DAY.

3/25/04

*[Signature]*

THURS. 8/26/04

0800 START MEMBERS O/S.

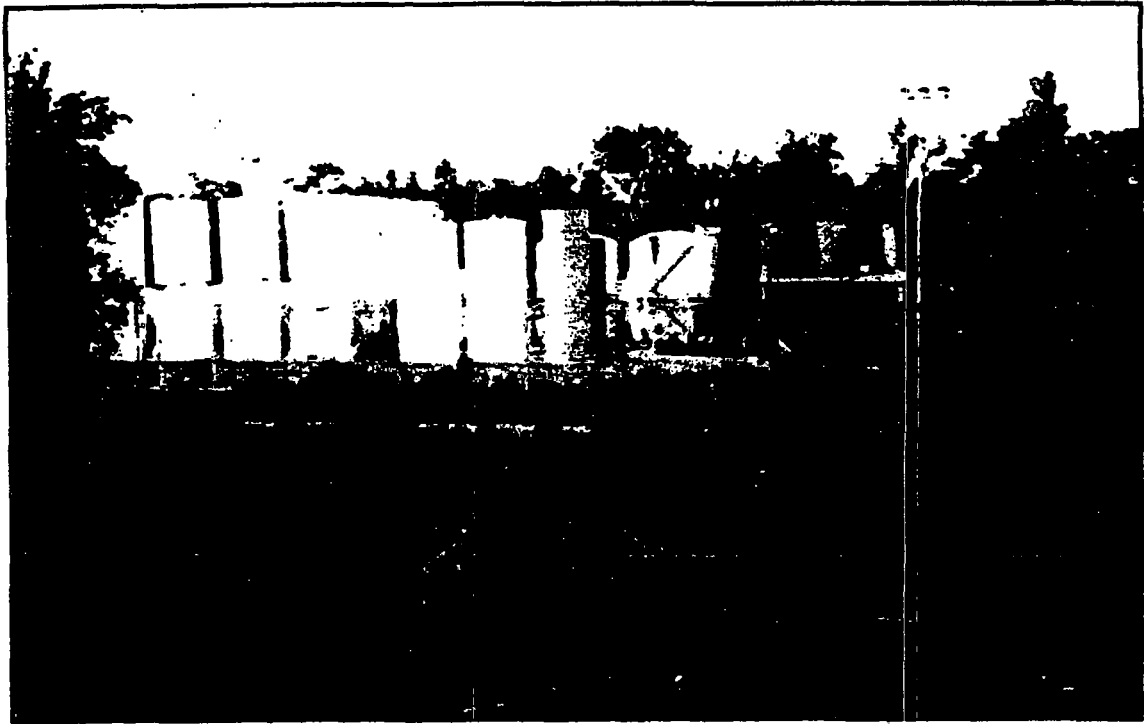
0815 SITE CLEAN UP RESUMES  
FROM YESTERDAY. SLUDGE JUMPS  
BEING CUT INTO SMALLER SECTIONS  
FOR PLACEMENT IN GARBAGE BAGS.

0840 MITCHELL CLIENT'S BACKGROUND  
2012 SAMPLE FROM MR. JOCK'S  
OPEN PROPERTY. SAMPLE  
LOCATION WAS NEAR THE  
INTERSECTION OF HAMILTON ST.  
AND SEWEL ST.

0900 RE-TING OF SAMPLES,  
DOUBLE CHECKING C-O-C AGAINST  
THE COLOR CONTENTS UNDERWAY.

1015 INFORMED PLANT MGR MR. DUMANO  
OF OUR WRAP-UP & TURNED  
OVER HIS SPLIT SAMPLES.

1045 FINAL LOAD OUT OF EQUIPMENT  
AND SAMPLES. DEPARTED  
SITE. ALL SAMPLES WILL  
BE HAND DELIVERED TO  
AES LABS THIS AFTERNOON.



**OFFICIAL PHOTOGRAPH NO. 1**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** View of the facility from the frac tanks.

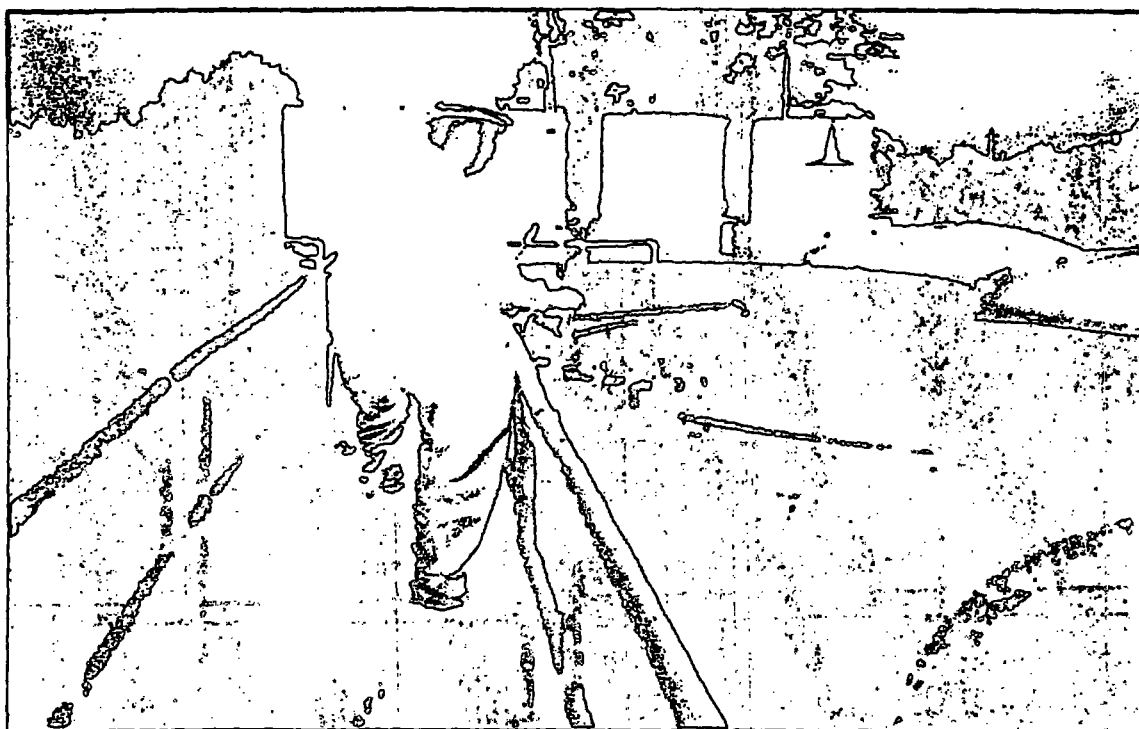
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 25, 2004

**Orientation:** North

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 2  
U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling of CT-6 tank with sludge judge.

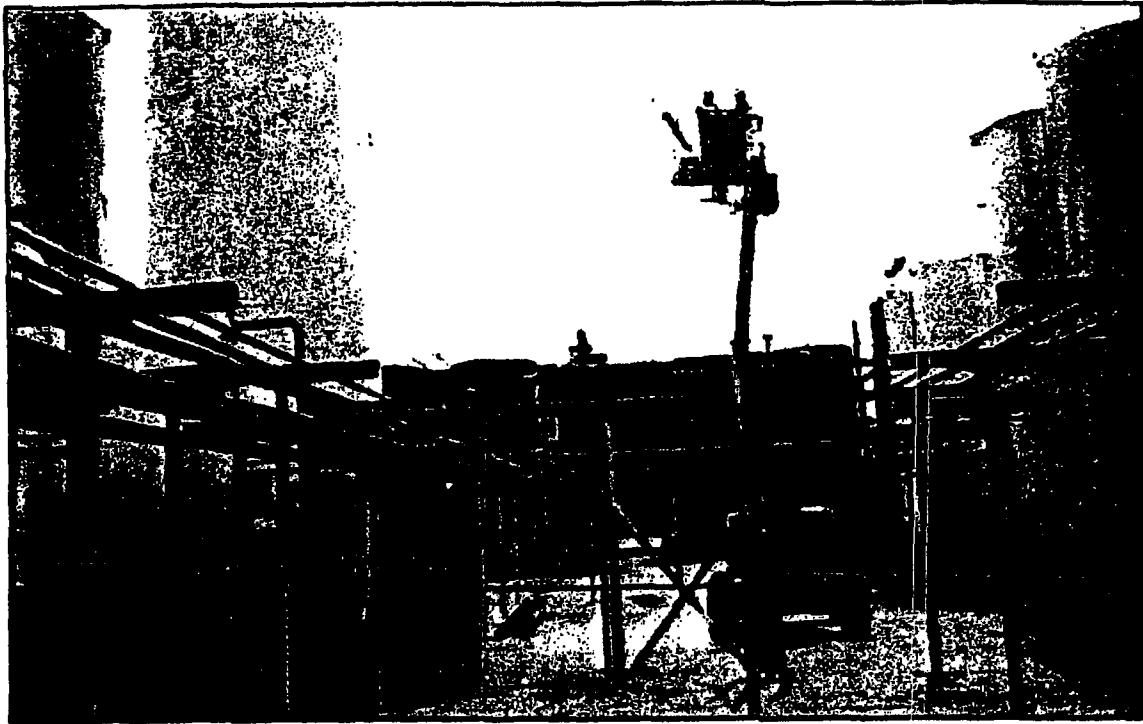
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 25, 2004

**Orientation:** East

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 3**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Operation of the 40-foot Z-boom inside the tank farm.

**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

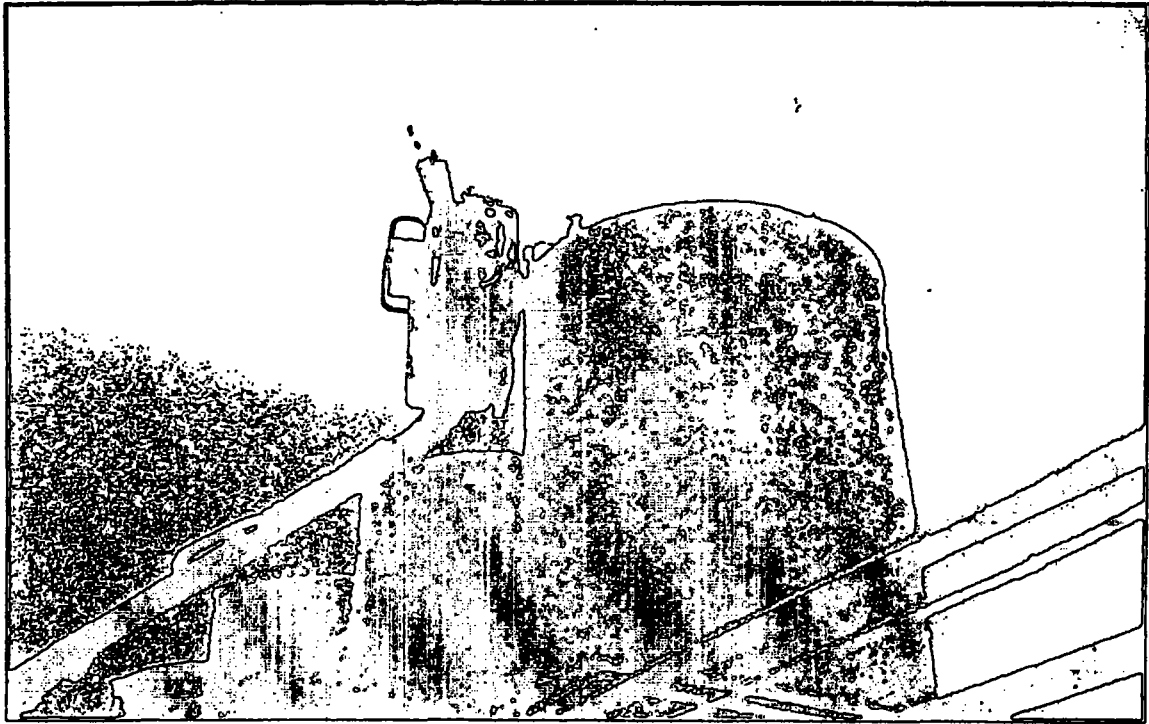
**Date:** August 24, 2004

**Orientation:** East

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.





**OFFICIAL PHOTOGRAPH NO. 4  
U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject: Sampling of Tank SH-1.**

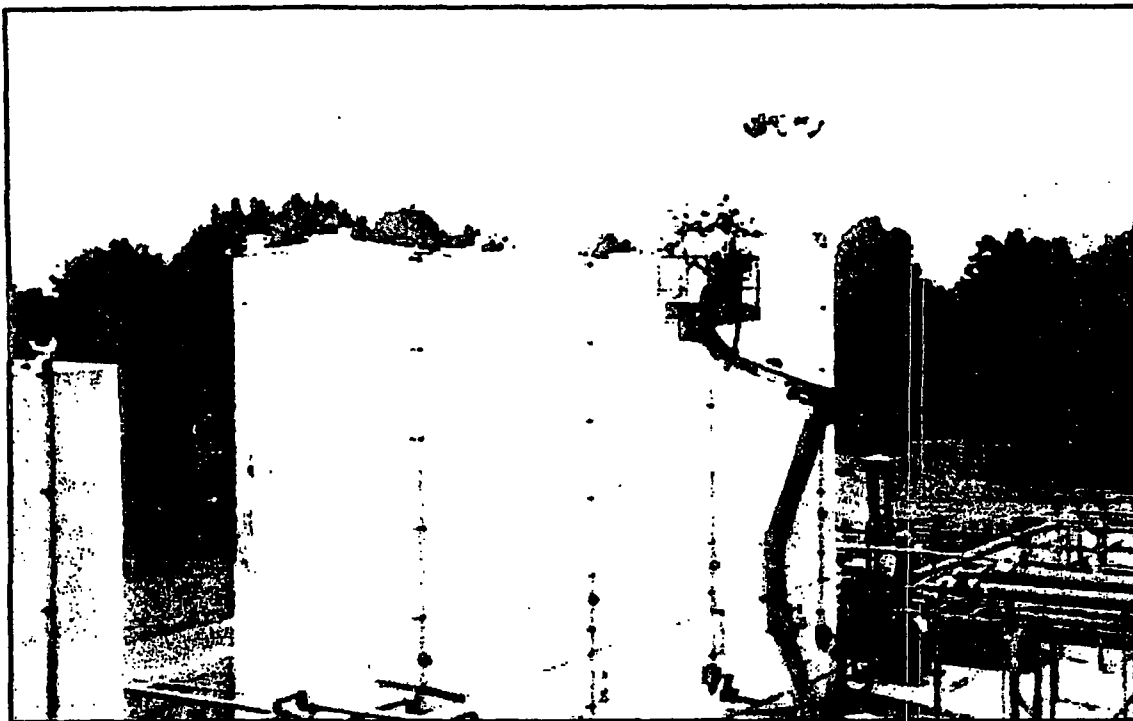
**Site: Seven Out, LLC  
Waycross, Ware County, Georgia**

**Date: August 24, 2004**

**Orientation: Southeast**

**Photographer: John Mitchell,  
Tetra Tech EM, Inc.**

**Witness: Randy Nattis,  
Tetra Tech EM, Inc.**



**OFFICIAL PHOTOGRAPH NO. 5**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling of tank SH-2.

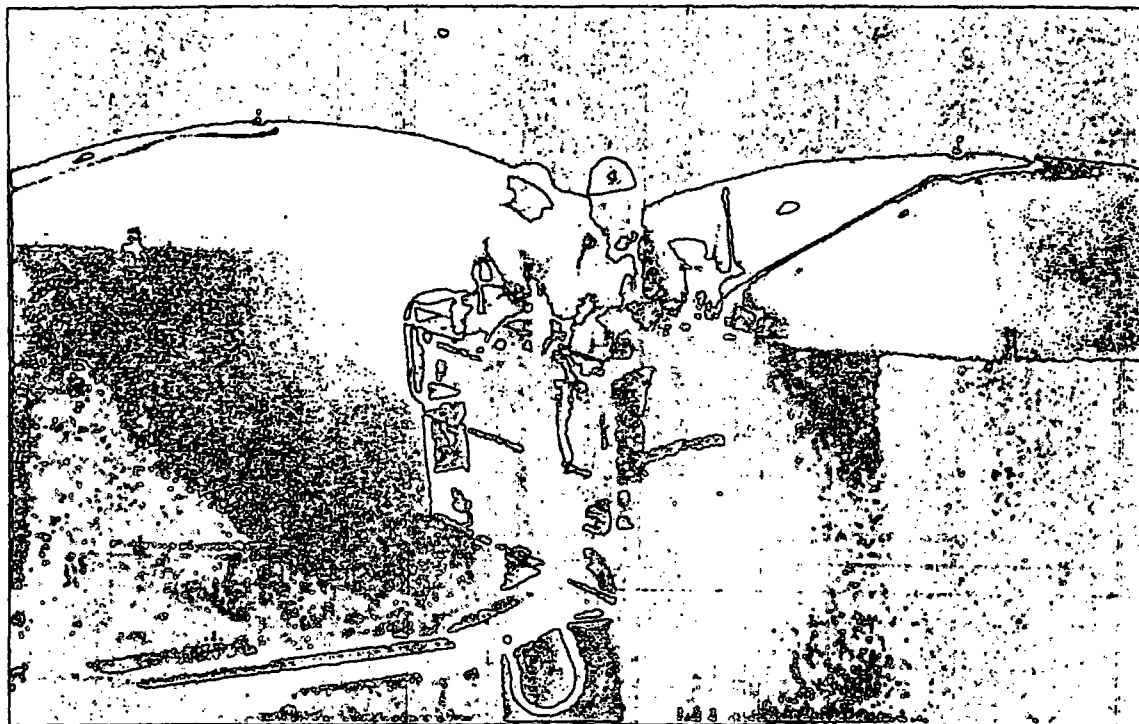
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 24, 2004

**Orientation:** Southwest

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 6**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling of tank DP-1.

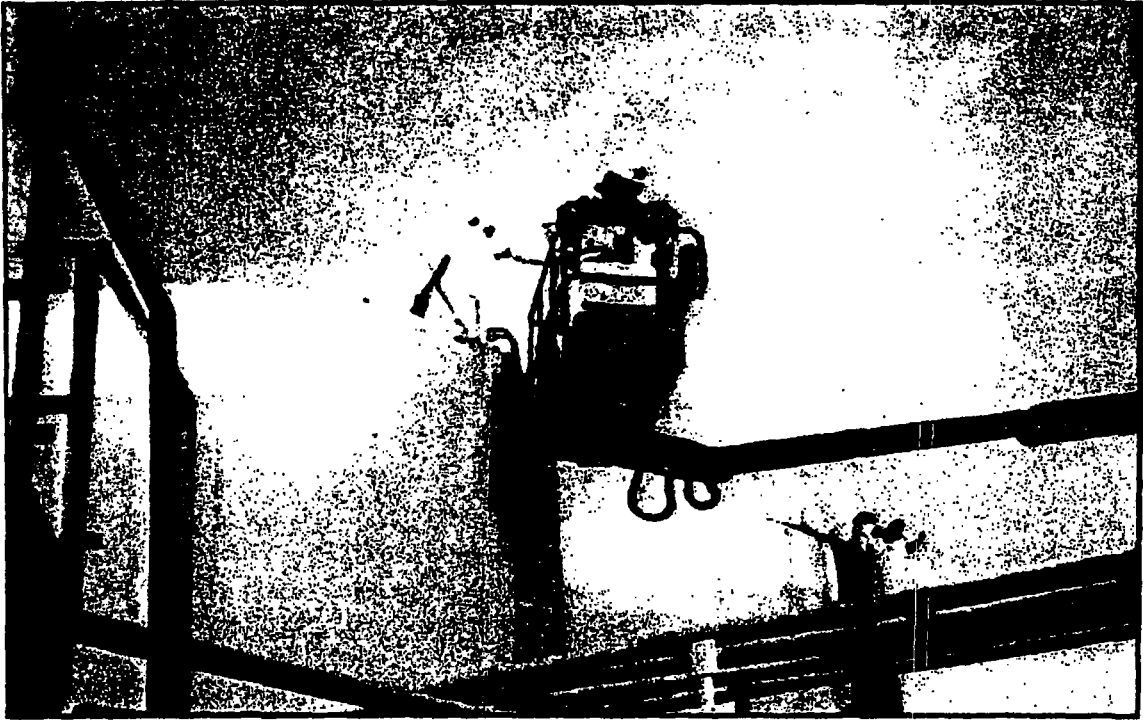
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 24, 2004

**Orientation:** West

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 7**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling of tank DP-2.

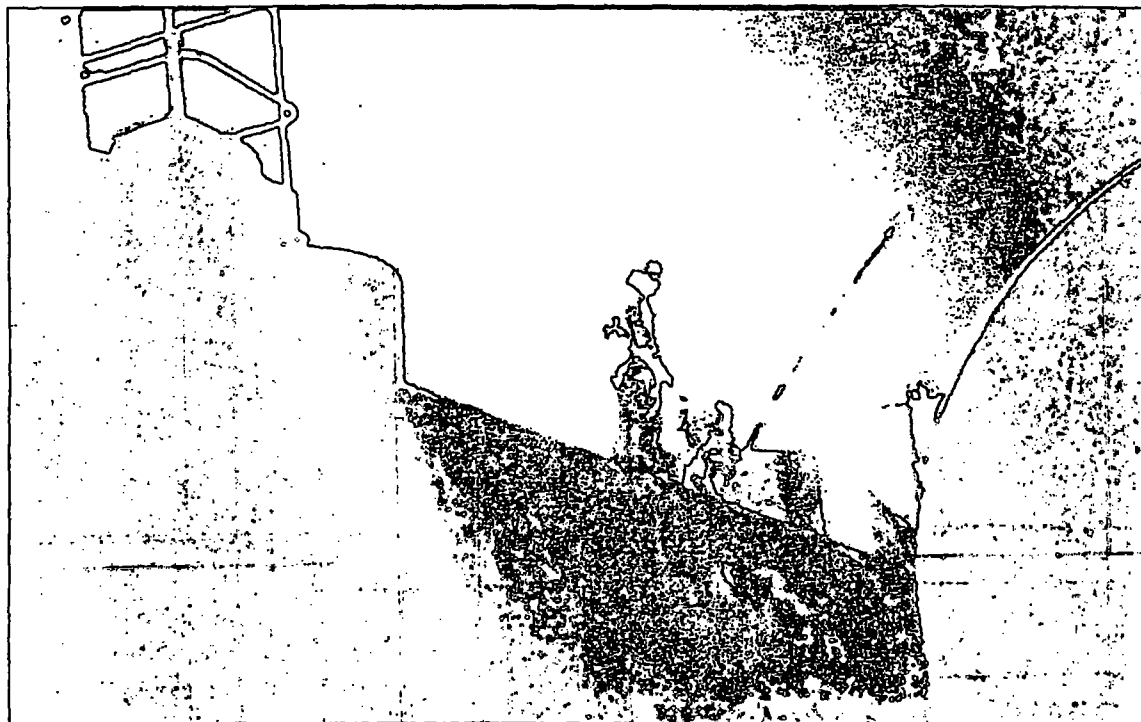
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 24, 2004

**Orientation:** Northeast

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 8  
U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject: Sampling of tank CD-2.**

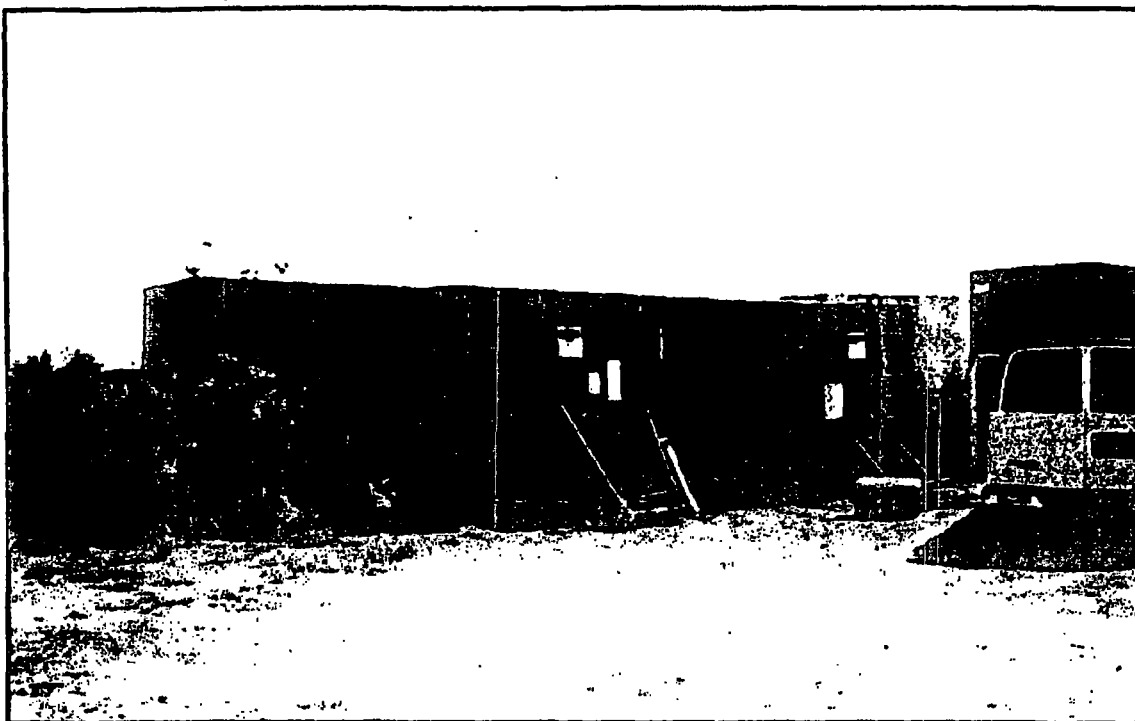
**Site: Seven Out, LLC  
Waycross, Ware County, Georgia**

**Date: August 25, 2004**

**Orientation: North**

**Photographer: John Mitchell,  
Tetra Tech EM, Inc.**

**Witness: Randy Nattis,  
Tetra Tech EM, Inc.**



**OFFICIAL PHOTOGRAPH NO. 9**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Frac tanks located south of the tank farm.

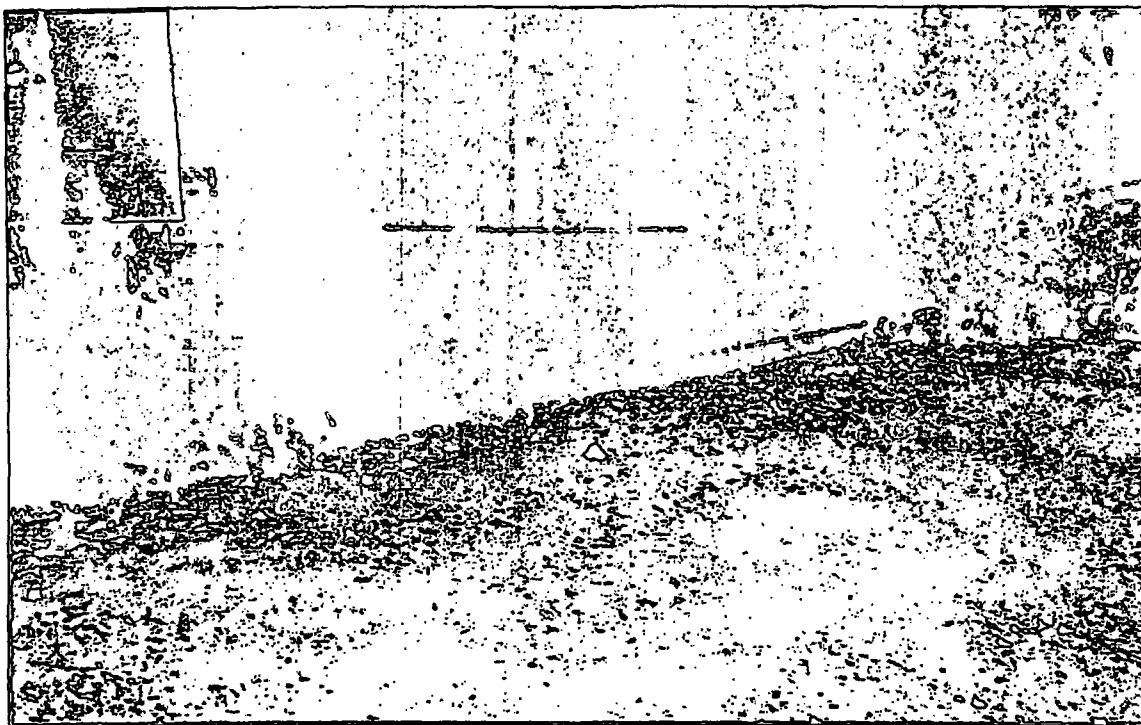
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 25, 2004

**Orientation:** South

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 10**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Frac tank G300D with stained soil possibly resulting from a past release.

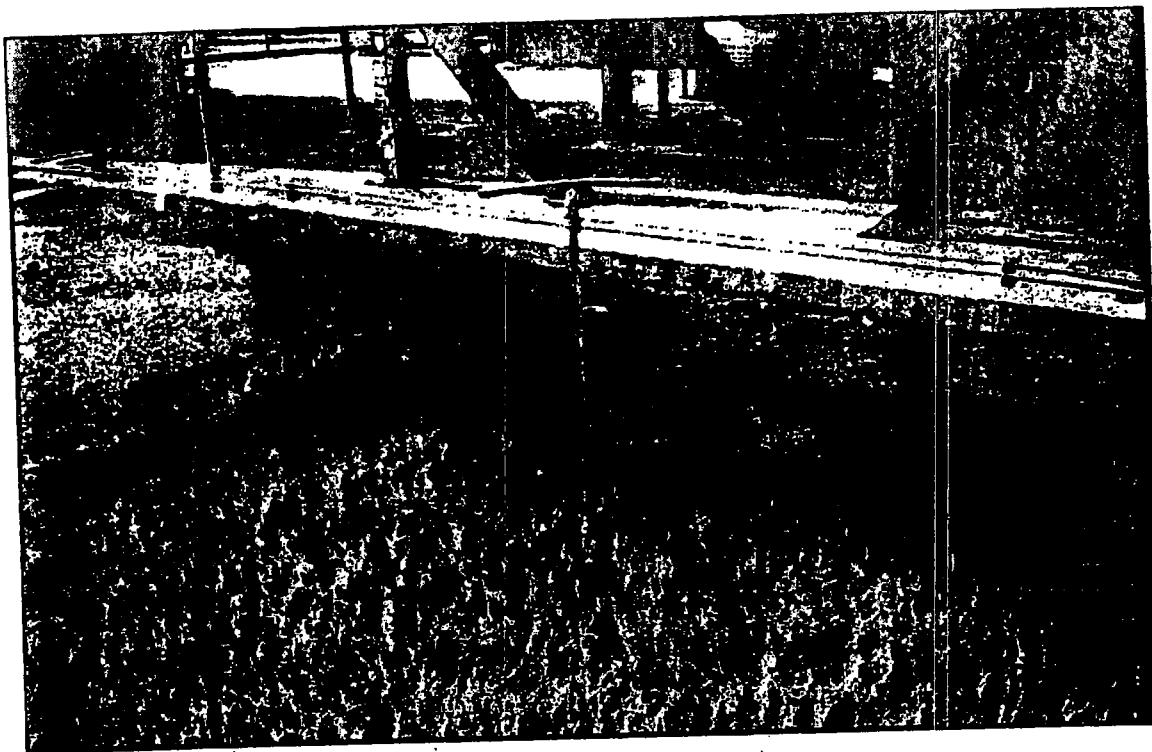
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 25, 2004

**Orientation:** South

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 11**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling location for soil sample SO-SW.

**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 25, 2004

**Orientation:** North

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.





**OFFICIAL PHOTOGRAPH NO. 12  
U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling location for soil sample SO-DD.

**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 25, 2004

**Orientation:** East

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 13**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling location for soil sample SO-FRT.

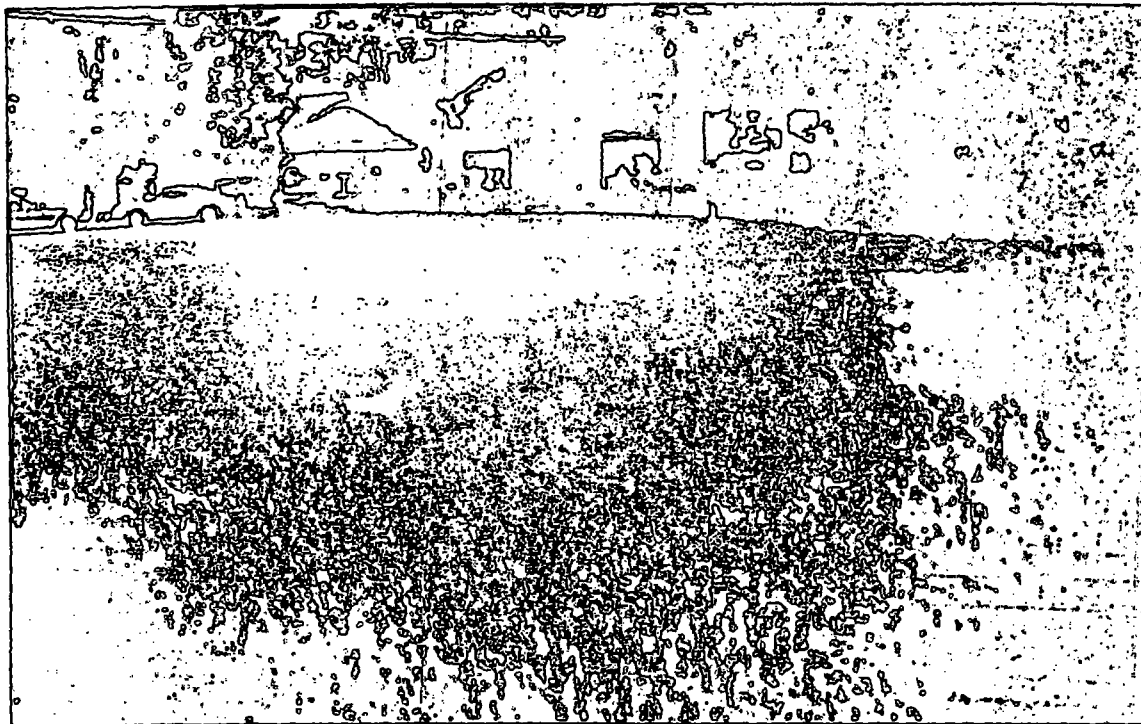
**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 25, 2004

**Orientation:** North

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.



**OFFICIAL PHOTOGRAPH NO. 14**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**Subject:** Sampling location for soil sample SO-BG (background sample).

**Site:** Seven Out, LLC  
Waycross, Ware County, Georgia

**Date:** August 26, 2004

**Orientation:** North

**Photographer:** John Mitchell,  
Tetra Tech EM, Inc.

**Witness:** Randy Nattis,  
Tetra Tech EM, Inc.

**APPENDIX G**  
**TABLE OF WITNESSES**

**(One Sheet)**

## TABLE OF WITNESSES

**Terry Stilman**  
On-Scene Coordinator  
U.S. EPA Region 4  
61 Forsyth Street, SW  
11<sup>th</sup> Floor  
Atlanta, Georgia 30303  
(678) 576-6440

**Fred Dunn**  
Georgia Environmental Protection Division  
2 Martin Luther King Jr. Drive  
Suite 1452 East Tower  
Atlanta, GA 30334  
(404) 657-8831

**John Mitchell (former Tetra Tech START team member)**  
Tetra Tech EM Inc.  
1955 Evergreen Boulevard  
Suite 300  
Duluth, Georgia 30096  
(678) 775-3080

**Brenda E. Blyler**  
Tetra Tech EM Inc.  
1955 Evergreen Boulevard  
Suite 300  
Duluth, Georgia 30096  
(678) 775-3093

**Randy Nattis**  
Tetra Tech EM Inc.  
101 Marietta Street  
Suite 2400  
Atlanta, Georgia 30303  
(404) 225-5530

**Alan Whitt**  
Whitt Environmental Services, Inc.  
1475 Buford Drive  
Suite 403-174  
Lawrenceville, GA 30043  
(678) 520-1750

**APPENDIX H**  
**DATA VALIDATION REPORT AND QUALIFIED DATA TABLES**  
**(27 Sheets)**

**December 9, 2004**

**Mr. Terry Stilman  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW, 11<sup>th</sup> Floor  
Atlanta, Georgia 30303**

**Subject: Data Validation Report  
Seven Out Site  
Waycross, Georgia  
Analytical Environmental Services, Inc.  
Laboratory Lot Number: 0408B38**

<b>Volatile Organic Compounds:</b>	<b>31 Aqueous and 4 Solid Samples and 1 Trip Blank</b>
<b>Semivolatile Organic Compounds:</b>	<b>33 Aqueous and 4 Solid Samples</b>
<b>Total Metals:</b>	<b>33 Aqueous and 4 Solid Samples</b>
<b>Total Mercury:</b>	<b>33 Aqueous and 4 Solid Samples</b>
<b>TCLP Metals:</b>	<b>29 Aqueous and 4 Solid Samples</b>
<b>TCLP Mercury:</b>	<b>29 Aqueous and 4 Solid Samples</b>

**Dear Mr. Stilman:**

Data validation was performed on the analytical data for 34 aqueous and 4 solid samples collected by Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) at the Seven Out site in Waycross, Georgia, on August 24 and 25, 2004. The samples were analyzed under Laboratory Lot Number 0408B38 by Analytical Environmental Services, Inc., of Atlanta, Georgia. The samples were analyzed for volatile organic compounds (VOC) by SW-846 Methods 5030B and 8260B; semivolatile organic compounds (SVOC) by SW-846 Methods 3520, 3550A, and 8270C; total metals by SW-846 Methods 3010A, 3050B, and 6010B; total mercury by SW-846 Methods 7470A and 7471A; toxicity characteristic leaching procedure (TCLP) metals by SW-846 Methods 1311, 3010A, and 6010B; and TCLP mercury by SW-846 Methods 1311 and 7470A. Due to the nature of their matrices, the laboratory treated four aqueous samples (CD-1-S, CD-3-S, SH-4-S, and SS-2-S) as "waste" samples, so the results for them are reported on a per kilogram basis.

Analytical data was evaluated in general accordance with all applicable data validation guidance documents, including the following: the US EPA Contract Laboratory Program National Functional Guidelines (NFG) for Organic Data Review (EPA, October 1999) and the US EPA Contract Laboratory Program NFGs for Inorganic Data Review (EPA, July 2002). The analytical methods that were used by the fixed laboratories during this project provide guidance on procedures and method acceptance criteria that, in some areas, differ from that given in the NFGs. Where differences exist between the methods and the NFGs, the data validators followed the acceptance criteria given in the methods. In addition, if the fixed laboratory data package presented laboratory-derived acceptance criteria, then these criteria were used to evaluate the data, unless the criteria were considered inadequate. Data evaluation was based on the following parameters:

- Data Completeness
- Holding Times
- Gas Chromatography and Mass Spectrometry (GC/MS) Instrument Performance Check
- Initial and Continuing Calibrations
- Blanks
- Inductively Coupled Plasma Interference Check Samples
- Inductively Coupled Plasma Serial Dilution
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicates and Matrix Duplicates
- Field Duplicates
- Laboratory Control Samples
- Internal Standards
- System Performance
- Compound Quantitation
- Compound Identification
- Tentatively Identified Compounds (TIC)

The following data validation approach was used; it should meet the needs of most data uses and requirements for limits on decision-making uncertainty for the data. This approach consisted of a review of all of the data, including the raw data (which was provided by the fixed laboratory in electronic form).

This data validation effort constituted a full validation of the data and involved a 100 percent check against applicable acceptance criteria of all quality control (QC) parameter data, including those parameters listed above. In addition, all data pertaining to analyte identification, such as chromatograms and mass spectra, were checked completely (100 percent) to evaluate the accuracy of analyte identification. This effort also involved an in-depth quantitative check of a fraction of the data; this check included the recalculation of QC results (such as percent recoveries [%R] and relative percent difference [RPD] values) and target analyte results from the raw data. Recalculations were conducted at



a frequency of around 10 percent for those data that were transcribed and generated by hand. For data that were calculated by software, recalculations were conducted at varying frequencies and to the extent necessary to confirm the adequacy of the software. If errors or discrepancies were encountered during the recalculation and checking of any data, the extent of the data check was expanded, as necessary, to determine the full extent of the problem.

Tables 1 and 2 summarize the qualified analytical results for aqueous and soil samples, respectively (see Enclosure 1).

#### 1.0 DATA COMPLETENESS

The data package for Laboratory Lot Number 0408B38 was complete except that the raw data for the VOC and SVOC analyses did not include mass spectra and no TIC data were presented. TCLP metals for samples NAOH, Sodium Hydroxide, ST-1, and Sulfuric Acid were requested on the chain-of-custody record, but were not performed because of the sample matrix. VOC analyses for samples Sodium Hydroxide and Sulfuric Acid were also not performed because of the sample matrix.

#### 2.0 HOLDING TIMES

The holding times were met for all analyses of the samples. The temperatures of the sample coolers varied from 3.1 to 5.4 degrees Celsius upon arrival at the laboratory.

#### 3.0 GC/MS INSTRUMENT PERFORMANCE CHECK

All GC/MS instrument performance checks for the VOC and SVOC analysis met the acceptance criteria.

#### 4.0 INITIAL AND CONTINUING CALIBRATIONS

The initial and continuing calibrations were analyzed at the proper frequencies and concentrations and met all requirements, with the following exceptions.

The VOC analyses used three instruments, four initial calibrations, and eight continuing calibrations. In the initial calibrations a few analytes had relative standard deviations (RSD) exceeding the 30 percent QC limit. However, the laboratory calculated these results by linear regression and found coefficients of determination of 0.995 or higher for all. Therefore, no qualifications are warranted for initial calibration irregularities.

On instrument GCMS-5, the 30 August continuing calibration had excessive (greater than 25 percent) percent differences (%D) from the initial calibration for acetone, bromomethane, carbon tetrachloride, and methylene chloride. The only affected result was the acetone result in the 5,000-fold dilution of sample OP-4-S, which was flagged "J" to indicate that it is estimated. The 31 August continuing calibration had an excessive %D for methylene chloride. Therefore, sample reporting limits for that compound were flagged "UJ" in samples CD-1-S, CD-3-S, F237, FA-S, G107D, G300D, RW-1-S, RW-2-S, SH-1-S, SH-2-S, SH-3-S, SH-4-S, SS-1-S, SS-2-S, CT-7, CT-8, and ST-1. The 1 September continuing calibration for instrument GCMS-5 had excessive %Ds for bromomethane and methylene chloride. Because that continuing calibration was used only for determination of acetone at high dilutions in several samples, no qualifications are required.

On instrument GCMS-12, the 31 August continuing calibration had an excessive %D for methyl acetate. The nondetect results for that compound in samples AS-S, CD-2-S, CT-1-S, CT-2-S, CT-3-S, CT-4-S, CT-5-S, CT-6-S, DP-1-S Layer A, DP-1-S Layer B, and DP-2-S were flagged "UJ" to indicate that the sample reporting limits are estimated. The 1 September continuing calibration had excessive %Ds for acetone, dichlorodifluoromethane, and methyl acetate. Therefore, all three compounds were flagged "UJ" as estimated in sample DAF-S, but only acetone in sample SH-3-S, because only that compound was quantitated in the 100-fold dilution of the sample. The 2 September continuing calibration of instrument GCMS-12 had excessive %D results for 2-butanone, 2-hexanone, acetone, dichlorodifluoromethane, and methyl acetate. The results for those compounds in the only associated sample, the trip blank, were flagged "UJ" to indicate that the sample reporting limits are estimated.

The VOC analyses of the soil samples were performed on instrument GCMS-7. The first continuing calibration, performed on 30 August, had excessive %Ds for 1,2-dibromo-3-chloropropane, 2-butanone, acetone, chloromethane, dichlorodifluoromethane, methyl tert-butyl ether, tetrachloroethene, and trichlorofluoromethane. The sample reporting limits for those compounds in the only associated sample, SO-FRT, were flagged "UJ" to indicate that they are estimated. The 31 August continuing calibration had excessive %D results for all of the above-named compounds plus Freon-113 (1,1,2-trichloro-1,2,2-trifluoroethane) and trichloroethene. The sample reporting limits for those compounds were flagged "UJ" to indicate that they are estimated in the other soil samples, SO-BG, SO-DD, and SO-SW.

The SVOC analyses used two instruments, three initial calibrations, and ten continuing calibrations. As with the VOC analyses, a few analytes in each initial calibration had RSD exceeding the 30 percent QC limit. However, the laboratory calculated these results by linear regression and found coefficients of determination of 0.995 or higher for all. Therefore, no qualifications are warranted for initial calibration problems. In addition, almost all of the continuing calibrations had all analytes within QC limits. The first exception was the 2 September continuing calibration on instrument MS9, which had an excessive %D for benzaldehyde. This continuing calibration was used only to determine phenol in some diluted samples, so no qualifications are warranted. The other exception was the 3 September continuing calibration on instrument MS10, which had excessive %Ds for butyl benzyl phthalate and benzo(k)fluoranthene. The sample reporting limits for those analytes in sample DP-1-S Layer A were flagged "UJ" to indicate that they are estimated. That same continuing calibration gave negligible response to phenol, possibly because the compound was omitted from the calibration mixture. Phenol was determined in diluted re-analyses of samples G107D, OP-4-S, CT-7, and CT-8 after that continuing calibration. The phenol results for those samples were flagged "J" to indicate the uncertainty caused by the lack of verification of the calibration.

## 5.0 BLANKS

The trip blank contained no VOCs. Calibration blanks and method blanks were free of target analytes in all analyses, with the following exception. One continuing calibration blank in the soil metals analyses contained some selenium. Since none of the samples contained any selenium, no qualifications are warranted.

## 6.0 INDUCTIVELY COUPLED PLASMA INTERFERENCE CHECK SAMPLES

The ICP interference check samples (ICS) results were within acceptable limits with the following exceptions. One pair of samples analyzed on 1 September with aqueous samples had essentially zero recoveries (very small positive and negative results in the raw data) for all analytes and looked very much like laboratory blanks. No qualifications are warranted, because this appears to be a laboratory error in loading the tray of vials for analysis. However, two sets of ICS samples analyzed with the soil samples gave potassium recoveries of 147 and 145 percent, respectively, versus QC limits of 80 to 120 percent. The positive potassium results in the soil samples were flagged "J" to indicate that they are estimated and may be biased high.

## 7.0 INDUCTIVELY COUPLED PLASMA SERIAL DILUTION

ICP serial dilutions were analyzed and gave acceptable results with one exception. In the aqueous serial dilution analysis performed on sample CT-6-S, calcium recovery was 116 percent, just above the QC limits of 85 to 115 percent. All aqueous results for calcium were flagged "J" to indicate the apparent matrix interference.

## 8.0 SURROGATE RECOVERIES

Surrogate recoveries for VOC and SVOC analyses were within specified control limits, with the following exceptions.

In the VOC analyses, all surrogate irregularities involved 4-bromofluorobenzene in the soil samples. Recoveries were somewhat below the QC limits of 65 to 133 percent in samples SO-BG, SO-DD, and SO-SW, at 58 to 63 percent. Therefore, all VOC results for those samples were flagged "J" or "UJ", as appropriate, to indicate that they are estimated due to apparent matrix interference. Sample SO-FRT had a low, but acceptable, recovery of 66 percent, but the MS/MSD samples created from sample SO-FRT had low recoveries of 64 and 64 percent. No qualifications were applied to the parent sample results for the irregularities in the QC samples.

In the SVOC analyses, a number of samples had one surrogate outside QC limits, or one acidic surrogate and one base/neutral surrogate outside of their respective limits. No qualifications are warranted for these irregularities. However, three samples, DP-1-S Layer B, SH-2-S, and SH-3-S, had recoveries for two of the three acidic surrogates outside QC limits. Therefore, all results for acidic compounds in those three samples were flagged "J" or "UJ", as appropriate, to indicate that they are considered estimated because of matrix interference. Sample DP-1-S Layer A had irregular recoveries for two of its acidic surrogates and for all three of its base/neutral surrogates. Therefore, all results for that sample were flagged "J" or "UJ", as appropriate, to indicate that they are considered estimated because of serious matrix interference. In a number of samples, recovery of the acidic surrogate 2,4,6-tribromophenol was zero. The NFG state that all non-detected acidic results in those samples should be rejected. Examination of the chromatograms of the affected samples showed a large mass of non-target compounds with retention times similar to those of the surrogate. The presence of these compounds created a "hump" from which the surrogate peak could not be separated. As a matter of professional judgment, the associated acidic compound results were considered to be estimated, rather than rejected, for this localized matrix interference.

## **9.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATES AND MATRIX DUPLICATES**

MS/MSD recoveries were within the specified control limits, with the following exceptions, all involving recoveries in the SVOC and total metals analyses. Aqueous MS/MSD analyses were performed using sample CT-6-S. In the SVOC analyses, control limits were not applied for phenol because the unspiked sample result was greater than 25 times the spike concentration. No qualifications are warranted for this data gap. Recoveries for potassium and sodium could not be determined because the unspiked sample contained more than four times as much as the spike. No qualifications are warranted for this data gap. However, there were low recoveries for aluminum (53 and 54 percent from the MS and MSD samples, respectively; 62 percent from the post-digestion spike [PDS]), barium (68 and 70 percent; 74 percent from the PDS), and thallium (72 and 74 percent; 84 percent from the PDS spike), versus the QC limits of 75 to 125 percent. Therefore, all aqueous aluminum, barium, and thallium results were flagged "J" or "UJ", as appropriate, to indicate that they are considered estimated.

The soil MS/MSD analyses were performed using sample SO-FRT. Calcium and iron recoveries could not be determined because the unspiked sample contained much more than the spike. No qualifications are warranted for these data gaps. However, antimony recoveries were only 73 and 71 percent (92 percent in the PDS), versus QC limits of 75 to 125 percent. The antimony results in the soil samples were flagged "UJ" to indicate that the results are considered estimated because of apparent matrix interference.

The waste MS analysis was performed using sample CD-1-S. Due to insufficient sample, no MSD analysis was performed. Calcium and sodium recoveries could not be determined because the unspiked sample contained much more than the spike. No qualifications are warranted for these data gaps. Zinc recovery was 74 percent (94 percent in the PDS), just below the QC limits of 75 to 125 percent. The zinc results in the waste samples were flagged "J" to indicate that they are considered estimated because of apparent matrix interference.

## **10.0 FIELD DUPLICATES**

No field duplicate samples were collected or analyzed.

## **11.0 LABORATORY CONTROL SAMPLES**

All laboratory control sample (LCS) results were within their various QC limits.

## **12.0 INTERNAL STANDARDS**

For the semivolatile and volatile analyses, the internal standard retention times in the samples were within QC limits established using the associated continuing calibration standard data in all cases. The internal standard area counts were within their QC limits of 50 to 200 percent with the following exceptions. In the VOC analysis of aqueous sample DP-2-S, matrix interference resulted in low area counts for pentafluorobenzene, 1,4-difluorobenzene, and chlorobenzene-d5, the first three of the four internal standards. In soil sample SO-BG, the fourth internal standard, 1,4-dichlorobenzene-d4, had an area count below the QC limits, also a result of apparent matrix interference. The analytes in those two

samples that are quantitated against the internal standards with irregular recoveries were flagged "J" or "UJ", as appropriate, to indicate that their concentrations are considered estimated.

In the SVOC analyses, aqueous samples CD-3-S, CT-3-S, CT-5-S, SH-1-S, SH-2-S, and SS-1-S and soil sample SO-DD had high area counts, as much as 800 percent, for chrysene-d12, the fifth of six internal standards. This may be a result of the co-elution of the internal standard with some unidentified non-target compound or compounds of these samples. The compounds quantitated against that internal standard (3,3'-dichlorobenzidine, benzo(a)anthracene, bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, chrysene, and pyrene) were flagged "UJ" to indicate the uncertainty in their sample reporting limits as a result of the interference.

### 13.0 SYSTEM PERFORMANCE

No signs of degraded instrument performance were observed. Analytical systems were judged to have been within control and stable during the course of these analyses.

### 14.0 COMPOUND QUANTITATION

Sample results were checked for proper dilution factors, volumes, masses, and adjustments for moisture content. Samples were correctly calculated. The laboratory does not report results less than the laboratory reporting limit. Many samples contained high concentrations of analytes, of non-target analytes, or of both. Therefore the initial analyses of some samples were performed at 10-fold or 20-fold dilutions, with corresponding higher sample reporting limits. In addition, a number of samples had one or more analytes with concentrations above the instrument's calibration range. Therefore, the samples were re-analyzed at a dilution, as much as 500 times the original analysis, to bring the results within calibration range. Although it took as many as three analyses of a sample to bring the results within calibration range, all reported positive results were within calibration range, so no extrapolations were reported. Therefore, no qualifications were required because of quantitation irregularities.

### 15.0 COMPOUND IDENTIFICATION

The relative response times (RRT) of the reported compounds in the volatile and semivolatile analyses were within  $\pm 0.06$  RRT units of the standard relative retention times. The laboratory did not present mass spectra, so the identity of the analytes could not be fully verified.

### 16.0 TENTATIVELY IDENTIFIED COMPOUNDS

No tentatively identified compound results were presented. It was noted in the chromatograms from the VOC and SVOC analyses that many samples contained large amounts of numerous compounds not on the analyte lists. The raw data included results for a number of VOCs and SVOCs included in the calibration standards, but not reported here. In particular, vinyl acetate was a major component of many samples and a number of other compounds were also detected in one or more samples.

### 17.0 OVERALL ASSESSMENT OF DATA

The overall quality of this data package was acceptable. The primary reason for qualification of the data is the inherent nature of the samples. Many samples contained large concentrations of many analytes and

non-target analytes that caused significant matrix interference. Because the analytical methods were optimized to detect and determine trace quantities of analytes, these high concentrations resulted in problems with surrogate, MS/MSD, and internal standard results. The data may be used, as qualified, for any purpose.

If you have any questions or need further information, please contact the undersigned at (404) 225-5516.

Sincerely,

John Schendel  
Data Validation Coordinator

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 040830**

PARAMETER	SO-BG	SO-DD	SO-FRT	SO-SW
<b>TCLP Metals (mg/L)</b>				
Arsenic	0.250 U	0.250 U	0.250 U	0.250 U
Barium	0.500 U	0.500 U	0.500 U	0.500 U
Cadmium	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Chromium	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Lead	0.0500 U	8.1300	0.0500 U	0.0690
Selenium	0.100 U	0.100 U	0.100 U	0.100 U
Silver	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Mercury	0.00400 U	0.00400 U	0.00400 U	0.00400 U
<b>Metals (mg/kg)</b>				
Aluminum	623	1860	586	2180
Antimony	3.93 UJ	3.59 UJ	3.75 UJ	4.2 UJ
Arsenic	3.93 U	3.59 U	3.75 U	151
Barium	3.93 U	15.5	7.11	75.2
Beryllium	1.96 U	1.8 U	1.87 U	2.1 U
Cadmium	1.96 U	1.8 U	1.87 U	2.1 U
Calcium	234	7740	1530	3130
Chromium	1.96 U	7.93	1.87 U	8.69
Cobalt	1.96 U	1.8 U	1.87 U	3.46
Copper	1.96 U	59.2	17.8	107
Iron	596	4910	1080	10800
Lead	3.93 U	17.7	10.8	264
Magnesium	39.3 U	507	58.5	143
Manganese	4.26	74.7	8.22	169
Nickel	3.93 U	3.59 U	3.75 U	4.62
Potassium	78.5 U	80.3 J	74.9 U	92.1 J
Selenium	3.93 U	3.59 U	3.75 U	4.2 U
Silver	1.96 U	1.8 U	1.87 U	2.1 U
Sodium	247	470	389	204
Thallium	3.93 U	3.59 U	3.75 U	4.2 U
Vanadium	3.93 U	5.34	3.75 U	8.58
Zinc	4.11	32.3	8.32	518
Mercury	0.0987 U	0.0992 U	0.0994 U	0.35
<b>Volatile Organic Compounds (ug/kg)</b>				
1,1,1-Trichloroethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,1,2,2-Tetrachloroethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,1,2-Trichloroethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,1-Dichloroethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,1-Dichloroethene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,2,4-Trichlorobenzene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,2-Dibromo-3-chloropropane	6.6 UJ	3.5 UJ	5.3 UJ	3.8 UJ
1,2-Dibromoethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,2-Dichlorobenzene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,2-Dichloroethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,2-Dichloropropane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,3-Dichlorobenzene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
1,4-Dichlorobenzene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
2-Butanone	13 UJ	7 UJ	11 UJ	7.6 UJ
2-Hexanone	13 UJ	7 UJ	11 U	7.6 UJ
4-Methyl-2-pentanone	13 UJ	7 UJ	11 U	7.6 UJ
Acetone	13 UJ	70 UJ	110 UJ	75.6 UJ
Benzene	6.6 UJ	32 J	5.3 U	3.8 UJ
Bromodichloromethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Bromoform	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Bromomethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Carbon disulfide	13 UJ	10 J	11 U	7.6 UJ

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0408R38**

PARAMETER	SO-BG	SO-DD	SO-FRT	SO-SW
<b>Volatile Organic Compounds (ug/kg) (Cont.)</b>				
Carbon tetrachloride	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Chlorobenzene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Chloroethane	13 UJ	7 UJ	11 U	7.6 UJ
Chloroform	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Chloromethane	13 UJ	7 UJ	11 UJ	7.6 UJ
cis-1,2-Dichloroethene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
cis-1,3-Dichloropropene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Cyclohexane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Dibromochloromethane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Dichlorodifluoromethane	13 UJ	7 UJ	11 UJ	7.6 UJ
Ethylbenzene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Freon-113	13 UJ	7 UJ	11 U	7.6 UJ
Isopropylbenzene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
m,p-Xylene	13 UJ	7 UJ	11 U	7.6 UJ
Methyl acetate	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Methyl tert-butyl ether	6.6 UJ	3.5 UJ	5.3 UJ	3.8 UJ
Methylcyclohexane	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Methylene chloride	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
o-Xylene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Styrene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Tetrachloroethene	6.6 UJ	3.5 UJ	5.3 UJ	3.8 UJ
Toluene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
trans-1,2-Dichloroethene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
trans-1,3-Dichloropropene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Trichloroethene	6.6 UJ	3.5 UJ	5.3 U	3.8 UJ
Trichlorofluoromethane	6.6 UJ	3.5 UJ	5.3 UJ	3.8 UJ
Vinyl chloride	13 UJ	7 UJ	11 U	7.6 UJ
<b>Semivolatile Organic Compounds (ug/kg)</b>				
1,1'-Biphenyl	330 U	330 U	330 U	330 U
2,4,5-Trichlorophenol	1700 U	1700 U	1700 U	1700 U
2,4,6-Trichlorophenol	330 U	330 U	330 U	330 U
2,4-Dichlorophenol	330 U	330 U	330 U	330 U
2,4-Dimethylphenol	330 U	330 U	330 U	330 U
2,4-Dinitrophenol	1700 U	1700 U	1700 U	1700 U
2,4-Dinitrotoluene	330 U	330 U	330 U	330 U
2,6-Dinitrotoluene	330 U	330 U	330 U	330 U
2-Chloronaphthalene	330 U	330 U	330 U	330 U
2-Chlorophenol	330 U	330 U	330 U	330 U
2-Methylnaphthalene	330 U	610	330 U	330 U
2-Methylphenol	330 U	330 U	330 U	330 U
2-Nitroaniline	1700 U	1700 U	1700 U	1700 U
2-Nitrophenol	330 U	330 U	330 U	330 U
3,3'-Dichlorobenzidine	670 U	670 UJ	670 U	670 U
3-Nitroaniline	1700 U	1700 U	1700 U	1700 U
4,6-Dinitro-2-methylphenol	1700 U	1700 U	1700 U	1700 U
4-Bromophenyl phenyl ether	330 U	330 U	330 U	330 U
4-Chloro-3-methylphenol	330 U	330 U	330 U	330 U
4-Chloroaniline	330 U	330 U	330 U	330 U
4-Chlorophenyl phenyl ether	330 U	330 U	330 U	330 U
4-Methylphenol	330 U	330 U	330 U	330 U
4-Nitroaniline	1700 U	1700 U	1700 U	1700 U
4-Nitrophenol	1700 U	1700 U	1700 U	1700 U
Acenaphthene	330 U	330 U	330 U	330 U
Acenaphthylene	330 U	330 U	330 U	1300
Acetophenone	330 U	330 U	330 U	330 U



**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0400230**

PARAMETER	SO-BG	SO-DD	SO-FRT	SO-SW
<b>Semi-volatile Organic Compounds (SVOCs) (Cont.)</b>				
Anthracene	330 U	330 U	330 U	1000
Atrazine	330 U	330 U	330 U	330 U
Benz(a)anthracene	330 U	330 UJ	330 U	2400
Benzaldehyde	330 U	330 U	330 U	330 U
Benzo(a)pyrene	330 U	330 U	330 U	2800
Benzo(b)fluoranthene	330 U	330 U	330 U	1800
Benzo(g,h,i)perylene	330 U	330 U	330 U	2400
Benzo(k)fluoranthene	330 U	330 U	330 U	3200
Bis(2-chloroethoxy)methane	330 U	330 U	330 U	330 U
Bis(2-chloroethyl)ether	330 U	330 U	330 U	330 U
Bis(2-chloroisopropyl)ether	330 U	330 U	330 U	330 U
Bis(2-ethylhexyl)phthalate	330 U	330 UJ	330 U	330 U
Butyl benzyl phthalate	330 U	330 UJ	330 U	330 U
Caproactam	330 U	330 U	330 U	330 U
Carbazole	330 U	330 U	330 U	370
Chrysene	330 U	330 UJ	330 U	3100
Dibenz(a,h)anthracene	330 U	330 U	330 U	650
Dibenzofuran	330 U	330 U	330 U	330 U
Diethyl phthalate	330 U	330 U	330 U	330 U
Dimethyl phthalate	330 U	330 U	330 U	330 U
Di-n-butyl phthalate	330 U	1100	330 U	330 U
Di-n-octyl phthalate	330 U	330 U	330 U	330 U
Fluoranthene	330 U	330 U	330 U	4600
Fluorene	330 U	330 U	330 U	330 U
Hexachlorobenzene	330 U	330 U	330 U	330 U
Hexachlorobutadiene	330 U	330 U	330 U	330 U
Hexachlorocyclopentadiene	670 U	670 U	670 U	670 U
Hexachloroethane	330 U	330 U	330 U	330 U
Indeno(1,2,3-cd)pyrene	330 U	330 U	330 U	3000
Isophorone	330 U	330 U	330 U	330 U
Naphthalene	330 U	330 U	330 U	330 U
Nitrobenzene	330 U	330 U	330 U	330 U
N-Nitrosodi-n-propylamine	330 U	330 U	330 U	330 U
N-Nitrosodiphenylamine	330 U	330 U	330 U	330 U
Pentachlorophenol	1700 U	1700 U	1700 U	1700 U
Phenanthrene	330 U	400	330 U	1800
Phenol	330 U	330 U	330 U	330 U
Pyrene	330 U	330 UJ	330 U	4000

**Notes:**

BG = Background

DD = Drainage ditch

FRT = Free tank area

J = The associated value is the approximate concentration of the analyte in the sample.

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

mg/L = Milligrams per liter

SO = Soil

SW = South wall of the tank farm

TCLP = Toxicity characteristic leaching procedure

U = Analyte was analyzed for but not detected at or above the associated value.

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0468E38**

PARAMETERS	AS-S	CD-1-S	CD-2-S	CD-3-S	CT-1-S	CT-2-S	CT-3-S	CT-4-S	CT-5-S
<b>TCLP Metals (mg/L)</b>									
Arsenic	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Barium	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500	0.500 U	0.500 U	0.500 U
Cadmium	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Chromium	0.0500 U	0.1120	0.0500 U	0.0500 U	0.0500 U	0.0708	0.0500 U	0.0500 U	0.0500 U
Lead	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Selenium	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
Silver	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Mercury	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U
<b>Metals</b>	<b>mg/L</b>	<b>mg/kg</b>	<b>mg/L</b>	<b>mg/kg</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>
Aluminum	1.59 J	58	18 J	120	73.4 J	3.37 J	1.44 J	0.2 U	1.35 J
Antimony	0.0200 U	0.9800 U	0.0200 U	1.2000 U	0.0208	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Arsenic	0.0500 U	0.9800 U	0.0500 U	1.2000 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Barium	0.0457 J	1.6	0.0854 J	3.7	0.135 J	0.0329 J	0.0502 J	0.0279 J	0.428 J
Beryllium	0.0100 U	0.4900 U	0.0100 U	0.5900 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Cadmium	0.0050 U	0.4900 U	0.0080	0.5900 U	0.0278	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Calcium	124 J	340	377 J	130	370 J	382 J	691 J	269 J	416 J
Chromium	0.0190	0.4900 U	0.0743	0.6100	1.9200	0.1330	0.0469	0.0133	0.0413
Cobalt	0.0200 U	0.4900 U	0.0552	0.4900 U	0.0688	0.0200 U	0.0229	0.0200	0.0200 U
Copper	0.716	0.89	1.9	14	31.7	4.65	3.3	0.4	1.19
Iron	29.3	110	253	40	431	36	18.4	6.15	101
Lead	0.0200	0.9800 U	0.0173	2.6000	0.0388	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Magnesium	22.8	9.8 U	44.3	12 U	25.7	14.4	54.3	42.5	27.1
Manganese	0.968	1.3	6.95	1.2 U	6.5	1.96	2.83	0.444	2.4
Nickel	0.108	0.98 U	0.301	1.2 U	1.65	0.209	0.227	0.17	0.141
Potassium	36.0	400.0	342.0	240.0	51.5	47.0	123.0	126.0	64.0
Selenium	0.0200 U	0.9800 U	0.0200 U	1.2000 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Silver	0.0100 U	0.4900 U	0.0100 U	0.5900 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Sodium	434	3300	3680	1700	1460	1950	3190	2620	2000
Thallium	0.0200 U	0.9800 U	0.0200 U	1.2000 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Vanadium	0.0100 U	0.9800 U	0.0100 U	41.0000	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Zinc	0.356	2.5 J	5.96	6.3 J	9.52	2.27	1.38	1.19	5.58
Mercury	0.00024	0.00981 U	0.0002 U	0.00934 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
<b>Volatile Organic Compounds</b>	<b>ug/L</b>	<b>ug/kg</b>	<b>ug/L</b>	<b>ug/kg</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>
1,1,1-Trichloroethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,1,2,2-Tetrachloroethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,1,2-Trichloroethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,1-Dichloroethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,1-Dichloroethene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,2,4-Trichlorobenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,2-Dibromo-3-chloropropane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U

QUALIFIED DATA SUMMARY TABLES  
LABORATORY LOT NO. C00330

PARAMETERS	AS-S	CD-1-S	CD-2-S	CD-3-S	CT-1-S	CT-2-S	CT-3-S	CT-4-S	CT-5-S
1,2-Dibromoethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Volatiles Organic Compounds (Cont.)	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1,2-Dichlorobenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,2-Dichloroethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,2-Dichloropropane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,3-Dichlorobenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	100 U	5000 U	250	5000 U	100 U	100 U	100 U	460	100 U
2-Hexanone	100 U	5000 U	100 U	5000 U	100 U	100 U	100 U	100 U	100 U
4-Methyl-2-pentanone	310	5000 U	110	5000 U	100 U	330	390	550	120
Acetone	3800	11000	11000 J	10000 U	700	1300	2200	2000	1000
Benzene	50 U	2500 U	640	2500 U	310	50	57	50 U	190
Bromodichloromethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Bromoform	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Bromomethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Carbon disulfide	50 U	5000 U	50 U	5000 U	140	50 U	50 U	50 U	50 U
Carbon tetrachloride	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Chlorobenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Chloroethane	100 U	5000 U	100 U	5000 U	100 U	100 U	100 U	100 U	100 U
Chloroform	50 U	2500 U	62	2500 U	50 U	50 U	50 U	50 U	50 U
Chloromethane	100 U	5000 U	100 U	5000 U	100 U	100 U	100 U	100 U	100 U
cis-1,2-Dichloroethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
cis-1,3-Dichloropropene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Cyclohexane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Dibromochloromethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Dichlorodifluoromethane	100 U	5000 U	100 U	5000 U	100 U	100 U	100 U	100 U	100 U
Ethylbenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Freon-113	100 U	5000 U	100 U	5000 U	100 U	100 U	100 U	100 U	100 U
Isopropylbenzene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
m,p-Xylene	100 U	5000 U	100 U	5000 U	100 U	100 U	100 U	100 U	100 U
Methyl acetate	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Methyl tert-butyl ether	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Methylcyclohexane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
o-Xylene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Styrene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Tetrachloroethene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Toluene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
trans-1,2-Dichloroethene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
trans-1,3-Dichloropropene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0408B38**

PARAMETERS	AS-8	CD-1-8	CD-2-8	CD-3-8	CT-1-8	CT-2-8	CT-3-8	CT-4-8	CT-5-8
Trichlorofluoromethane	50 U	2500 U	50 U	2500 U	50 U	50 U	50 U	50 U	50 U
Vinyl chloride	20 U	5000 U	20 U	5000 U	20 U	20 U	20 U	20 U	20 U
Semivolatile Organic Compounds	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/L	ug/L	ug/L	ug/L
1,1'-Biphenyl	100 U	96 U	200 U	98 U	490	100 U	100 U	100 U	500 U
2,4,5-Trichlorophenol	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
2,4,6-Trichlorophenol	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2,4-Dichlorophenol	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2,4-Dimethylphenol	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2,4-Dinitrophenol	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
2,4-Dinitrotoluene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2,6-Dinitrotoluene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2-Chloronaphthalene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2-Chlorophenol	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2-Methylnaphthalene	100 U	96 U	1900	450	4000	120	290	100 U	1300
2-Methylphenol	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
2-Nitroaniline	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
2-Nitrophenol	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
3,3'-Dichlorobenzidine	100 U	640 U	200 U	660 U	200 U	100 U	100 U	100 U	500 U
3-Nitroaniline	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
4,6-Dinitro-2-methylphenol	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
4-Bromophenyl phenyl ether	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
4-Chloro-3-methylphenol	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
4-Chloroaniline	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
4-Chlorophenyl phenyl ether	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
4-Methylphenol	410	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
4-Nitroaniline	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
4-Nitrophenol	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
Acenaphthene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Acenaphthylene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Acetophenone	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Anthracene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Atrazine	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Benz(a)anthracene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Benzaldehyde	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Benzo(a)pyrene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Benzo(b)fluoranthene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Benzo(g,h,i)perylene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Benzo(k)fluoranthene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Bis(2-chloroethoxy)methane	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Bis(2-chloroethyl)ether	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Bis(2-chloroisopropyl)ether	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U

QUALIFIED DATA SUMMARY TABLES  
LABORATORY LOT NO. C40200

PARAMETERS	AS-S	CD-1-S	CD-2-S	CD-3-S	CT-1-S	CT-2-S	CT-3-S	CT-4-S	CT-5-S
Bis(2-ethylhexyl)phthalate	110	96 U	880	98 U	2400	100 U	100 U	100 U	500 U
Butyl benzyl phthalate	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Caprolactam	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Semivolatile Organic Compounds (Cont.)	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Carbazole	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Chrysene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Dibenz(a,h)anthracene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Dibenzofuran	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Diethyl phthalate	100 U	96 U	2400	98 U	420	170	370	160	500 U
Dimethyl phthalate	100 U	96 U	200 U	98 U	200 U	100 U	270	100 U	500 U
Di-n-butyl phthalate	100 U	96 U	200 U	98 U	2200	100 U	230	100 U	680
Di-n-octyl phthalate	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Fluoranthene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Fluorene	100 U	96 U	200 U	98 U	1200	100 U	100 U	100 U	500 U
Hexachlorobenzene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Hexachlorobutadiene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Hexachlorocyclopentadiene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Hexachloroethane	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Indeno(1,2,3-cd)pyrene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Isophorone	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Naphthalene	100 U	96 U	1000	98 U	1000	100 U	110	100 U	500
Nitrobenzene	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
N-Nitrosodi-n-propylamine	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
N-Nitrosodiphenylamine	100 U	96 U	200 U	98 U	200 U	100 U	100 U	100 U	500 U
Pentachlorophenol	250 U	480 U	500 U	490 U	500 U	250 U	250 U	250 U	1250 U
Phenanthrene	100 U	96 U	200 U	260	1000	100 U	100 U	100 U	500 U
Phenol	100 U	96 U	11000	98 U	5900	5300	27000	40000	14000
Pyrene	100 U	96 U	200 U	98 U	1400	100 U	100 U	100 U	500 U

NSCs

J - The associated value is the approximate concentration of the analyte in the sample.

ug/kg - Micrograms per kilogram

ug/L - Micrograms per liter

mg/kg - Milligrams per kilogram

mg/L - Milligrams per liter

NA - The analyte was not analyzed for

TB-1 - Trip blank

TC1P - Toxicity characteristic leaching procedure

U - Analyte was analyzed for but not detected at or above the associated value

UJ - Analyte was analyzed for but not detected at or above the associated value, which is estimated

**QUALIFIED DATA SUMMARY TABLES**  
LABORATORY LOT NO. 0408B38

PARAMETERS	CT-6-S	CT-7	CT-8	DAF-8	DP-1-S LAYER A	DP-1-S LAYER B	DP-2-S	F237	FA-S
<b>TCLP Metals (mg/L)</b>									
Arsenic	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Barium	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Cadmium	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Chromium	0.0500 U	0.0500 U	0.0655	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Lead	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0630	0.0500 U
Selenium	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
Silver	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Mercury	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U
<b>Metals</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>
Aluminum	0.2 U	1.16 J	3.43 J	0.2 U	6.62 J	92 J	0.2 U	1 U	0.287 J
Antimony	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.1000 U	0.0200 U	0.1000 U	0.0200 U
Arsenic	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.2500 U	0.0500 U	0.2500 U	0.0500 U
Barium	0.0312 J	0.0536 J	0.0542 J	0.02 U	0.063 J	0.55 J	0.02 U	0.1 U	0.02 U
Beryllium	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0500 U	0.0100 U
Cadmium	0.0050 U	0.0050 U	0.0088	0.0050 U	0.0050 U	0.0250 U	0.0050 U	0.0250 U	0.0050 U
Calcium	60.8 J	730 J	573 J	21.3 J	716 J	989 J	22.1 J	7.23 J	164 J
Chromium	0.0104	0.0113	0.1330	0.0100 U	0.0387	0.1830	0.0100 U	0.0500 U	0.0100 U
Cobalt	0.0200 U	0.0200 U	0.0506	0.0200 U	0.0315	0.1000 U	0.0200 U	0.1000 U	0.0200 U
Copper	0.437	2.25	3.3	0.01 U	11	13.1	0.353	0.142	0.0388
Iron	2.52	16.1	40.5	7.05	31.3	232	2.38	11.1	5.53
Lead	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0386	0.1070	0.0100 U	0.0500 U	0.0100 U
Magnesium	56.5	41.2	37.3	1.99	43.7	69.8	36.2	0.902	25.1
Manganese	0.396	1.39	2.33	0.0726	2.16	4.45	0.218	0.112	1.36
Nickel	0.124	0.203	1.44	0.0338	0.203	0.326	0.0753	0.1 U	0.109
Potassium	93.1	125.0	70.5	3.4	385.0	477.0	110.0	7.2	42.1
Selenium	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.1000 U	0.0200 U	0.1000 U	0.0200 U
Silver	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0500 U	0.0100 U
Sodium	1960	3030	2080	23.3	2290	3150	1660	1450	507
Thallium	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.1000 U	0.0200 U	0.1000 U	0.0200 U
Vanadium	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0500 U	0.0100 U	0.0500 U	0.0100 U
Zinc	0.222	1.8	4.1	0.02 U	2.58	3.01	0.108	2.03	0.111
Mercury	0.0002 U	0.00044	0.0002 U	0.0002 U	0.0002	0.00029	0.0002 U	0.0002 U	0.0002 U
<b>Volatile Organic Compounds</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/kg</b>	<b>ug/L</b>	<b>ug/L</b>
1,1,1-Trichloroethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,1,2,2-Tetrachloroethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,1,2-Trichloroethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,1-Dichloroethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,1-Dichloroethene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,2,4-Trichlorobenzene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,2-Dibromo-3-chloropropane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. C43889**

PARAMETERS	CT-6-S	CT-7	CT-8	DAF-S	DP-1-S LAYER A	DP-1-S LAYER B	DP-2-S	F237	FA-S
1,2-Dibromoethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Various Organic Compounds (Cont.)	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L
1,2-Dichlorobenzene	50 U	50 U	50 U	5 U	560	100 U	100 U	100 U	50 U
1,2-Dichloroethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,2-Dichloropropane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,3-Dichlorobenzene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
1,4-Dichlorobenzene	50 U	50 U	50 U	5 U	100 U	780	100 U	100 U	50 U
2-Butanone	440	100 U	100 U	10 U	350	970	200 U	200 U	100 U
2-Hexanone	100 U	100 U	100 U	10 U	200 U	200 U	200 U	200 U	100 U
4-Methyl-2-pentanone	290	300	400	10 U	480	200 U	200 U	200 U	100 U
Acetone	3000	3700	1500	20 U	28000	52000	7300 U	400 U	3700
Benzene	50 U	370	82	5 U	920	1600	120 U	100 U	50 U
Bromodichloromethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Bromoform	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Bromomethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Carbon disulfide	91	50 U	200	5 U	100 U	550	360 U	100 U	74
Carbon tetrachloride	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Chlorobenzene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Chloroethane	100 U	100 U	100 U	10 U	200 U	200 U	200 U	200 U	100 U
Chloroform	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Chloromethane	100 U	100 U	100 U	10 U	200 U	200 U	200 U	200 U	100 U
cis-1,2-Dichloroethene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
cis-1,3-Dichloropropene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Cyclohexane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Dibromochloromethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Dichlorodifluoromethane	100 U	100 U	100 U	10 U	200 U	200 U	200 U	200 U	100 U
Ethylbenzene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Freon-113	100 U	100 U	100 U	10 U	200 U	200 U	200 U	200 U	100 U
Isopropylbenzene	50 U	50 U	50 U	5 U	420	770	100 U	100 U	50 U
m,p-Xylene	100 U	100 U	100 U	10 U	200 U	240	200 U	200 U	100 U
Methyl acetate	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Methyl tert-butyl ether	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Methylcyclohexane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Methylene chloride	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
o-Xylene	50 U	50 U	50 U	5 U	400	440	100 U	100 U	50 U
Styrene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Tetrachloroethene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Toluene	50 U	50 U	50 U	5 U	100 U	130	100 U	100 U	50 U
trans-1,2-Dichloroethene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
trans-1,3-Dichloropropene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Trichloroethene	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0408B38**

PARAMETERS	CT-6-S	CT-7	CT-8	DAF-S	DP-1-S LAYER A	DP-1-S LAYER B	DP-2-S	F237	FA-S
Trichlorofluoromethane	50 U	50 U	50 U	5 U	100 U	100 U	100 U	100 U	50 U
Vinyl chloride	20 U	20 U	20 U	2 U	40 U	40 U	40 U	40 U	20 U
Semivolatile Organic Compounds	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1'-Biphenyl	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2,4,5-Trichlorophenol	250 U	2500 U	2500 U	250 U	2500 U	12500 U	250 U	250 U	2500 U
2,4,6-Trichlorophenol	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2,4-Dichlorophenol	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2,4-Dimethylphenol	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2,4-Dinitrophenol	250 U	2500 U	2500 U	250 U	2500 U	12500 U	250 U	250 U	2500 U
2,4-Dinitrotoluene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2,6-Dinitrotoluene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2-Chloronaphthalene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2-Chlorophenol	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2-Methylnaphthalene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2-Methylphenol	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
2-Nitroaniline	250 U	2500 U	2500 U	250 U	2500 U	12500 U	250 U	250 U	2500 U
2-Nitrophenol	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
3,3'-Dichlorobenzidine	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
3-Nitroaniline	250 U	2500 U	2500 U	250 U	2500 U	12500 U	250 U	250 U	2500 U
4,6-Dinitro-2-methylphenol	250 U	2500 U	2500 U	250 U	2500 U	12500 U	250 U	250 U	2500 U
4-Bromophenyl phenyl ether	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
4-Chloro-3-methylphenol	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
4-Chloroaniline	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
4-Chlorophenyl phenyl ether	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
4-Methylphenol	1700	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
4-Nitroaniline	250 U	2500 U	2500 U	250 U	2500 U	12500 U	250 U	250 U	2500 U
4-Nitrophenol	250 U	2500 U	2500 U	250 U	2500 U	12500 U	250 U	250 U	2500 U
Acenaphthene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Acenaphthylene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Acetophenone	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Anthracene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Atrazine	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Benz(a)anthracene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Benzaldehyde	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Benzo(a)pyrene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Benzo(b)fluoranthene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Benzo(g,h,i)perylene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Benzo(k)fluoranthene	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Bis(2-chloroethoxy)methane	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Bis(2-chloroethyl)ether	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U
Bis(2-chloroisopropyl)ether	100 U	1000 U	1000 U	100 U	1000 U	5000 U	100 U	100 U	1000 U



QUALIFIED DATA SUMMARY TABLES  
LABORATORY LOT NO. 640333

PARAMETERS	CT-6-S	CT-7	CT-9	DAF-S	DP-1-S LAYER A	DP-1-S LAYER B	DP-2-S	F237	FA-S
Bis(2-ethylhexyl)phthalate	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Butyl benzyl phthalate	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Caprolactam	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Semi-volatile Organic Compounds (Cont.)	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L
Carbazole	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Chrysene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Dibenz(a,h)anthracene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Dibenzofuran	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Diethyl phthalate	100 U	1000 U	1000 U	100 U	1000 W	5700	100 U	100 U	1000 U
Dimethyl phthalate	100 U	1000 U	1000 U	100 U	1000 W	5000 U	510	100 U	1000 U
Di-n-butyl phthalate	100 U	1000 U	1000 U	100 U	1000 W	12000	100 U	100 U	1000 U
Di-n-octyl phthalate	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Fluoranthene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Fluorene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Hexachlorobenzene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Hexachlorobutadiene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Hexachlorocyclopentadiene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Hexachloroethane	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Indeno(1,2,3-cd)pyrene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Isophorone	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	150	1000 U
Naphthalene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Nitrobenzene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
N-Nitrosodi-n-propylamine	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
N-Nitrosodiphenylamine	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Pentachlorobenzol	250 U	2500 U	2500 U	250 U	2500 W	12000 W	250 U	250 U	2500 U
Phenanthrene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U
Phenol	20000	40000 J	15000 J	100 U	1000 W	12000 J	1300	260	1000 U
Pyrene	100 U	1000 U	1000 U	100 U	1000 W	5000 U	100 U	100 U	1000 U

3. The associated value in the approximate concentration of the analyte is the number

 $\mu\text{g/Kg}$  - Micrograms per kilogram

45/1. Micrograms per liter

mg/kg Milligramas por kilogramo

mg/L. • Milligrams per liter

NA The electrolyte was now analyzed for

TH-1 - Trip blank

**TCLP** Toxicity characteristic leaching procedure

1) Analyte was analyzed for but not detected at or above the associated value

(U) - Analyte was analyzed for but not detected at or above the reported value, which is estimated.

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0408238**

PARAMETERS	G107D	G300D	NAOH	OP-4-S	RW-1-S	RW-2-S	SH-1-S	SH-2-S	SH-3-S
<b>TCLP Metals (mg/L)</b>									
Arsenic	0.250 U	0.250 U	NA	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U	0.250 U
Barium	0.500 U	0.500 U	NA	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Cadmium	0.0250 U	0.0250 U	NA	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Chromium	0.0500 U	0.0500 U	NA	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.3020	0.0500 U
Lead	0.0500 U	0.0724	NA	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0690	0.0500 U
Selenium	0.100 U	0.100 U	NA	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
Silver	0.0250 U	0.0250 U	NA	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U
Mercury	0.00400 U	0.00400 U	NA	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U	0.00400 U
<b>Metals</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>
Aluminum	2.22 J	1 UJ	2 UJ	2.9 J	0.795 J	0.948 J	1.48 J	400 J	0.746 J
Antimony	0.0200 U	0.1000 U	0.2000 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Arsenic	0.0500 U	0.2500 U	0.5000 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Barium	0.175 J	0.1 UJ	0.2 UJ	0.0733 J	0.02 UJ	0.0221 J	0.095 J	0.0461 J	0.0455 J
Beryllium	0.0100 U	0.0500 U	0.1000 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Cadmium	0.0050 U	0.0250 U	0.0500 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0177	0.0050 U
Calcium	182 J	8.73 J	528 J	420 J	381 J	770 J	473 J	360 J	405 J
Chromium	0.0100 U	0.0500 U	0.1000 U	0.0253	0.0100 U	0.0100 U	0.0276	0.3430	0.0292
Cobalt	0.0200 U	0.1000 U	0.0200 U	0.0250	0.0200 U	0.0200 U	0.0301	0.0716	0.0200 U
Copper	0.13	0.05 U	0.18	0.45	0.0488	0.119	0.172	10.9	0.0662
Iron	140	5.47	20.5	116	19.1	4.47	68.2	700	5.59
Lead	0.0100 U	0.0500 U	0.1000 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0689	0.0100 U
Magnesium	26.1	1.25	42.2	49.7	7.72	4.56	59.6	114	45.5
Manganese	3.09	0.123	2.77	6.42	0.343	0.411	3.87	9.71	2.3
Nickel	0.139	0.1 U	0.2 U	0.374	0.0718	0.0475	0.223	0.371	0.145
Potassium	94.1	8.3	62.3	216.0	82.3	32.4	249.0	312.0	367.0
Selenium	0.0200 U	0.1000 U	0.2000 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Silver	0.0100 U	0.0500 U	0.1000 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Sodium	3640	1120	727	2780	1660	1550	3390	3380	4170
Thallium	0.0200 UJ	0.1000 UJ	0.2000 UJ	0.0200 UJ	0.0200 UJ	0.0200 UJ	0.0200 UJ	0.0200 UJ	0.0200 UJ
Vanadium	0.0100 U	0.0500 U	0.1000 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U	0.0100 U
Zinc	1.38	0.7	0.425	4.05	0.38	0.766	4.67	13.8	0.437
Mercury	0.0002 U	0.0016 U	0.0016 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
<b>Volatile Organic Compounds</b>									
	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>
1,1,1-Trichloroethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,1,2,2-Tetrachloroethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,1,2-Trichloroethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,1-Dichloroethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,1-Dichloroethene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,2,4-Trichlorobenzene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,2-Dibromo-3-chloropropane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U

QUALIFIED DATA SUMMARY TABLES  
LABORATORY LOT NO. 040800

PARAMETERS	G107D	G300D	NAOH	OP-4-S	RW-1-S	RW-2-S	SH-1-S	SH-2-S	SH-3-S
1,2-Dibromoethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Volatile Organic Compounds (Cont.)	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2-Dichlorobenzene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,2-Dichloroethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,2-Dichloropropane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,3-Dichlorobenzene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
1,4-Dichlorobenzene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Butanone	180	200 U	200 U	2200	440	100 U	380	220	400
2-Hexanone	100 U	200 U	200 U	100 U	100 U	100 U	100 U	100 U	100 U
4-Methyl-2-pentanone	100 U	200 U	850	510	340	100 U	410	420	420
Acetone	8600	400 U	6100	51000 J	10000	1100	34000	21000	270000 J
Benzene	50 U	100 U	500	1200	160	50 U	860	790	250
Bromodichloromethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Bromofarm	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Bromomethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Carbon disulfide	50 U	100 U	770	50 U	50 U	50 U	50 U	50 U	50 U
Carbon tetrachloride	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Chlorobenzene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Chloroethane	100 U	200 U	200 U	100 U	100 U	100 U	100 U	100 U	100 U
Chloroform	50 U	100 U	100 U	93	50 U	50 U	50 U	50 U	50 U
Chloromethane	100 U	200 U	200 U	100 U	100 U	100 U	100 U	100 U	100 U
cis-1,2-Dichloroethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
cis-1,3-Dichloropropane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Cyclohexane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Dibromochloromethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Dichlorodifluoromethane	100 U	200 U	200 U	100 U	100 U	100 U	100 U	100 U	100 U
Ethylbenzene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Freon-113	100 U	200 U	200 U	100 U	100 U	100 U	100 U	100 U	100 U
Isopropylbenzene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
m,p-Xylene	100 U	200 U	200 U	100 U	100 U	100 U	100 U	100 U	100 U
Methyl acetate	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Methyl tert-butyl ether	50 U	100 U	100 U	89	50 U	50 U	78	50 U	50 U
Methylcyclohexane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
o-Xylene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Styrene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Tetrachloroethene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Toluene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	54	50 U
trans-1,2-Dichloroethene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
trans-1,3-Dichloropropane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Trichloroethene	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0408B38**

PARAMETERS	G107D	G300D	NAOH	OP-4-S	RW-1-S	RW-2-S	SH-1-S	SH-2-S	SH-3-S
Trichlorofluoromethane	50 U	100 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U
Vinyl chloride	20 U	40 U	40 U	20 U	20 U	20 U	20 U	20 U	20 U
<b>Semivolatile Organic Compounds</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>
1,1'-Biphenyl	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2,4,5-Trichlorophenol	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
2,4,6-Trichlorophenol	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2,4-Dichlorophenol	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2,4-Dimethylphenol	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2,4-Dinitrophenol	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
2,4-Dinitrotoluene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2,6-Dinitrotoluene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2-Chloronaphthalene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2-Chlorophenol	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2-Methylnaphthalene	1000 U	100 U	1000 U	100 U	190	100 U	1000 U	1000 U	1000 U
2-Methylphenol	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
2-Nitroaniline	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
2-Nitrophenol	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
3,3'-Dichlorobenzidine	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
3-Nitroaniline	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
4,6-Dinitro-2-methylphenol	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
4-Bromophenyl phenyl ether	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
4-Chloro-3-methylphenol	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
4-Chloroaniline	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
4-Chlorophenyl phenyl ether	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
4-Methylphenol	1000 U	100 U	3800	100 U	100 U	100 U	1000 U	1000 U	1000 U
4-Nitroaniline	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
4-Nitrophenol	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
Acenaphthene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Acenaphthylene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Acetophenone	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Anthracene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Atrazine	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Benz(a)anthracene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Benzaldehyde	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Benzo(a)pyrene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Benzo(b)fluoranthene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Benzo(g,h,i)perylene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Benzo(k)fluoranthene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Bis(2-chloroethoxy)methane	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Bis(2-chloroethyl)ether	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Bis(2-chloroisopropyl)ether	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U

QUALIFIED DATA SUMMARY TABLES  
LABORATORY LOT NO. 0400830

PARAMETERS	G107D	G300D	NAOH	OP-4-S	RW-1-S	RW-2-S	SH-1-S	SH-2-S	SH-3-S
Bis(2-ethylhexyl)phthalate	1000 U	100 U	1600	170	100 U	100 U	1000 U	1000 U	1000 U
Butyl benzyl phthalate	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Caprolactam	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Seventeen Organic Compounds (Cont.)	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L	gr/L
Carbazole	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Chrysene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Dibenz(a,h)anthracene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Dibenzofuran	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Diethyl phthalate	1000 U	100 U	1000 U	320	100 U	100 U	1000 U	1000 U	2100
Dimethyl phthalate	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Di-n-butyl phthalate	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1500	1000 U
Di-n-octyl phthalate	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Fluoranthene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Fluorene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Hexachlorobenzene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Hexachlorobutadiene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Hexachlorocyclopentadiene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Hexachloroethane	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Indeno(1,2,3-cd)pyrene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Isophorone	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Naphthalene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Nitrobenzene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
N-Nitrosodi-n-propylamine	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
N-Nitrosodiphenylamine	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Pentachlorophenol	2500 U	250 U	2500 U	250 U	250 U	250 U	2500 U	2500 U	2500 U
Phenanthrene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U
Phenol	30000 J	170	1000 U	180000 J	11000	770	14000	1000 U	40000 J
Pyrene	1000 U	100 U	1000 U	100 U	100 U	100 U	1000 U	1000 U	1000 U

Notes:

J The associated value is the approximate concentration of the analyte in the sample.

ug/Kg - Micrograms per kilogram

ug/L - Micrograms per liter

mg/Kg - Milligrams per kilogram

mg/L - Milligrams per liter

NA - The analyte was not analyzed for

TB-1 - Trip blank

TU-1P - Toxicity characteristic leaching procedure

U - Analyte was analyzed for but not detected at or above the associated value

UJ - Analyte was analyzed for but not detected at or above the associated value, which is estimated

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0408R38**

PARAMETERS	SH-4-S	SODIUM HYDROXIDE	SS-1-S	SS-2-S	ST-1	SULFURIC ACID	TB-1
<b>TCLP Metals (mg/L)</b>							
Arsenic	0.250 U	NA	0.250 U	0.250 U	NA	NA	NA
Barium	0.500 U	NA	0.500 U	0.500 U	NA	NA	NA
Cadmium	0.0250 U	NA	0.0250 U	0.0250 U	NA	NA	NA
Chromium	0.0500 U	NA	0.0500 U	0.0500 U	NA	NA	NA
Lead	0.0500 U	NA	0.0500 U	0.0500 U	NA	NA	NA
Selenium	0.100 U	NA	0.100 U	0.100 U	NA	NA	NA
Silver	0.0250 U	NA	0.0250 U	0.0250 U	NA	NA	NA
Mercury	0.00400 U	NA	0.00400 U	0.00400 U	NA	NA	NA
Metals	mg/kg	mg/L	mg/L	mg/kg	mg/L	mg/L	NA
Aluminum	63	2 UJ	63.7 J	390	268 J	3.2 J	NA
Antimony	1.0000 U	0.2000 U	0.0200 U	0.9778 U	0.2000 U	0.2000 U	NA
Arsenic	1.0000 U	0.5000 U	0.0500 U	0.9778 U	0.5000 U	0.5000 U	NA
Barium	1.2	0.2 UJ	0.281 J	4.8 J	2.4 J	0.2 UJ	NA
Beryllium	0.5000 U	0.1000 U	0.0100 U	0.4889 U	0.1000 U	0.1000 U	NA
Cadmium	0.5000 U	0.0500 U	0.0064	0.4889 U	0.0806	0.0500 U	NA
Calcium	610	2.86 J	503 J	510	480 J	8.49 J	NA
Chromium	0.5000 U	0.1000 U	0.0299	0.4889 U	6.3800	0.9310	NA
Cobalt	0.5000 U	0.2000 U	0.0200 U	0.4889 U	0.2000 U	0.2000 U	NA
Copper	13	0.1 U	1.12	18	14.4	0.1 U	NA
Iron	160	3.58	221	100	2200	20	NA
Lead	14.0000	0.1000 U	0.0100 U	0.9778 U	0.4310	0.1000 U	NA
Magnesium	59	1 U	60.5	18	64.2	2.81	NA
Manganese	7.9	0.05 U	5.76	3.5	29.3	0.23	NA
Nickel	1 U	0.2 U	0.137	0.97784 U	3.43	0.738	NA
Potassium	320.0	113.0	115.0	890.0	76.3	5.0 U	NA
Selenium	1.0000 U	0.2000 U	0.0200 U	0.9778 U	0.2000 U	0.7250	NA
Silver	0.5000 U	0.1000 U	0.0100 U	0.4889 U	0.1000 U	0.1000 U	NA
Sodium	1600	188000	2040	6800	1780	10 U	NA
Thallium	1.0000 U	0.2000 UJ	0.0200 UJ	0.9778 U	0.2000 UJ	0.2000 UJ	NA
Vanadium	1.0000 U	0.1000 U	0.0100 U	1.9000	0.1000 U	0.1000 U	NA
Zinc	2.8 J	0.2 U	9.16	2.3 J	21	0.2 U	NA
Mercury	0.00979 U	0.00218	0.0002 U	0.00982 U	0.00277	0.0057	NA
<b>Volatile Organic Compounds</b>							
	mg/kg	NA	mg/L	mg/kg	mg/L	NA	mg/kg
1,1,1-Trichloroethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,1,2,2-Tetrachloroethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,1,2-Trichloroethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,1-Dichloroethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,1-Dichloroethene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,2,4-Trichlorobenzene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,2-Dibromo-3-chloropropane	2500 U	NA	50 U	2500 U	100 U	NA	5 U

QUALIFIED DATA SUMMARY TABLES  
LABORATORY LOT NO. C43880

PARAMETERS	SH-4-S	SODIUM HYDROXIDE	SS-1-S	SS-2-S	ST-1	SULFURIC ACID	TE-1
1,2-Dibromoothane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Vegetable Glycerol Compounds (Cool.)	cr/L	NA	cr/L	cr/L	cr/L	NA	cr/L
1,2-Dichlorobenzene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,2-Dichloroethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,2-Dichloropropane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,3-Dichlorobenzene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
1,4-Dichlorobenzene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
2-Butanone	5000 U	NA	140	5000 U	200 U	NA	10 U
2-Hexanone	5000 U	NA	100 U	5000 U	200 U	NA	10 U
4-Methyl-2-pentanone	5000 U	NA	300	5000 U	200 U	NA	10 U
Acetone	74000	NA	19000	18000	860	NA	20 U
Benzene	2600	NA	900	2500 U	2300	NA	5 U
Bromodichloromethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Bromoforn	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Bromomethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Carbon disulfide	5000 U	NA	110	5000 U	850	NA	5 U
Carbon tetrachloride	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Chlorobenzene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Chloroethane	5000 U	NA	100 U	5000 U	200 U	NA	10 U
Chloroform	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Chloromethane	5000 U	NA	100 U	5000 U	200 U	NA	10 U
cis-1,2-Dichloroethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
cis-1,3-Dichloropropene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Cyclohexane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Dibromochloromethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Dichlorodifluoromethane	5000 U	NA	100 U	5000 U	200 U	NA	10 U
Ethylbenzene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Freon-113	5000 U	NA	100 U	5000 U	200 U	NA	10 U
Isopropylbenzene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
m,p-Xylene	5000 U	NA	100 U	5000 U	200 U	NA	10 U
Methyl acetate	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Methyl tert-butyl ether	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Methylcyclohexane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Methylene chloride	2500 U	NA	50 U	2500 U	100 U	NA	5 U
o-Xylene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Styrene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Tetrachloroethene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Toluene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
trans-1,2-Dichloroethene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
trans-1,3-Dichloropropene	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Trichloroethene	2500 U	NA	50 U	2500 U	100 U	NA	5 U

**QUALIFIED DATA SUMMARY TABLES**  
**LABORATORY LOT NO. 0408B38**

PARAMETERS	SH-4-S	SODIUM HYDROXIDE	SS-1-S	SS-2-S	ST-1	SULFURIC ACID	TB-1
Trichlorofluoromethane	2500 U	NA	50 U	2500 U	100 U	NA	5 U
Vinyl chloride	5000 U	NA	20 U	5000 U	40 U	NA	5 U
<b>Semivolatile Organic Compounds</b>	<b>mg/kg</b>	<b>ug/L</b>	<b>ug/L</b>	<b>mg/kg</b>	<b>ug/L</b>	<b>ug/L</b>	<b>NA</b>
1,1'-Biphenyl	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2,4,5-Trichlorophenol	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
2,4,6-Trichlorophenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2,4-Dichlorophenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2,4-Dimethylphenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2,4-Dinitrophenol	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
2,4-Dinitrotoluene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2,6-Dinitrotoluene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2-Chloronaphthalene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2-Chlorophenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2-Methylnaphthalene	93 U	1000 U	1000 U	440	2000	1000 U	NA
2-Methylphenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
2-Nitroaniline	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
2-Nitrophenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
3,3'-Dichlorobenzidine	630 U	1000 U	1000 U	650 U	1000 U	1000 U	NA
3-Nitroaniline	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
4,6-Dinitro-2-methylphenol	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
4-Bromophenyl phenyl ether	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
4-Chloro-3-methylphenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
4-Chloroaniline	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
4-Chlorophenyl phenyl ether	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
4-Methylphenol	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
4-Nitroaniline	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
4-Nitrophenol	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
Acenaphthene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Acenaphthylene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Acetophenone	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Anthracene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Atrazine	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Benz(a)anthracene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Benzaldehyde	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Benzo(a)pyrene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Benzo(b)fluoranthene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Benzo(g,h,i)perylene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Benzo(k)fluoranthene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Bis(2-chloroethoxy)methane	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Bis(2-chloroethyl)ether	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Bis(2-chloroisopropyl)ether	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA



**QUALIFIED DATA SUMMARY TABLES**  
LABORATORY LOT NO. M0030

PARAMETERS	SH-4-S	SODIUM HYDROXIDE	SS-1-S	SS-2-S	ST-1	SULFURIC ACID	TE-1
Bis(2-ethylhexyl)phthalate	93 U	1000 U	1000 U	97.0874 U	1000 U	1100	NA
Butyl benzyl phthalate	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Caprolectam	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Seculvelotile Organic Compounds (Cont.)	cy/L	cy/L	cy/L	cy/L	cy/L	cy/L	NA
Carbazole	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Chrysene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Dibenz(a,h)anthracene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Dibenzofuran	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Diethyl phthalate	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Dimethyl phthalate	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Di-n-butyl phthalate	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Di-n-octyl phthalate	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Fluoranthene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Fluorene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Hexachlorobenzene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Hexachlorobutadiene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Hexachlorocyclopentadiene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Hexachloroethane	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Indeno(1,2,3-cd)pyrene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Isophorone	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Naphthalene	93 U	1000 U	1000 U	170	1000 U	1000 U	NA
Nitrobenzene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
N-Nitrosodi-n-propylamine	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
N-Nitrosodiphenylamine	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA
Pentachlorophenol	470 U	2500 U	2500 U	490 U	2500 U	2500 U	NA
Phenanthrene	93 U	1000 U	1000 U	140	1000 U	1000 U	NA
Phenol	93 U	1000 U	18000	97.0874 U	1000 U	1000 U	NA
Pyrene	93 U	1000 U	1000 U	97.0874 U	1000 U	1000 U	NA

Notes:

1. The associated value is the approximate concentration of the analyte in the sample.

ug/Kg - Micrograms per kilogram

ug/L - Micrograms per liter

mg/Kg - Milligrams per kilogram

mg/L - Milligrams per liter

NA - The analyte was not analyzed for

TB-1 - Trip blank

TCLP - Toxicity characteristic leaching procedure

U - Analyte was analyzed for but not detected at or above the associated value

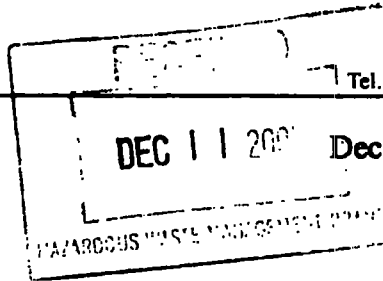
W - Analyte was analyzed for but not detected at or above the associated value, which is estimated

## REFERENCE 17

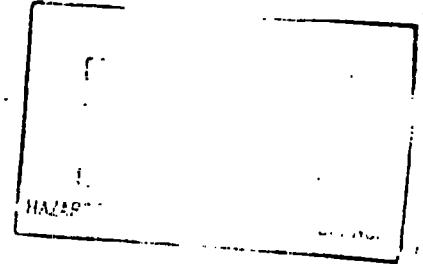


# GEOSYNTEC CONSULTANTS

9220 Cypress Green Drive  
Jacksonville, Florida 32256 • USA  
Tel. (904) 739-1600 • Fax (904) 739-1669



December 4, 2001



Ms. Verona Barnes  
Unit Coordinator/Hazardous Waste Support Unit  
Georgia Department of Natural Resources  
Suite 1154 East Tower  
205 Butler Street, S.E. Floyd Tower  
Atlanta, Georgia 30334

Re: Notification of Regulated Waste Activity  
BCX Waycross, GA Facility

Dear Ms. Barnes:

On behalf of BCX Corporation, GeoSyntec Consultants (GeoSyntec) requests a GAEPD/USEPA identification number for the proposed BCX waste oil processing and marketing facility to be located in Waycross. Attached is a completed and signed EPA Form 8700-12.

Please contact me should you have any questions.

Sincerely,

Edward C. Bates  
Associate

cc: Mr. J. Allen Bryson, BCX  
Mr. Charles Phelps, BCX  
Ms. Elaina Modlin, P.E., GeoSyntec

Notif of Reg Waste Activity.doc



RECYCLED AND RECYCLABLE



December 13, 2001

CHARLES PHELPS  
BCX WAYCROSS FACILITY  
PO BOX 25  
WAYCROSS, GA 31502

RE: EPA ID # GAR000030007  
3 FOLKS ST  
WAYCROSS, WARE COUNTY, GA 31502

Dear CHARLES PHELPS:

We have recently received your notification of regulated waste activity (EPA Form 8700-12).

The above referenced EPA ID number has been assigned to the facility at the address given. This number is site specific and will be used by the Georgia Environmental Protection Division and the US EPA for identification purposes. If you move to a new location, you should deactivate this number and apply for another number at the new location. This number is not a permit. It is used for data management and information tracking purposes.

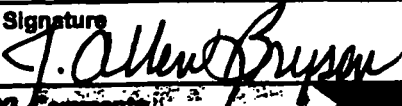
Your cooperation in protecting Georgia's environment is appreciated.

Sincerely,



Jacquelyn D. Hymel  
Hazardous Waste Support Unit  
Hazardous Waste Management Branch

Notification of Regulated Waste Activity		Date Received (For Official Use Only) DEC 11 2001	
<b>EPA</b> United States Environmental Protection Agency			
<input checked="" type="checkbox"/> A. Installation is a new facility. <input type="checkbox"/> B. Installation is an existing facility.		GAR000030007	
I. Name of Installation (Physical address not P.O. Box or Route Number)			
BCX WAYCROSS FACILITY			
II. Location of Installation (Physical address not P.O. Box or Route Number)			
3 FOLKS STREET			
City or Town			
WAYCROSS			
State		Zip Code	
GA		31502-	
County Name			
WARE			
III. Installation Contact Address (See Instructions)			
Street or P.O. Box			
PO BOX 25			
City or Town			
WAYCROSS			
State		Zip Code	
GA		31502-	
IV. Installation Contact (Person to be contacted regarding waste activities)			
Name (Last)		(First)	
PHELPS		CHARLES	
Job Title		Phone Number (Area Code and Number)	
VP OPERATIONS		904-356-3391	
V. Installation Contact Address (See Instructions)			
A. Street Address		B. Street or P.O. Box	
<input checked="" type="checkbox"/> 1859		EAST ADAMS STREET	
City or Town		State Zip Code	
JACKSONVILLE		FL 32201-	
VI. Ownership (See Instructions)			
A. Name of Installation's Legal Owner			
SOS EARTH (dba) BCX CORPORATION			
Street, P.O. Box, or Route Number			
3 FOLKS STREET			
City or Town		State Zip Code	
WAYCROSS		GA 31502-	
Phone Number (Area Code and Number)		B. Land Type	
912-338-0402		P	
C. Owner Type		D. Change of Owner Indicator	
P		Yes No	
		Month Day Year	

B. For Official Use Only		
<b>VII. Part of Required Waste Activity (Mark "X" in the appropriate boxes. Refer to instructions.)</b>		
<b>A. Hazardous Waste Activity</b> <input type="checkbox"/> 1. Storage, Accumulation, or Transfer <input type="checkbox"/> 2. Treatment, Storage, or Disposal (TSDF) <input type="checkbox"/> 3. Land Disposal <input type="checkbox"/> 4. Exportation <input type="checkbox"/> 5. Importation <input type="checkbox"/> 6. Other (Specify: _____) <input type="checkbox"/> 7. Other (Specify: _____) <input type="checkbox"/> 8. Other (Specify: _____) <input type="checkbox"/> 9. Other (Specify: _____) <input type="checkbox"/> 10. Other (Specify: _____) <input type="checkbox"/> 11. Other (Specify: _____) <input type="checkbox"/> 12. Other (Specify: _____)	<b>C. Use of Hazardous Waste</b> <input type="checkbox"/> 1. Use of Hazardous Waste in Manufacturing Processes (Excludes Types 1 and 2 of Activity) <input type="checkbox"/> 2. Use of Hazardous Waste in Research, Development, or Testing <input type="checkbox"/> 3. Use of Hazardous Waste in Agriculture <input type="checkbox"/> 4. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 5. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 6. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 7. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 8. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 9. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 10. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 11. Use of Hazardous Waste in Other Activities <input type="checkbox"/> 12. Use of Hazardous Waste in Other Activities	
<b>Universal Waste Activity</b>		
<b>Other Hazardous Waste Activity (Mark additional boxes if necessary)</b>		
<b>A. Listed Hazardous Wastes (See 40 CFR 261.21-33. See instructions if you need to list more than 12 waste codes.)</b>		
1	2	
3	4	
5	6	
7	8	
9	10	
11	12	
<b>B. Characteristic of Undefined Hazardous Wastes (Mark "X" in the boxes corresponding to the characteristic of material hazardous waste; your institution number. See 40 CFR Parts 261.21-261.24. See instructions if you need to list more than 4 toxicity characteristic waste codes.)</b>		
1. Ignitable (D001)	2. Corrosive (D002)	
3. Reactive (D003)	4. Toxicity Characteristic	
1	2	
3	4	
<b>C. Other Wastes (Mark regulated or other wastes requiring a number to have an L2 number. See instructions.)</b>		
1	2	
3	4	
5	6	
<b>X. Certification</b>		
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Signature 	Name and Official Title (Type or print) J. Allen Bryson, CEO	Date Signed 12-5-01
XI. Comments		
Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section IV of the booklet for addresses.)		

IB- For Official Use Only

Section I: Toxicity Characteristic Wastes (See 40 CFR 261.24; Use this page only if you need to list more than 4 waste codes)					
1	11	21	31	41	51
2	12	22	32	42	52
3	13	23	33	43	53
4	14	24	34	44	54
5	15	25	35	45	55
6	16	26	36	46	56
7	17	27	37	47	57
8	18	28	38	48	58
9	19	29	39	49	59
10	20	30	40	50	60
11	21	31	41	51	61
12	22	32	42	52	62
13	23	33	43	53	63
14	24	34	44	54	64
15	25	35	45	55	65
16	26	36	46	56	66
17	27	37	47	57	67
18	28	38	48	58	68
19	29	39	49	59	69
20	30	40	50	60	70
21	31	41	51	61	71
22	32	42	52	62	72
23	33	43	53	63	73
24	34	44	54	64	74
25	35	45	55	65	75
26	36	46	56	66	76
27	37	47	57	67	77
28	38	48	58	68	78
29	39	49	59	69	79
30	40	50	60	70	80
31	41	51	61	71	81
32	42	52	62	72	82
33	43	53	63	73	83
34	44	54	64	74	84
35	45	55	65	75	85
36	46	56	66	76	86
37	47	57	67	77	87
38	48	58	68	78	88
39	49	59	69	79	89
40	50	60	70	80	90
41	51	61	71	81	91
42	52	62	72	82	92
43	53	63	73	83	93
44	54	64	74	84	94
45	55	65	75	85	95
46	56	66	76	86	96
47	57	67	77	87	97
48	58	68	78	88	98
49	59	69	79	89	99
50	60	70	80	90	

Section II: Toxicity Characteristic Hazardous Wastes. (See 40 CFR 261.24; Use this page only if you need to list more than 4 waste codes)

5	6	7	8	9	10
11	12	13	14	15	16
17	18	19	20	21	22

## REFERENCE 18



APR 6 2004

1

PERMIT#0003

**CITY OF WAYCROSS**

**WATER AND WASTEWATER DEPARTMENT  
WARE COUNTY, GEORGIA**

**PERMIT FOR THE DISCHARGE OF NON-DOMESTIC WASTEWATER UNDER THE  
INDUSTRIAL PRETREATMENT PROGRAM**

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.) hereinafter called the "Federal Act," the City of Waycross's Code (Section 32), as amended hereinafter called the Sewer Use Ordinance (SUO) and the Rules and Regulations promulgated pursuant to each of these Acts,

**BCX Corporation**

is authorized to discharge to the City of Waycross Wastewater Treatment Facility effluent from a facility located at:

901 Francis Street  
P.O. Box 25  
Waycross, Ga. 31502

In accordance with effluent limitations, monitoring requirements and other conditions set forth in Part I, II, and III hereof.

This permit shall become effective on 01-01-04

*Effective*  
*"3/1/04" - Phil Demarco*

*EFFECTIVE DATE OF PERMIT.*

This permit and the authorization to discharge shall expire at midnight 12/31/04.

Signed this 12 day of 12, 2003

  
JAMES H. NALLEY JR, City Manager

## **PART I**

### **A. CHARGES FOR SERVICE**

Charges for wastewater service authorized by this permit shall be according to the rates established by the Mayor and Council of the City of Waycross for Customers other than single family residential customers and shall be subject to revisions when new rates are adopted. A volume charge per one hundred cubic feet of metered wastewater discharged shall be levied for "Normal Strength Waste."

Tests will be made to determine the character and average concentration of pollutants in the discharge. Surcharges shall be levied for pollutants in excess of "Normal" concentration as defined by the Ordinance. Payment of surcharge shall not relieve the permittee of the limitations of pollutants in this permit. The City shall collect samples from time to time as deemed appropriate to check for conventional, toxic organic, and heavy metal pollutants.

A nominal charge for the collection and analysis for conventional pollutants will be assessed. Charges for pollutant analyses will be based on the contract lab's actual prices including collection and shipping costs.

## **PART II**

### **A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

The effluent limitations outlined below are representative of the type of pollutants expected to be discharged by the permittee. However, the permittee shall not discharge any pollutant or wastewater which will interfere with operation of the POTW; nor any substance which may cause fire or explosion; nor any solid or viscous substance which may cause obstruction to the flow in the sewer, nor any wastewater containing toxic or priority pollutants as defined by the Federal Water Quality Act in quantities that will interfere with operation of the POTW or cause a violation of the NPDES Permit, nor any other specific prohibitions listed in the City's Sewer Use Ordinance (Section 32-35(d)).

This permit is issued in conformity with plans, specifications and other data submitted to the City by the permittee.

The permittee shall at all times maintain in good working order and operate as efficiently as possible all facilities or systems installed or used by the permittee to achieve compliance with the terms of this permit.

PARAMETERS	LIMIT Lbs/day	Limit mg/L Daily Limit	Monthly average	SAMPLE FREQUENCY	SAMPLE TYPE
Flow MGD		0.216	.216	Daily	Effluent Weir
C.O.D	3000	1666	1666	1/day	24 Hr Comp
Biochemical Oxygen Demand (5-day)	750	417	417	1/day	24 Hr. Comp
Total Suspended Solids	567		567	1/day	24 Hr. Comp
Nitrogen, total(TN)	63	35	35	1/day	24HR Comp
ammonia-N	19.8	11	11	1/day	24 Hr. Comp
Fats, Oil & Grease		100	100	1/week	24 Hr. Comp
Antimony		0.237	0.141	1/week	24 Hr. Comp
Arsenic		0.162	.104	1/week	24 Hr. Comp
Barium		0.427	.281	1/week	24 Hr. Comp
Cadmium		0.08	.08	1/week	24 Hr. Comp
Chromium		0.746	.487	1/week	24 Hr. Comp
Cobalt		0.192	.124	1/week	24 Hr. Comp
Copper		0.405	.301	1/week	24 Hr. Comp
Cyanide		0.082	.082	1/week	grab
Lead		0.116	.096	1/week	24 Hr. Comp
Mercury		0.002	.0007	1/week	24 Hr. Comp
Molybdenum		1.01	.965	1/week	24 Hr. Comp
Nickel		1.33	.75	1/week	24 Hr. Comp
Selenium		0.46	.26	1/week	24 Hr. Comp
Silver		0.120	.0351	1/week	24 Hr. Comp
Tin		0.409	.120	1/week	24 Hr. Comp
Titanium		0.09	.0618	1/week	24 Hr. Comp
Vanadium		0.218	.0662	1/week	24 Hr. Comp
Zinc		0.641	.641	1/week	24 Hr. Comp
Bis(2-ethylhexyl) phthalate		0.215	.158	1/week	24 Hr. Comp
Carbazole		0.392	.233	1/week	24 Hr. Comp
o-cresol		1.92	.561	1/week	24 Hr. Comp
p-cresol		0.698	.205	1/week	24 Hr. Comp
n-Decane		0.948	.948	1/week	24 Hr. Comp
2,3-Dichloroaniline		0.0731	.0361	1/week	24 Hr. Comp
Flouranthene		0.393	.393	1/week	24 Hr. Comp
n-Octadecane		0.589	.589	1/week	24 Hr. Comp
2,4,6-Trichlorophenol		0.155	.106	1/week	24 Hr. Comp
PH		5.0-9.5		daily	grab

peak ppm = daily mg/l limit

The pH shall not be less than 5.0 nor greater than 9.5 standard units and shall be monitored daily.

EFFLUENT SAMPLES WILL BE COLLECTED AT METERING STATION.

. Total flow .216MGD. Daily flows will be equalized over 24hrs

## B. SPECIAL CONDITIONS

1. Monthly average shall be determined by summing the results from all sampling events for a given parameter for a given month and dividing by the number of sample results.
2. BCX will furnish the city with documentation of analysis that is performed before wastewater is accepted for treatment. BCX will perform 129-priority pollutant scan from each site that is hauled to the facility, if the city deems necessary.
3. BCX will furnish toxicity testing on all new waste streams before received.
4. DMR will be completed and sent along with each sampling event.
5. The Sampling Report will be due on the 15<sup>th</sup> of the month after the sampling event, and will be submitted to the following address:

Pretreatment Program Manager  
City of Waycross  
Water and Wastewater Department  
P.O. Box 99  
Waycross, GA 31502

6. Permittee shall not discharge any wastewater to the POTW resulting from the receipt and/or treatment of organic wastes unless a written determination has been made by C.O.W that Permittee's pretreatment systems provide "equivalent treatment" for the subject organic waste.
7. Permittee shall not discharge to the POTW any wastewater resulting from the receipt of pesticide chemical wastes. Such wastes shall include process wastewater regulated under 40 CFR 455.
8. In accordance with 40 CFR 437.41(c), Permittee shall maintain On-site Compliance Paperwork, available for inspection and copying. Such paperwork must at a minimum:
  - A. List and describe each wastestream accepted at the facility (e.g. waste profiles, receipt logs, etc.).
  - B. List and describe the treatment systems in-place at the facility, modifications to the treatment systems and the conditions under which the systems are operated for each wastestream accepted at the facility (e.g. treatment "recipes", operator instructions, SOPs, etc.).

**Criminal prosecution:** Any user who willfully or negligently violates any provision of this division or any orders or permits issued hereunder shall, upon conviction in the municipal court of the city, be guilty of a misdemeanor, punishable by a fine not to exceed one thousand hundred dollars (\$1000.00) per violation per day or imprisonment for not more than six (6) months or both.

Any user who knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this division, or wastewater permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this division shall, upon conviction, be punished by a fine of not more than one thousand dollars (\$1000.00) per day or imprisonment for not more than six (6) months or both.

## **I. DISCHARGE OF HAZARDOUS MATERIALS PROHIBITED**

The City of Waycross prohibits the discharge of hazardous materials as defined in 40 CFR Part 261. Any user who commences the discharge of hazardous waste shall notify the POTW, the EPA Regional Waste Management Division Director, and Georgia Environmental Protection Division Hazardous Waste Program, in writing, of any discharge into the POTW of a substance which, otherwise disposed of, would be a hazardous waste under 40 CFR Part 261.

At least once every two (2) years, the director of public works shall evaluate whether each significant industrial user needs an accidental discharge/slug control plan. The City Manager may require any user to develop, submit for approval, and implement such a plan. Alternatively, the director of public works may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

- a. Description of discharge practices, including non-routine batch discharges;
- b. Description of stored chemicals;
- c. Procedures for immediately notifying the POTW superintendent of any accidental or slug discharge, as required by section 32-37(d)(6)a. of the Sewer Use Ordinance.
- d. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response.

## **J. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit for any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

provide information and supporting data establishing that treatment systems achieve "equivalent treatment".

Describe the procedures adopted to ensure that treatment systems are well-operated and maintained, and provide information documenting that waste treatment systems are performing as expected; and

E. Explain why such procedures will ensure that treatment systems are well operated and maintained.

9. Permittee shall maintain on site all data (date, time, meter readings, tank gauge readings, charts, etc.), used to determine discharge flow and/or volume. Such records shall be available for inspection and copying.

10. Permittee shall monitor flow at the designated sample point using a properly annually calibrated, C.O.W approved meter and continuous recorder.

#### Permit Modifications

C.O.W may modify this permit for good cause, including ,but not limited to, the following reasons:

- A. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;also any new requirements in permit parameters at POTW.
- B. To address significant alterations or additions to the user's operation, processes, or wastewater volume or character since the time of permit issuance;
- C. A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- D. Information indicating that the permitted discharge poses a threat to the POTW, C.O.W personnel, or the receiving waters;
- E. Violation of any terms or conditions of the permit;
- F. Misrepresentations or failure to fully disclose all relevant facts in the permit application or in any required reporting;
- G. To correct typographical or other errors in the permit.

## **Permit Revocation**

**C.O.W may revoke a wastewater discharge permit for good cause, including, but not limited to, the following reasons:**

- A. Failure to notify C.O.W of significant changes to the wastewater prior to the changed discharge;**
- B. Failure to provide prior notification to C.O.W of changed conditions of this permit;**
- C. Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;**
- D. Falsifying self-monitoring reports;**
- E. Tampering with monitoring equipment;**
- F. Refusing to allow C.O.W timely access to the facility premises and records;**
- G. Failure to meet effluent limitations;**
- H. Failure to pay fines; surcharges,**
- I. Failure to pay sewer charges;**
- J. Failure to meet compliance schedules;**
- K. Failure to complete a wastewater survey or the industrial user discharge permit application;**
- L. Failure to provide advance notice of the transfer of business ownership of a permitted facility; or**
- M. Violation of any pretreatment standard or requirement, or any terms of this permit or C.O.W's *Industrial Pretreatment Regulation*.**

**. All industrial user discharge permits issued to a particular user are void upon the issuance of a new permit to that user.**

### **Duty to Comply**

Permittee shall comply with all conditions of this permit. Compliance with this permit does not relieve Permittee of responsibility for compliance with all applicable federal, state, and local pretreatment standards, including those that become effective during the term of this permit. Such standards include, but may not be limited to:

- *Code of Federal Regulations*, Title 40, Chapter I, Subchapter N (United States Environmental Protection Agency))
- *Industrial Pretreatment Regulation (C.O.W)*

### **Duty to Mitigate**

Permittee shall take all reasonable steps to minimize or correct any adverse impacts to the POTW or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliant discharge.

### **Duty to Halt or Reduce Activity**

Upon reduction of efficiency of operation, or loss or failure of all or part of the treatment facility, Permittee shall, to the extent necessary to maintain compliance with its permit, control its production or discharges until operation of the treatment facility is restored or an alternative method of treatment is provided. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### **Proper Operation and Maintenance**

Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process control



## **C. SAMPLING AND ANALYSES**

The discharge shall meet the requirements of Table 1 and the conditions in the following paragraphs. Monthly average is the arithmetic mean of values for samples collected in a calendar month.

1. All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation, shall be retained by the permittee for a minimum of three (3) years. All records relating to compliance with pretreatment standards shall be made available to officials of the City of Waycross, the Georgia Environmental Protection Division and the U.S. Environmental Protection Agency upon the proper request.
2. The permittee shall notify the City in writing at least ninety (90) days in advance of any proposed change in operations that may affect the conditions of the permit.

## **PART III**

### **A. GENERAL CONDITIONS**

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of this permit. Samples must be collected using flow proportional sampling techniques. In the event that flow proportional sampling is infeasible, the city may authorize the use of time proportional sampling or a minimum of four grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. All pollutant analyses and sampling techniques shall be performed in accordance with 40 CFR Part 136, or if not included in 40 CFR Part 136, then in accordance with procedures approved by EPA.

### **B. ACCESS**

Authorized representatives of the City, EPD, and EPA shall have the right of access and shall enter the premises of the permittee from time to time after appropriate application at the plant office for the purpose of inspection of the facilities, inspection and copying of records, and for testing and measuring the discharge from the facility. Any samples taken may be split with the permittee upon request of the permittee.

### **C. PERMIT TRANSFER**

This permit may be transferred to a new owner, new user, different premises, or a new or changed operation only if the permittee gives at least 90 days advance notice to the City, and the City approves the wastewater discharge permit transfer. The permittee shall provide a copy of this permit to any proposed new owner or operator prior to any change. Failure to provide advance notice of a transfer renders this permit void as of the date of the facility transfer.

### **D. PERMIT MODIFICATION**

The City may modify this wastewater discharge permit as determined necessary (i.e., new regulatory requirements, changes in user's operations, discharge violations, transfer of facility ownership, etc). If additional pretreatment and/or operation and maintenance will be required to meet the pretreatment standards, the permittee shall submit the shortest schedule by which the permittee will provide such additional pretreatment. The schedule shall be according to the conditions of the City's Sewer Use Ordinance and the completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.

### **E. PERMITTEE'S NOTICE OF VIOLATION**

If sampling performed by permittee indicates a violation, the permittee must notify the City within twenty-four (24) hours of becoming aware of the violation. The permittee shall also repeat the sampling and analysis and submit the results of the repeat analysis to the director of utilities within thirty (30) days after becoming aware of the violation.

### **F. NOTIFICATION OF POTENTIAL PROBLEMS**

In the case of any discharge, including, but not limited to accidental discharges, discharges of non-routine, episodic nature, a non-customary batch discharge, or a slug load, that may cause potential problems for the POTW; the user shall immediately telephone and notify the pretreatment manager and POTW plant superintendent of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the user.

Within five (5) days following such discharge, the user shall, unless waived by the city, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, natural resources, or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties, or other liability which may be imposed pursuant to this division.

A notice shall be permanently posted on the user's bulletin board or other prominent place advising

employees whom to call in the event of a discharge described in paragraph a. above. Employers shall ensure that all employees, who may cause such a discharge to occur, are advised of the emergency notification procedure.

## **G. DILUTIONS**

Each user must notify the City of any planned significant changes to the user's operations or system which might alter the nature, quality, or volume of its wastewater at least 90 days before the change. Significant changes, for the purpose of this requirement, include, but are not limited to flow increases of 20 percent or greater, and the discharge of any previously unreported pollutants.

No industrial user shall increase the use of potable or process water or, in anyway, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

## **H. CIVIL AND CRIMINAL REMEDIES**

If any person discharges sewage, industrial wastes, or other wastes into the wastewater disposal system contrary to the provisions of this permit or any order issued hereunder, the City may commence an action for appropriate legal and/or equitable relief in the Ware County Court.

*Infunctive relief:* Whenever a user has violated or continues to violate the division or any order or permit issued hereunder, the city, through counsel may petition the court for its issuance of a preliminary or permanent injunction or both (as may be appropriate) which restrains or compels the activities on the part of the user. The city may also initiate nuisance abatement proceedings in the municipal court of the city, as an alternate remedy.

*Civil penalties:* Any user who has violated or continues to violate the division or any order or permit issued hereunder, shall be liable to the city for a civil penalty of up to at least one thousand dollars (\$1,000.00) plus actual damages incurred by the POTW per violation per day for as long as the violation continues. In addition to the above described penalty and damages, the city may recover

Reasonable attorneys' fees, court costs, and other expenses associated with the enforcement activities, including sampling and monitoring expenses.

The city shall petition the municipal court of the city or any state court having jurisdiction to impose, assess, and recover such sums. In determining amount of liability, the municipal court of the city or any state court having jurisdiction shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through the user's violation, corrective actions by the user, the compliance history of the user, and any other factors as justice requires.

***Criminal prosecution:*** Any user who willfully or negligently violates any provision of this division or any orders or permits issued hereunder shall, upon conviction in the municipal court of the city, be guilty of a misdemeanor, punishable by a fine not to exceed one thousand hundred dollars (\$1000.00) per violation per day or imprisonment for not more than six (6) months or both.

Any user who knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this division, or wastewater permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this division shall, upon conviction, be punished by a fine of not more than one thousand dollars (\$1000.00) per day or imprisonment for not more than six (6) months or both.

#### **I. DISCHARGE OF HAZARDOUS MATERIALS PROHIBITED**

The City of Waycross prohibits the discharge of hazardous materials as defined in 40 CFR Part 261. Any user who commences the discharge of hazardous waste shall notify the POTW, the EPA Regional Waste Management Division Director, and Georgia Environmental Protection Division Hazardous Waste Program, in writing, of any discharge into the POTW of a substance which, otherwise disposed of, would be a hazardous waste under 40 CFR Part 261.

At least once every two (2) years, the director of public works shall evaluate whether each significant industrial user needs an accidental discharge/slug control plan. The City Manager may require any user to develop, submit for approval, and implement such a plan. Alternatively, the director of public works may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

- a. Description of discharge practices, including non-routine batch discharges;
- b. Description of stored chemicals;
- c. Procedures for immediately notifying the POTW superintendent of any accidental or slug discharge, as required by section 32-37(d)(6)a. of the Sewer Use Ordinance.
- d. Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, and/or measures and equipment for emergency response.

#### **J. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit for any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

## Appendix A

### Priority Pollutant Metals and Detection Limits

Antimony	5 µg/l
Arsenic	5 µg/l
Beryllium	1 µg/l
Cadmium	0.7 µg/l
Chromium (Total)	5 µg/l
Copper	6 µg/l
Lead	1 µg/l
Mercury	0.6 µg/l
Nickel	5 µg/l
Selenium	5 µg/l
Silver	5 µg/l
Thallium	1 µg/l
Zinc	10 µg/l

## Appendix B

### \*\* Total Toxic Organic Pollutant list and Detection Limits

Methoxychlor	0.3 µg/l
2,4-Dichlorophenoxyacetic acid (2,4-D)	5.0 µg/l
2,4,5-Trichlorophenoxy propionic acid (TP Silvex)	10 µg/l
Cyanide	25 µg/l
Acrolein	50 µg/l
Acrylonitrile	50 µg/l
Benzene	2.0 µg/l
Bromoform (tribromomethane)	10 µg/l
Carbon tetrachloride (tetrachloromethane)	2.0 µg/l
Chlorobenzene	10 µg/l
Chlorodibromomethane	10 µg/l
Chloroethane	5.0 µg/l
2-Chloroethyl (vinyl ether)	10 µg/l
Chloroform (trichloromethane)	2.0 µg/l
Dichlorobromomethane	10 µg/l
1,1-dichloroethane	2.0 µg/l
1,2-dichloroethane	2.0 µg/l
1,1-dichloroethylene	2.0 µg/l
1,2-dichloropropane	2.0 µg/l
1,3-dichloropropylene (cis)	2.0 µg/l
1,3-dichloropropylene (trans)	2.0 µg/l
Ethylbenzene	2.0 µg/l
Methyl bromide (bromomethane)	10 µg/l
Methylene chloride (dichloromethane)	10 µg/l
Methyl chloride	10 µg/l
1,1,2,2-tetrachloroethane	2.0 µg/l

## REFERENCE 19

**Georgia Department of Natural Resources**

2 Martin Luther King, Jr. Drive, SE, Suite 1066 East, Atlanta, Georgia 30334-9

Lonice C. Barrett, Commissioner

Environmental Protection Division

Harold F. Rehels, Director

Office: 404/657-8831 FAX: 404/463-

June 6, 2003

Mr. Allen Bryson  
CEO  
BCX Waycross Facility  
901 Francis Street  
Waycross, GA 31501

**SUBJECT: USED OIL TRANSPORTER REQUIREMENTS**  
BCX Waycross Facility  
Waycross, Ware County  
EPA I.D. Number GAR000030007

Dear Mr. Bryson:

On April 22, 2003, Marie Humphreys of the Brunswick EPD office and I conducted a Used Oil processor compliance evaluation inspection of your business. This inspection was conducted to determine your compliance status with Georgia's Rules for Recycled Used Oil Management Standards ("Rules"), Section 391-3-11-.17. It was determined that BCX has not received used oil for processing as of the inspection date, and that no violations of the Rules were observed. Please ensure that all used oil facility requirements are satisfied prior to the acceptance of used oil.

Please be advised that this business may be periodically inspected to ensure compliance with Georgia's Rules for Used Oil Management. Enclosed is a Used Oil Management Inspection Report used during the inspection. Should you have any questions or concerns, please contact me at (404) 657-8831. Thank you for your cooperation in protecting Georgia's environment.

Sincerely,



John Short  
Environmental Specialist  
Hazardous Waste Compliance Unit

JES/js

Enclosure: Used Oil Management Inspection Report

c: Renée Hudson Goodley

Freddie L. Dunn, Jr.

File: /BCX Waycross Facility, Waycross

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# Georgia Department of Natural Resource

2 Martin Luther King, Jr. Drive, SE, Suite 1066 East, Atlanta, Georgia 30334-90

Lonice C. Barrett, Comm  
Environmental Protection

Harold F. Rehels, Direc

Phone: 404/657-8831 FAX: 404/463-86

## USED OIL MANAGEMENT INSPECTION REPORT

### SECTION I FACILITY INFORMATION

Facility Name: BCX Waycross Facility		
EPA Identification Number: GAR000030007		NAICS Code:
Location Address: 901 Francis Street		
City: Waycross	County: Ware	Zip Code: 31501
Mailing Address: same		
City:	State:	Zip Code:
Officials Contacted:		
Name: Allen Bryson	Title: CEO	Telephone Number: (912) 338-040

### SECTION II SUMMARY OF FINDINGS

BCX was receiving industrial wastewater during this inspection. The wastewater treatment facility plans to receive used oil from the railroad industry and possible from a military installation according to Mr. Bryson.

The following checklist is mostly not applicable because BCX has not begun to accept, store, or process used oil.

Based on this inspection, this facility is a: Industrial Wastewater Treatment Facility			
Generator Used Oil:		Burner of Used Oil Fuel:	
Transporter of Used Oil:		Marketer of Used Oil Fuel:	
Collection/Aggregation Center of Used Oil:		Processor and/or Refiner of Used Oil:	
Samples: No		Number of Samples:	None
Photographs: Yes		Number of Photographs:	4
Inspected by: John E. Short and Marie Humphreys (Brunswick EPD Office)		Inspection Date: 4/22/2003	
Reviewed by: Freddie L. Dumas		Review Date: 06/02/2003	
Attachments: Facility Brochure, Photographs, Manifest Documents			
File Name: BCX Waycross Facility, Waycross		Submission for Review Date: 5/15/2003	

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### SECTION III USED OIL SPECIFICATION & REBUTTABLE PRESUMPTION (CONTINUED)

<b>B. REBUTTABLE PRESUMPTION (279.44, 279.53, 279.63)</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Violation</b>
1. Does the used oil contain more than 1,000-ppm total halogens?		X	X	
a) Is the used oil metalworking oils/fluids containing paraffins that is processed, through a tolling arrangement, to reclaim metalworking oils/fluids? (If yes, the rebuttable presumption does not apply.)		X	X	
b) Is the used oil contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where CFCs are destined for reclamation? (If yes, the rebuttable presumption does not apply.)		X	X	
2. Does the facility rebut the presumption that the used oil is a hazardous waste?		X	X	
3. Does the facility demonstrate that the used oil does not contain hazardous waste? (For example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix VIII of Part 261.)		X	X	

**COMMENTS:** An on-site laboratory will test for flash point, water content and halogen content. Another lab (ENCO) will test for PCB's and metals. The lab will provide BCX with a lab report for each load that leaves the site. This will ensure that the used oil is on-spec.

### SECTION IV GENERAL REQUIREMENTS

<b>A. NOTIFICATION (279.42, 279.51, 279.62, 279.73)</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Violation</b>
1. Did the facility notify? (not applicable to generators)	X			
<b>B. USED OIL STORAGE (279.22, 279.45, 279.45, 279.64)</b>				
1. Does the facility store used oil?		X	X	
2. Is the used oil stored in tanks, containers, or units subject to regulation under 40 CFR Parts 264 or 265?	X			
3. Are the containers and aboveground tanks in good condition with no leaks?	X			

**COMMENTS:**

Mr. Bryson notified on December 5, 2001 in anticipation of the facility operating as a marketer and processor of used oil. There was no used oil stored in the tanks during the inspection according to Mr. Bryson.

**SECTION IV**  
**GENERAL REQUIREMENTS (CONTINUED)**

	Yes	No	N/A	Violated
7. Do the records include a cross-reference to the record of used oil analyses or other information used to make the determination that the used oil meets specification? (fuel marketers only)		X	X	
8. Are records retained for at least three years?		X	X	
<b>MANAGEMENT OF RESIDUES (279.47, 279.59, 279.67)</b>				
1. Are materials reclaimed from the residues and used beneficially? (If yes, not a solid waste nor subject to Part 279.)		X	X	
2. Are materials produced from the residues that are burned for energy recovery? (If yes, subject to Part 279.)		X	X	
3. Are materials derived from the residues that are disposed of or used in a manner constituting disposal? (If yes, not used oil, not subject to Part 279, but are solid wastes and subject to Parts 260 through 266, 268.)		X	X	
4. Is the residue re-refining distillation bottoms used as feedstock to manufacture asphalt products? (If yes, not subject to Part 279 or Parts 260 through 266, 268.)		X	X	

**COMMENTS:**

IV. B. 5. The tanks are clearly labeled "used oil" even though they are not currently storing or processing used oil.

V. C. 7. BCX will be able to cross check used oil analytical by comparing the manifest with the matching analytical data supplied by ENCO.

## SECTION V

### SUBPART C – USED OIL GENERATOR (CONTINUED)

	Yes	No	N/A	Violation
a) Does the contract indicate the type of used oil and the frequency of shipments?		X	X	
b) Does the contract indicate that the vehicle used to transport the used oil to the processing/re-refining facility and to deliver recycled used oil back to generator is owned and operated by the used oil processor/re-refiner?		X	X	
c) Does the contract indicate that reclaimed oil will be returned to the generator?		X	X	
4. Does the generator ensure that the used oil is transported only by transporters who have obtained EPA identification numbers?		X	X	
<b>USED OIL FILTER EXCLUSION [261.4(b)(13)]</b>				
1. Does the generator manage used oil filters?		X	X	
a) Are the filters non-terme plated		X	X	
b) Are the filters gravity hot-drained?		X	X	

#### COMMENTS:

Filters will not be managed by BCX according to Mr. Bryson.

## SECTION VI

### SUBPART D – USED OIL COLLECTION CENTERS & AGGREGATION POINTS

	Yes	No	N/A	Violation
A. Is the facility a do-it-yourselfer used oil collection center? (If yes, used oil generator requirements apply)		X	X	
B. Is the facility a used oil collection center? (If yes, used oil generator requirements apply)		X	X	
C. Is the facility registered/licensed/permitted/recognized by a state/county/municipal government to manage used oil?		X	X	
D. Is the facility a used oil aggregation point owned by the generator? (If yes, used oil generator requirements apply)		X	X	
E. Does the facility only accept used oil collected from other used oil sites owned by the generator and/or from household do-it-yourselfers?		X	X	

#### COMMENTS:

# SECTION VIII

## SUBPART F - USED OIL PROCESSORS AND RE-REFINERS

### A. PREPAREDNESS AND PREVENTION [279.529(a)]

	Yes	No	N/A	Viol
1. Is the facility maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of used oil to air, soil, or surface water?		X	X	
2. Is the facility equipped with the following:		X	X	
a) Internal communications or alarm system?		X	X	
b) Telephone or two-way radio?		X	X	
c) Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment?	X		X	
d) Water or foam?		X	X	
3. Is all emergency equipment tested and maintained?		X	X	
4. Do personnel have immediate access to communications and/or alarm system?		X	X	
5. Is adequate aisle space maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility in an emergency?		X	X	
6. Have local authorities inspected the facility?		X	X	

### B. CONTINGENCY PLAN AND EMERGENCY PROCEDURES [279.52(b)]

1. Does the facility have a contingency plan or an SPCC plan?		X	X	
2. Does the contingency/SPCC plan include:		X	X	
a) A description of arrangements agreed to by local police, fire departments, hospitals, contractors, and State and local emergency response teams?		X	X	
b) A list of names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator?		X	X	
c) A list of all emergency equipment at the facility and the location and physical description of each item and its capabilities?		X	X	
d) An evacuation plan, which includes signals to be used, evacuation routes, and alternate evacuation routes?		X	X	
3. Are copies of the contingency plan and all revisions:		X	X	
a) Maintained at the facility?		X	X	
b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams?		X	X	
4. Is the contingency plan amended as necessary?		X	X	

## SECTION VIII PROCESSORS/REFINERS (CONTINUED)

	Yes	No	N/A	Violation
ii. The frequency of sampling to be performed and whether the analysis will be performed on-site or off-site?		X	X	
iii. The methods used to analyze used oil for the parameters specified in 279.53 or 270.72?		X	X	
iv. Whether used oil will be sampled and analyzed prior to or after any processing/re-refining?		X	X	
c) The type of information that will be used to determine the halogen content or make the on-specification used oil fuel determination?		X	X	
<b>F. OPERATING RECORD AND REPORTING (279.57)</b>				
1. Does the facility keep a written operating record at the facility?		X	X	
a) Does the record contain records and results of used oil analyses performed as described in the analysis plan?		X	X	
b) Does the record contain summary reports and details of all incidents that require implementation of the contingency plan?		X	X	
2. Did the facility submit a biennial report on its used oil activities? (due by March 1 even years for previous year)		X	X	
<b>G. OFF-SITE SHIPMENTS (279.58)</b>				
1. Does the facility use a transporter with an EPA identification number?		X	X	

### COMMENTS:

This company was not receiving used oil at the time of the inspection.

VIII. B. The contingency plan is currently being finalized.

VIII. E./F. An Analysis Plan and Operating Record will be created and maintained prior to this company's acceptance of used oil according to Mr. Bryson.

VIII. F. 2. A biennial report will be required in 2004 addressing 2003 used oil activities.

**SECTION X**  
**SUBPART H - USED OIL FUEL MARKETERS**

**A. PROHIBITIONS (279.71)**

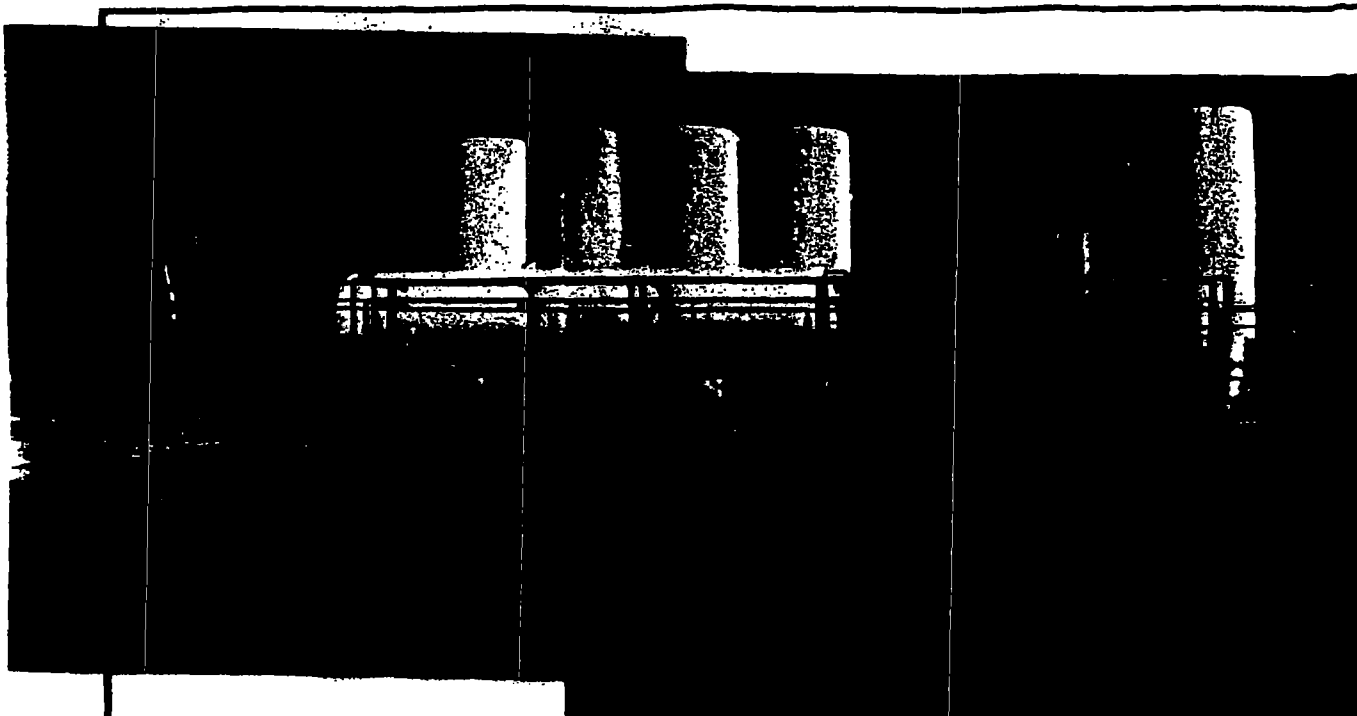
	Yes	No	N/A	Violations
1. Does the facility initiate shipments to burners:		X	X	
a) With an EPA identification number?		X	X	
b) That only burn in acceptable devices?		X	X	
<b>B. ON-SPECIFICATION USED OIL FUEL (279.72)</b>				
1. Does the facility market on-specification used oil for energy recovery?		X	X	
a) Does the facility first claim the used oil met the specifications?		X	X	
b) Are copies of analyses and/or other information retained for three years?		X	X	

**C. NOTICES (279.75)**

1. Is notice obtained from the burner before the first shipment of off-specification used oil?		X	X	
a) Does the notice certify that the burner notified EPA/EPD stating the location and general description of used oil management activities?		X	X	
b) Does the notice certify that the burner will burn the off-specification used oil only in acceptable devices?		X	X	
2. Are notices retained for three years from the date of the last shipment?		X	X	

**COMMENTS:**

N/A is defined as not applicable



Site Name: BCX Waycross

Picture 1 and 2 of 4

County Name: Ware

Date: 4/22/2003

Photographer: John Short

Explanation: Overview of tank farm and wastewater treatment plant (to rear of photo).



Site Name: BCX Waycross

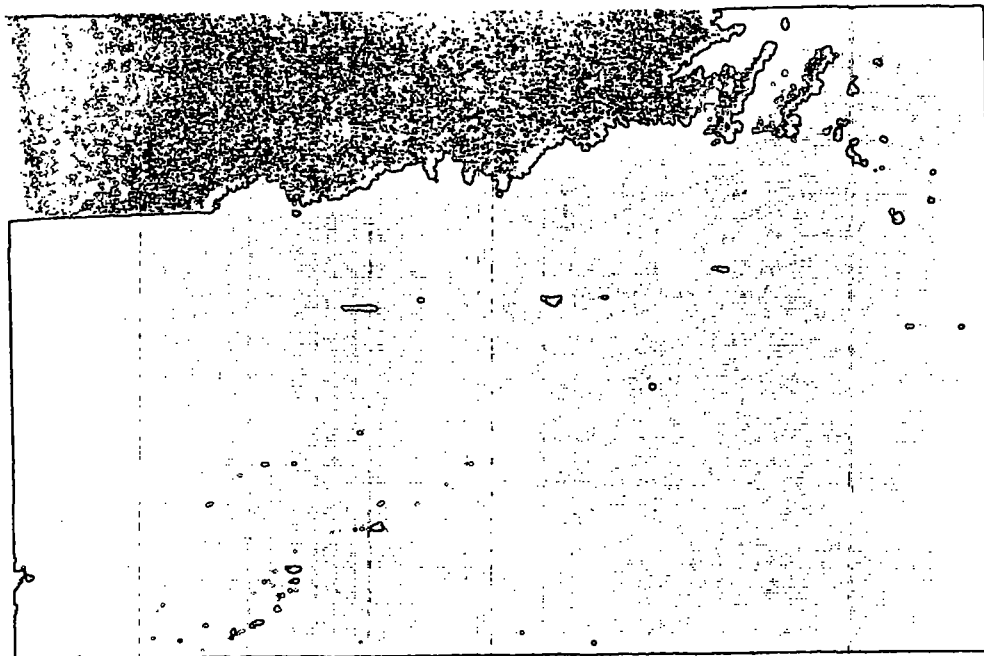
Picture 3 of 4

County Name: Ware

Date: 4/22/2003

Photographer: John Short

Explanation: This is where used oil will be unloaded. Solids will be collected in the green unit that will filter incoming used oil prior to storage and processing. Currently, only industrial wastewater is unloaded into the units.



Site Name: BCX Waycross

Picture 4 of 4

County Name: Ware

Date: 04/22/2003

Photographer: John Short

Explanation: These are empty tanks and totes on the BCX Waycross Facility property. Some of these tanks will be scrapped but Mr. Bryson said the majority of them are usable and saleable. A contractor certifies tanks as empty, as documented by BCX.



## REFERENCE 20

ALLEN BRYSON  
BCX CORPORATION  
3 FOLK ST  
WAYCROSS GA 31502

# City of Waycross

Office of City Engineer

MR BRYSON

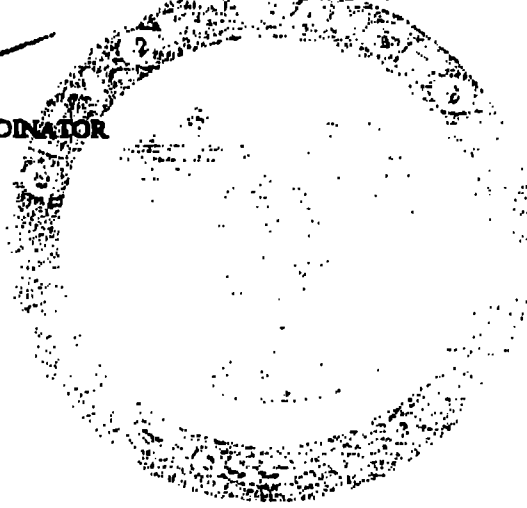
THIS IS A FORMAL "NOTICE OF VIOLATION" FOR THE MONTH OF MAY, 2003. THE  
PARAMETERS IN QUESTION ARE:

TN  
BOD  
COD  
NH3  
COPPER  
ZINC

PLEASE SEND ME A UPDATED CORRECTIVE ACTION PLAN. FAILURE TO CORRECT THESE  
VIOLATIONS COULD RESULT IN FINES, SURCHARGES AND /OR SEWER USE  
DISCONNECTION.

IF YOU HAVE ANY QUESTIONS CALL ME AT 912-287-2945

  
HENRY MCLAUGHLIN  
PRETREATMENT COORDINATOR



P.O. Cramer 99  
Waycross, Georgia 31502  
912/287-2945

**City of Waycross**

Office of City Engineer

May 23, 2003

Mr. Alan Bryson  
B.C.X. Corporation  
3 Folk Street  
Waycross, Georgia 31501

Dear Mr. Bryson:

During my annual inspection on May 22, 2003, I saw that your self-monitoring reports indicated that the following parameters had been left off. During the inspection we spoke of this and you showed me a letter from your laboratory stating this was a mistake on their part. At this time, this is acceptable, but in the future, I will expect to see these parameters on your self-monitoring reports. The following are the parameter in question:

Carbazole  
O-Cresol  
P-Cresol  
N-Decane  
2,3-Dichloroniline  
N-Octadecane

This letter is a formal notice that I am aware of this matter and your corrective action. Thanks for your continued cooperation.

If you have any questions regarding this matter please feel free to call 287-2945.

Sincerely,

Henry McLaughlin  
Industrial Pretreatment Coordinator

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

# City of Waycross

Office of City Engineer

7-21-03

ALLEN BRYSON  
BCX CORPORATION  
3 FOLK ST  
WAYCROSS GA 31502

MR BRYSON

AFTER REVIEW OF YOUR JUNE 2003 SAMPLE REPORTS I AM ISSUING A FORMAL "NOTICE OF VIOLATION". YOU MUST SUBMIT A CORRECTIVE PLAN OF ACTION IMMEDIATELY. SINCE NITROGEN, TOTAL AND NH3 ARE DAILY SAMPLES NO REPEAT SAMPLE IS REQUIRED. WEEKLY SAMPLES SHOULD BE RESAMPLED AND SENT IN WITH CORRECTIVE PLAN OF ACTION. THE FOLLOWING IS THE PARAMETERS AND DATES OF CONCERN. FURTHER PERMIT VIOLATIONS COULD RESULT IN SERVICE DISCONNECT AND/OR SURCHARGES.

PERMIT VIOLATION FOR MONTH OF JUNE 2003

PARAMETERS

DATES

NITROGEN, TOTAL

6/2,6/3,6/5,6/9,6/10,6/11,6/12,6/25

NH3

6/2,6/4,6/5,6/9,6/18,6/24,6/30

COPPER

6/6,6/27

ZINC

6/6,6/27

MERCURY

6/27

CYANIDE

6/27

TOTAL OF 21 PERMIT VIOLATIONS FOR MONTH OF JUNE, 2003.

IF YOU HAVE ANY QUESTIONS YOU MAY CONTACT ME AT 912-287-0342

  
HENRY McLaughlin  
PRETREATMENT MANAGER

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

**City of Waycross**

Office of City Engineer

ALLEN BRYSON  
BCK CORPORATION  
3 FOLK ST  
WAYCROSS GA 31502

MR BRYSON

THIS IS A FORMAL "NOTICE OF VIOLATION" FOR THE MONTH OF JULY, 2003. THE  
PARAMETERS IN QUESTION ARE:

NH3

TN

COPPER

ZINC

PLEASE SEND ME A UPDATED CORRECTIVE ACTION PLAN. FAILURE TO CORRECT THESE  
VIOLATIONS COULD RESULT IN FINES, SURCHARGES AND /OR SEWER USE  
DISCONNECTION.

IF YOU HAVE ANY QUESTIONS CALL ME AT 912-287-2945

  
HENRY MCLAUGHLIN  
PRETREATMENT COORDINATOR

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

**BCX, Incorporated**  
*An Environmental / Energy Company*



July 25, 2003

Scott Murphy  
Plant Engineer  
BCX Inc.  
912-338-0402 ext. 106

Dear Henry,

On July 24, 2003, I received a copy of our formal notice of violation for the period of June, 2003. Please note that due to our internal sampling program, we were aware of many of the problems listed and had already begun to take steps to address those problems. Even though there were 21 permit violations during the month of June, this is a significant improvement over the 86 violations that were noted during the previous month. Our corrective plan of action is currently being implemented and is already producing much improved results. What follows is a summary of the corrective steps that we have taken to date and a synopsis of the corrective actions we intend to take during the next few weeks.

**Phase One:** The first phase of our corrective action plan actually began back in May. During this time, BCX initiated a nation wide search for a chemist with a background in contract water treatment and a history of correcting compliance issues. The new chemist was hired during the month of June and began work for BCX during the first week of July. During that first week of July, changes to our treatment programs were immediately put into place in order to address the compliance problems that were known at that time. Since that first week our daily and weekly samples have shown continual improvement.

**Phase Two:** During the second week of July, the BCX Water Treatment Operators went through daily training on the proper use and application of both the water treatment equipment and the water treatment chemicals. Also during this time, careful attention was paid to proper treatment pH and the careful application of a carbamate in order to remove soluble metals. Preliminary analytical results from this second



week of July have shown that the application of the carbonate and proper treatment pH have reduced effluent metal loading to within permit limitations.

**Phase Three:**

During the second week of July, BCX began an intensive research project with the goal of determining the most effective means for meeting our permit requirements. This research included experiments using many types of activated carbon, bentonite clay, and several other treatment chemistries, all aimed at yielding effluent consistently within permit guidelines. Also, during this time period research was conducted and continues to be conducted on the possible application of new equipment such as a pH control system, sand filters, ammonia air-stripper, ozone generators, and activated carbon filters.

**Phase Four:**

In order to help meet compliance guidelines, BCX has begun training its sales force on the types of waters that will and will not be accepted by this facility. Also, all existing accounts are in the process of being characterized by our internal laboratory to identify those accounts which contain contaminants that would contribute to a possible permit violation. As this process is completed, those waste streams identified as containing high levels of ammonia, nitrogen, and other problematic pollutants will be segregated for individual treatment using specialized treatment processes.

**Phase Five:**

On July 22, 2003, a shipment of new water treatment chemicals was received by BCX and immediately implemented into our water treatment processes. The use of these chemicals is a direct result of the research that was conducted during the first two weeks of July. This represents a significant investment by BCX with the goal of meeting our permit requirements. Also, on the same date, new laboratory equipment was ordered, which will allow BCX to test for such problematic contaminants as ammonia and total nitrogen in-house without the delay of waiting for results from an outside laboratory. Our intention is to test all water prior to discharge in our laboratory in order to determine whether or not further treatment is necessary to lower parameters such as COD, TSS, TN, Ammonia, and metals such as Copper, Zinc, and Lead.

**BCX, Incorporated**  
An Environmental / Energy Company



Phase Six:

BCX management has made a commitment to the production and/or purchase of new equipment such as: a pH control system, sand filtration system, and a carbon filtration system. We are currently doing extensive research into the best equipment for our particular application. As soon as we have determined the best equipment for our application, I will submit to you a detailed explanation of the equipment and copies of the research that helped to make the determination.

During the last week we have implemented new techniques and new chemistries, which will have a major impact on the quality of our effluent. As soon as our new test equipment arrives, we will begin holding all effluent prior to release while analytical work is done by our in-house lab. If we have any indication of a potential parameter violation, the water will be held and retreated. As soon as BCX has made the determination on which equipment will be built or purchased, we will notify your office and seek your input and approval.

If you have any questions, please contact me at (912) 338-0402.

Thank you,



Scott Murphy



**City of Waycross**  
Office of City Engineer

9-16-03

ALLEN BRYSON  
BCX CORPORATION  
3 FOLK ST  
WAYCROSS GA 31502

MR BRYSON


AFTER REVIEW OF YOUR AUGUST 2003 SAMPLE REPORTS I AM ISSUING A FORMAL "NOTICE OF VIOLATION". YOU MUST SUBMIT A CORRECTIVE PLAN OF ACTION IMMEDIATELY. WEEKLY SAMPLES SHOULD BE RESAMPLED AND RESULTS SENT IN WITH CORRECTIVE PLAN OF ACTION. THE FOLLOWING IS THE PARAMETERS OF CONCERN. FURTHER PERMIT VIOLATIONS COULD RESULT IN SERVICE DISCONNECT AND/OR SURCHARGES.

PERMIT VIOLATION FOR MONTH OF: AUGUST 2003

PARAMETERS

NH3  
TN  
COPPER  
ZINC  
P-CRESOL

IF YOU HAVE ANY QUESTIONS YOU MAY CONTACT ME AT 912-287-2945

  
HENRY McLaughlin  
PRETREATMENT MANAGER

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

10-16-03

**City of Waycross**

Office of City Engineer

SCOTT MURPHY  
BCX CORPORATION  
3 FOLK ST  
WAYCROSS GA 31502

MR MURPHY

AFTER REVIEW OF YOUR SEPTEMBER 2003 SAMPLE REPORTS I AM ISSUING A FORMAL "NOTICE OF VIOLATION". YOU MUST SUBMIT A CORRECTIVE PLAN OF ACTION IMMEDIATELY. SINCE NITROGEN, TOTAL AND NH3 ARE DAILY SAMPLES NO REPEAT SAMPLE IS REQUIRED. WEEKLY SAMPLES SHOULD BE RESAMPLED AND SENT IN WITH CORRECTIVE PLAN OF ACTION. THE FOLLOWING IS THE PARAMETERS. FURTHER PERMIT VIOLATIONS COULD RESULT IN SERVICE DISCONNECT AND/OR SURCHARGES.

**PERMIT VIOLATION FOR MONTH OF SEPT 2003**  
**PARAMETERS**

NITROGEN, TOTAL  
NH3  
ZINC  
SILVER

ZINC AND SILVER ARE CONSIDERED INSIGNIFICANT VIOLATIONS. NH3 AND TOTAL NITROGEN ARE CONSIDERED SIGNIFICANT VIOLATIONS. THIS NEEDS YOUR IMMEDIATE ATTENTION.

IF YOU HAVE ANY QUESTIONS YOU MAY CONTACT ME AT 912-287-2945

*Henry S. McLaughlin*  
HENRY McLaughlin  
PRETREATMENT MANAGER

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

11-19-03

## City of Waycross

Office of City Engineer

SCOTT MURPHY  
BCH CORPORATION  
3 FOLK ST  
WAYCROSS GA 31502

MR. MURPHY

THIS IS A FORMAL "NOTICE OF VIOLATION" FOR THE MONTH OF OCTOBER 2003. THE  
PARAMETERS IN QUESTION ARE:

NITROGEN, TOTAL (TN)

AMMONIA

BARIUM

PLEASE SEND ME AN UPDATED CORRECTIVE ACTION PLAN. FAILURE TO CORRECT THESE  
VIOLATIONS COULD RESULT IN FINES, SURCHARGES AND/OR SEWER USE  
DISCONNECTION. WHILE I UNDERSTAND YOUR EFFLUENT IS IMPROVING THIS TYPE OF  
PERMIT VIOLATION IS UNACCEPTABLE. AT PRESENT OUR TREATMENT PLANT IS HAVING  
AN AMMONIA REMOVAL PROBLEM AND CAN HANDLE NO MORE THAN PERMITTED  
LEVELS. IF YOU HAVE A PLAN TO ADDRESS YOUR AMMONIA PROBLEM THEN FORWARD  
THIS TO ME IMMEDIATELY.

IF YOU HAVE ANY QUESTIONS CALL ME AT 912-287-2945

*Henry S. McLaughlin*  
HENRY MCLAUGHLIN  
PRETREATMENT COORDINATOR

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

**BCX, Incorporated**  
An Environmental / Energy Company



Henry McLaughlin  
Pretreatment Coordinator  
Waycross, GA 31501  
November 29, 2003

Mr McLaughlin:

I sincerely apologize for any additional burden that BCX is placing on the treatment plant in terms of additional ammonia loading. I understand that we need to correct our ammonia problem as quickly as possible in order to relieve this burden from your plant. As the weather has cooled substantially and the leachate ammonia levels coming to us have increased, we have found it increasingly difficult to meet our permit requirements. The analytical results that I have thus far for November show an increase in both our influent and effluent ammonia levels, this at a time when Waycross is having so much difficulty with the same issue. I'm including in this letter our plan for dealing with this ammonia problem as well as our plan for some radical changes to our plant design, which should help to make BCX a better partner with the city for waste water treatment. I ask for your patience over the next few weeks as we implement these changes. We hope to have these changes implemented by the end of January, 2004.

Step One: We have ordered and expect to take delivery of a ISCO autosampler model 3710FR with the next week. This model is fully flow proportional and is currently being programmed for our flowmeter. This will help to get completely accurate flow proportioned analytical results for our plant. Currently, the best way we have to composite sample is to pull samples from every tank before we discharge and combine them for our sample.

Step Two: We are having a steam system installed which will allow us bring the water up to temperature in order to allow our activated carbon to function more efficiently. The steam injections will also help to strip off our ammonia. This work is currently in process and should be finished by December 6.

Step Three: After we are able to get our water to the proper temperature, I am sending off samples to a company called Aeromix in Minneapolis MN. They will use this information to size a stripper to remove the vast majority of our ammonia, certainly enough to meet our permit requirements. I am including two of the quotes they have sent



me for your scrutiny. If you have any concerns please touch base with me so that we can answer them before we commit to the purchase. Also, if you plan to revise down my ammonia limit, please give me some idea of what the new limit might be, as I will definitely need to take this into consideration when determining which model to purchase.

**Step Four:** We are taking the two large 44,000 gallon tanks currently on the lot and are converting them to equalize our effluent flow. Currently we discharge all of our water during one shift, which may be causing the treatment plant some difficulty because of our loading. With the tanks in place, our discharge will drop to a steady 35gpm (based on current flows) instead of the 150gpm pulses of flow from individual treatment tanks that we currently release. I am currently trying to find or develop a level sensing system which I can install to accomplish this.

**Step Five:** I am currently conducting biotoxicity studies of all of my individual accounts in order to determine if we are processing something, which may be causing harm to the city treatment system. If something does come back as toxic we will develop an alternative treatment for the water from the account. Please forward to me the name and number of the lab that you recommend for the new style of test.

**Step Six:** You have indicated that you may need to adapt our discharge permit to reduce BOD and COD loadings on the plant. If you would get those new numbers to me as quickly as possible I would greatly appreciate it as I may need to change some plans I have to meet those new levels. If they are lowered substantially, I will need to investigate further effluent polishing techniques such as ultra filtration or carbon filtration.

If you have any questions, please call me at 338-0402.

Sincerely,

Scott Murphy  
General Manager

01-26-04

# City of Waycross

Office of City Engineer

SCOTT MURPHY  
BCX CORPORATION  
901 FRANCIS ST  
WAYCROSS GA 31502

MR MURPHY

AFTER REVIEW OF YOUR DECEMBER 2003 SAMPLE REPORTS I AM ISSUING A FORMAL "NOTICE OF VIOLATION". YOU MUST SUBMIT A CORRECTIVE PLAN OF ACTION IMMEDIATELY SINCE B.O.D, COD, NITROGEN, TOTAL AND NH3 ARE DAILY SAMPLES NO REPEAT SAMPLE IS REQUIRED. WEEKLY SAMPLES SHOULD BE RESAMPLED AND SENT IN WITH CORRECTIVE PLAN OF ACTION. THIS CORRECTIVE ACTION PLAN SHOULD INCLUDED STEPS BEING TAKEN AND PROCESS BEING ADDED TO PUT YOUR FACILITY DISCHARGING WITHIN PERMITTED LEVELS. THE FOLLOWING IS THE PARAMETERS. FURTHER PERMIT VIOLATIONS SHOULD RESULT IN SERVICE DISCONNECT AND/OR SURCHARGES.

PERMIT VIOLATION FOR MONTH OF DEC 2003

PARAMETERS

BOD  
COD  
NITROGEN, TOTAL  
NH3  
COPPER  
ZINC

BOD, COD, NH3 AND TOTAL NITROGEN ARE CONSIDER SIGNIFICANT VIOLATIONS. THIS NEEDS YOUR IMMEDIATE ATTENTION

IF YOU HAVE ANY QUESTIONS YOU MAY CONTACT ME AT 912-287-2945

  
HENRY MCLAUGHLIN  
PRETREATMENT MANAGER

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

## REFERENCE 21

# City of Waycross

OFFICE OF CITY MANAGER

This the 27 day of JAN, 2004.

Signed:   
James H. Nalley, Jr.  
City Manager

Agreed to and consented to, BCX, Incorporated

By: \_\_\_\_\_



P.O. DRAWER 99  
WAYCROSS, GEORGIA 31502-0099  
912/287-2912  
FAX 912/287-2990  
cmanager@waycrossga.com

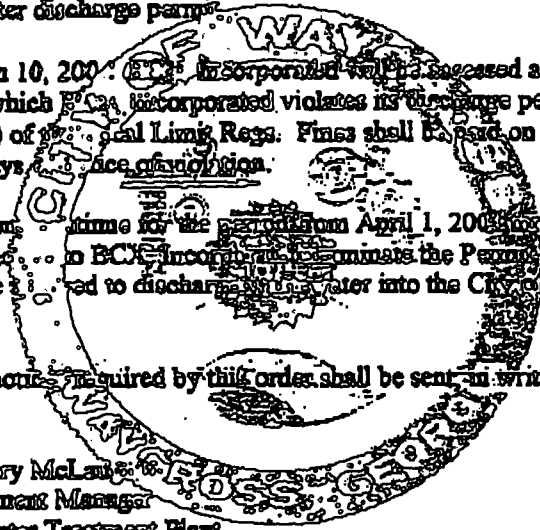


# City of Waycross

OFFICE OF CITY MANAGER

## ORDER

THEREFORE BASED ON THE ABOVE FINDINGS, BCX, INCORPORATED IS HEREBY ORDERED TO:

1. Take whatever steps necessary to adequately treat the wastewater of BCX, Incorporated to a level which will comply with its wastewater discharge permit immediately.
2. Prior to March 10, 2004, provide sufficient documentation in the form of a corrective action plan to demonstrate that the waste of BCX, Incorporated will be in compliance with its wastewater discharge permit.
3. Beginning March 10, 2004, BCX, Incorporated will be assessed a fine of \$1,000 per day for each day in which BCX, Incorporated violates its discharge permit in accordance with Section 32-38 (f) of the Local Limit Regs. Fines shall be paid on a monthly basis and are due within 10 days of the date of violation.
4. If permit violations continue for the period from April 1, 2004 through April 15, 2004 City may, with respect to BCX, Incorporated, terminate the Permit and BCX, Incorporated will no longer be allowed to discharge its wastewater into the City of Waycross sanitary sewer system.
5. All reports and actions required by this order shall be sent in writing, to the following address:  
  
Mr. Henry McLane  
Pretreatment Manager  
Wastewater Treatment Plant  
P. O. Box 99  
Waycross, Georgia 31502
6. This consent order does not constitute a waiver of the Permit, which Permit remains in full force and effect. The City reserves the right to seek any and all remedies available to it under Section 32-39 of the Local Limit Regs. and pursuant to applicable law for any violation cited by this order as well as any violation that takes place hereafter.
7. Failure to comply with the requirements of this order shall constitute further violation of the Sewer Use Ordinance and Local Limit Regs. and may subject BCX, Incorporated to civil or criminal penalties or such other appropriate enforcement response as may be appropriate.
8. This Consent Order is effective March 10, 2004 and shall remain in effect until March 1, 2005, unless modified, extended, or terminated by the Parties or by order of any court of competent jurisdiction.

P.O. DRAWER 88  
WAYCROSS, GEORGIA 31502-0088  
812/287-2812  
FAX 812/287-2880  
cmonagor@waycrossga.com

# City of Waycross

OFFICE OF CITY MANAGER

## CONSENT ORDER

CITY OF WAYCROSS, GEORGIA

IN THE MATTER OF

BCX, Incorporated  
901 Francis Street  
Waycross, Georgia 31501

ADMINISTRATIVE ORDER

CONSENT ORDER

### LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested on the City Manager, under Section 32-38 of the City of Waycross Local Limit Development for the City of Waycross for NPDES Permit No. ~~GA003210~~ GA003210 issued and assigned pursuant to City's Sewer Use Ordinance ("Local Limit Regs."). This order is based on findings of violation of the conditions of the wastewater discharge permit issued under Section 32-37 of the City's Local Limit Regs.

### FINDINGS

1. BCX, Incorporated discharges non-domestic wastewater containing pollutants into the sanitary sewer system of the City of Waycross (hereafter, "City").
2. BCX, Incorporated is a "significant industrial user" as defined by Section 32-31 of the City's Local Limit Regs.
3. BCX, Incorporated was issued wastewater discharge permit (Industrial Pretreatment Program, Permit Number 0012, hereafter referred to as "Permit") on April 1, 2002 which contains prohibitions, restrictions, and limitations on the quality of the wastewater it discharges to the sanitary sewer.
4. Pursuant to the ordinance, Local Limit Regs., and the above-referenced Permit, data is routinely collected or submitted on the compliance status of BCX, Incorporated.
5. This data shows that BCX, Incorporated has violated its Permit in the following manner:
  - BCX, Incorporated has been issued notice of violations for the following months: May 2003, June 2003, July 2003, August 2003, September 2003, October 2003, December 2003, and January 2004. Details of the violations are more specifically set forth in the individual notices which have been forwarded to BCX, Incorporated for each month listed herein.
  - Each of the notices sent to BCX, Incorporated required BCX, Incorporated to submit a corrective action plan to address the violations. BCX, Incorporated has failed to submit a Corrective Action Plan that addresses how it will comply with its Permit for discharge of non-domestic wastewater under the Permit.
  - All of these violations satisfy the City's definition of significant violations.

WAYCROSS, GEORGIA 31502-0088

912/287-2912

FAX 912/287-2980

cmanager@waycrossga.com

February 18, 2004

City of Waycross  
Office of City Engineer

Mr. Scott Murphy  
BCX Corporation  
901 Francis Street  
Waycross, Georgia 31502

Mr. Murphy:

After reviewing your January 2004 sample reports, The City of Waycross is issuing a formal "Notice of Violation". BCX should submit a corrective action plan immediately. Since B.O.D., COD, Nitrogen, Total and NH3 are daily samples, no repeat sampling is required. Only weekly samples should be re-sampled and submitted with the corrective action plan. The corrective action plan should include steps taken and the process added to put your facility discharging within permitted levels. Further permit violations could result in a disconnected service and/or surcharges.

Permit Violations for month of January 2004

Parameters:

BOD

COD

Nitrogen, Total

NH3

Lead

Barium

Cadmium

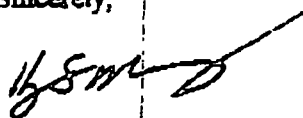
Copper

Zinc

BOD, COD, NH3 and Total Nitrogen are considered significant violations. This matter needs your immediate attention. BCX's DMR should be updated with the correct parameter limits.

If you have any question you may call 912-287-2945

Sincerely,

  
Henry McLaughlin  
Pre-treatment Manager

P.O. Drawer 99  
Waycross, Georgia 31502  
912/287-2945

## REFERENCE 22

**BCX**, Incorporated  
An Environmental / Energy Company



2004.5  
C44

March 3, 2004

Mr. Henry McLaughlin  
Industrial Pretreatment Coordinator  
City of Waycross  
Water and Wastewater Department  
PO Drawer 99  
Waycross, GA 31502

Dear Mr. McLaughlin;

This letter will confirm our discussion at the City Manager's office earlier this afternoon.

BCX has immediately and voluntarily disconnected its facility located at #3 Folks Street, Waycross, Georgia from the City of Waycross Municipal Wastewater System.

Our facility will remain disconnected until the City of Waycross and BCX agree in writing that the connection may be restored. As agreed, we are working on a plan which we will present to you next week.

We sincerely appreciate everyone's participation in today's meeting.

Sincerely,

Ferrell J. Carden  
President

Cc: James H. Nalley, Jr. City Manager  
Neal L. Conner, Jr., Esq  
W.E. Bland City Engineer  
Daniel E. Groselle, PE  
J. Clay Sykes, PE

## REFERENCE 23

# Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, SE, Suite 1066 East, Atlanta, Georgia 30334-9000

Lonice C. Barrett, Commissioner

Environmental Protection Division

Carol A. Couch, Ph.D., Director

Office: 404/857-8831 404FAX: 404/857-8831

## TRIP REPORT

April 8, 2003

### SITE NAME AND LOCATION:

BCX Waycross Facility  
(BCX, Incorporated)  
901 Frances Street  
Waycross, GA 31501

### EPA ID NUMBER:

GAR000030007

### COUNTY:

Ware

### TRIP BY:

John E. Short *JES*  
Environmental Specialist  
Hazardous Waste Compliance Unit

### DATE OF INVESTIGATION:

April 6, 2004

### OFFICIALS CONTACTED:

Phil DeMarco, Plant Manager  
John Kalp, Environmental Specialist,  
EPD Coastal District Municipal Team

### REFERENCE:

March 2003 Inspection Report

### COMMENTS:

#### I. Background

This inspection was to be conducted as an evaluation of a used oil facility that notified as a used oil processor. This company ceased accepting industrial wastewater and stopped discharging to the Waycross POTW on March 1, 2004.

The City of Waycross issued Notices of Violation and an Administrative Order to BCX, Inc. due to many exceedances of the company's pre-treatment permit. This facility voluntarily shutdown on March 1, 2004 after their third wastewater pre-treatment permit with the city of Waycross went into effect. Allegedly, the new permit was issued in January and went into effect March 1, 2004 required parameters that were lower than in the previous two permits with the city. According to Mr. DeMarco, parameters set in the permit were cut in half, which would require different treatment including ultra filtration. BCX, Inc. viewed the permit as impossible to meet and therefore voluntarily

closed. Additionally, the company had received 8 enforcement letters from May 2003 to December 2003 from the city of Waycross. In January, an Administrative Order was issued to BCX, Inc. from the city.

## **II. Findings**

Wastewater is treated with the treatment process being adjusted (based on the results of treatability testing for each customer) for each batch to ensure the end product meets pretreatment standards. In general, the following wastewater steps are employed: Metals removal, Biological Oxygen Demand adjustment, total nitrogen removal, pH adjustment, total suspended solids removal, solids removal to filter press, sampling, analysis, and discharge to the city of Waycross. The following treatment chemicals are stored in bulk within secondary containment: Ferric acid, aluminum sulfate, sodium hydroxide and sulfuric acid.

Water is sent to through the wastewater treatment process (and eventually discharged to the City of Waycross POTW) and filter press sludge is sent to a Title V landfill (Broadhurst Environmental owned by Republic Services in Screvin, Georgia). Filter press sludge analytical (TCLP results) tested non-hazardous two separate times and is attached.

Each tank is equipped with an electronic high-level indicator that sounds a horn to alert employees that the pump failed or level dropped in the event of a release. The secondary containment holds the capacity of the 3 largest tanks. A recommendation was made to Mr. DeMarco to have the tank farm fenced in because it is very accessible to the public.

Some tanks are clearly labeled "used oil" even though they are not currently storing or processing used oil. The oil-water separator near the treatment tanks has not been used very often according to Mr. DeMarco. When it was used, a "miniscule" amount of oil was generated as stated by Mr. DeMarco. The separator was empty during the inspection. According to records, there have not been shipments of used oil from the facility. It is not clear where an oil layer, if present in wastewaters accepted, is sent to, be it the oil/water separator or a tank. Any oil would need to be tested for halogens and then sent off-site for energy recovery.

Mr. DeMarco stated that some of the tanks contained treated wastewater, untreated wastewater, and mixtures of various wastewaters from different customers. There was no documentation available that demonstrated exactly what was in each tank. Tanks were holding "retreated liquid, off-product, and mixtures" in different tanks. Mr. DeMarco indicated that the liquid stored in the containers was intended to go thru the treatment process and discharged to the city.



### **III. Record Review**

Waste profiles for all customers (except the Bold and Hawaiian Tropic facilities) daily and weekly laboratory analytical wastewater effluent data (April 2003 – September 2003), manifests for January – May 2003 and a manifest/client summary document (attached).

A hand-written document dated 3/12/04 was obtained (attached) that indicated the gallons of liquid in each tank and the source, if applicable. Two of the tanks were empty according to the log. The only three customers referenced are GA Pacific, Colomer and Hawaiian Tropic.

Some of the profiles in the facility files were not for material accepted by BCX, Inc. according to Mr. DeMarco and manifests. For example, International Agile Mfg. (profile attached as "IAM") generates used oil and water and the company was a potential BCX, Inc. client; however, the material was never accepted by BCX, Inc. The profiles for Bold and Hawaiian Tropic were not reviewed during the inspection.

BCX, Inc. mainly receives "non-hazardous wastewater" as identified on manifests. Water from used oil refineries such as Four-Way Oil, Inc. in Cairo and Coastal Refining Co. in the past have sent "petroleum contact water/non-regulated wastewater (oily)" to BCX, Inc. for treatment. The waste profile and manifests for Four-Way Oil, Inc. are attached.

This company also receives landfill leachate from two different landfills – Nassau County, Florida landfill and Broadhurst Environmental in Screvin, Georgia. Vegetable oil and water is received from Colomer, which is similar to the Hawaiian Tropic wastewater according to Mr. DeMarco.

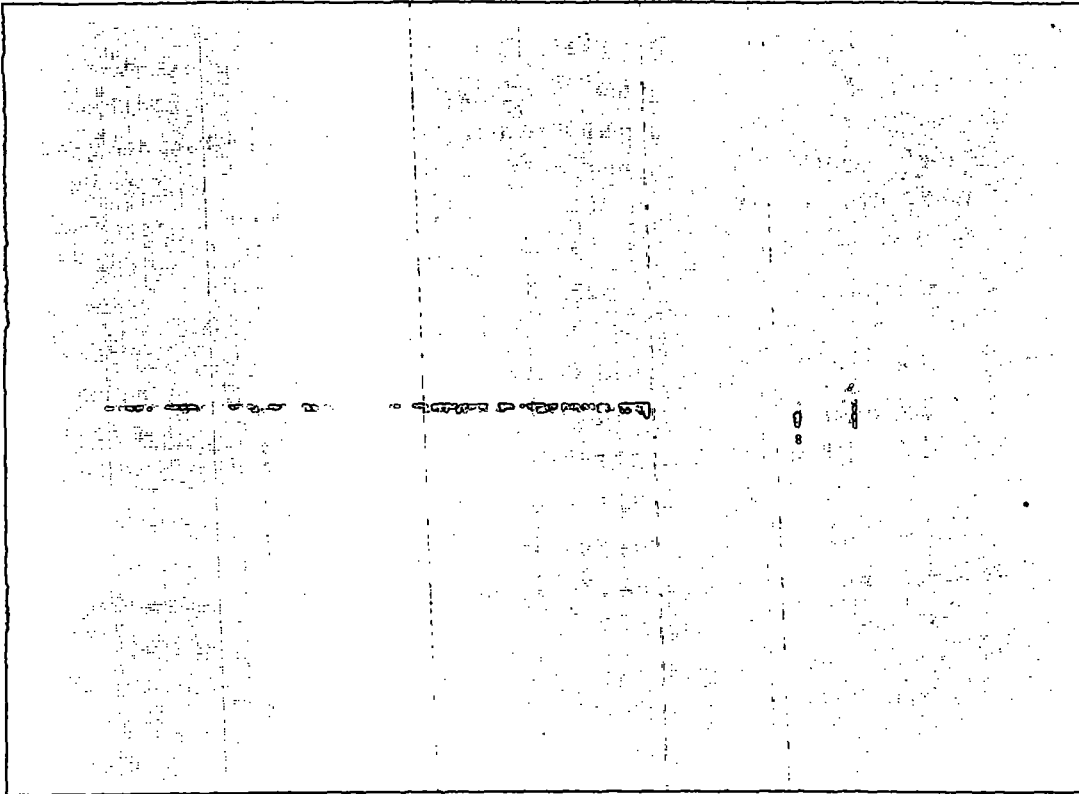
### **CONCLUSIONS:**

This facility is not currently a used oil processor. However, facility representatives plan on processing used oil at some point.

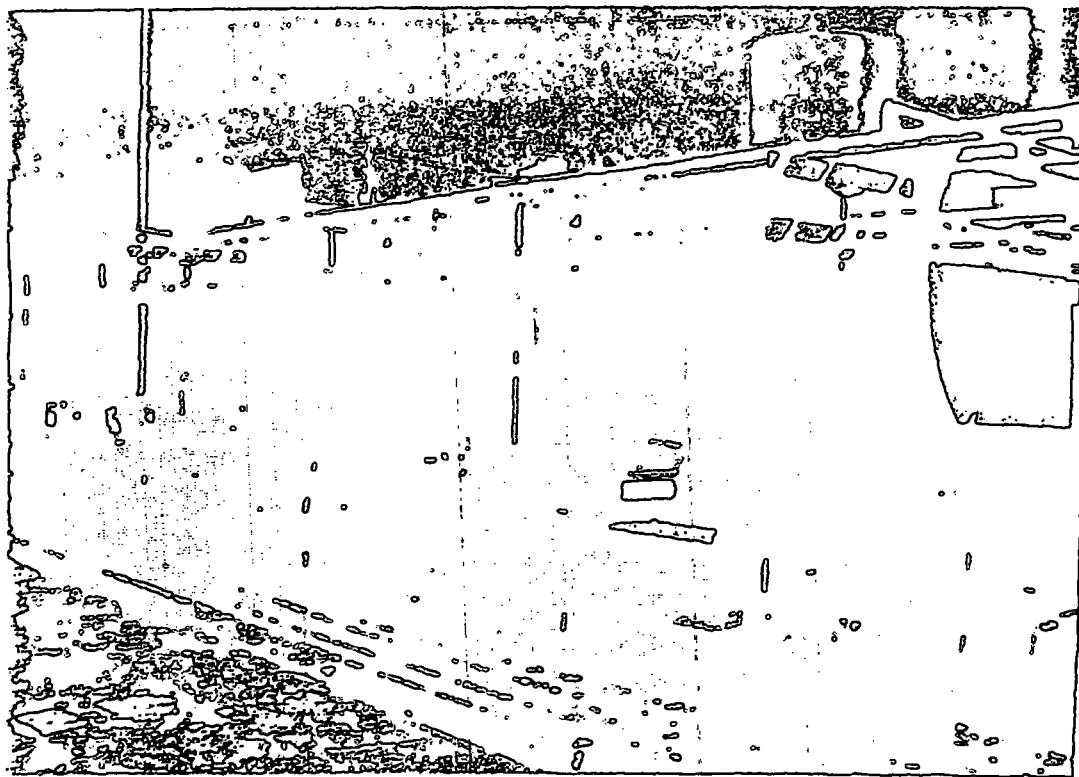
There was one violation observed during the inspection:

40 CFR Section 262.11, "Hazardous Waste Determination" – because the owner/operator failed to determine the contents of 27 tanks located in the facility aboveground tank farm and in the flocculation containers.

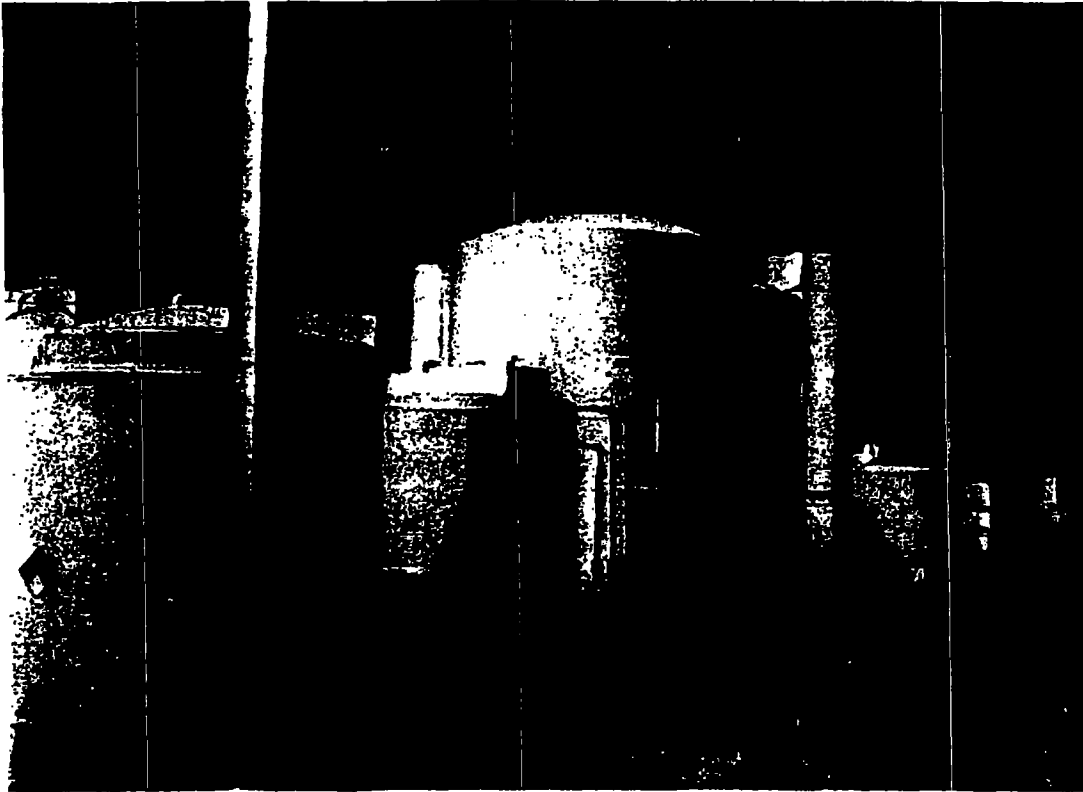
There were no violations of 40 CFR Part 279 observed during the inspection.



**1. Overview of BCX tank farm as viewed from the office. This is where various transporters contracted thru BCX, Inc. unload incoming material. The four unloading stations are the darkened areas in front of the secondary containment curbing.**



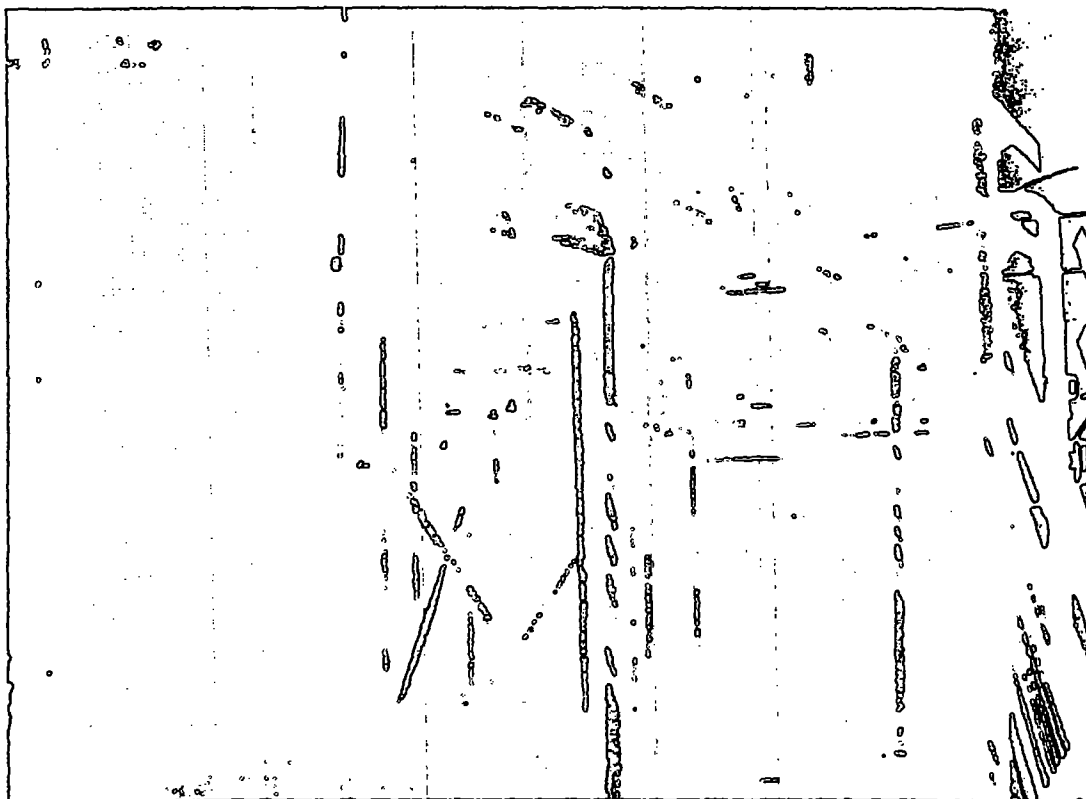
**2. Unloading stations and tank CD-3, which contained 30,000 gallons of material from Georgia Pacific.**



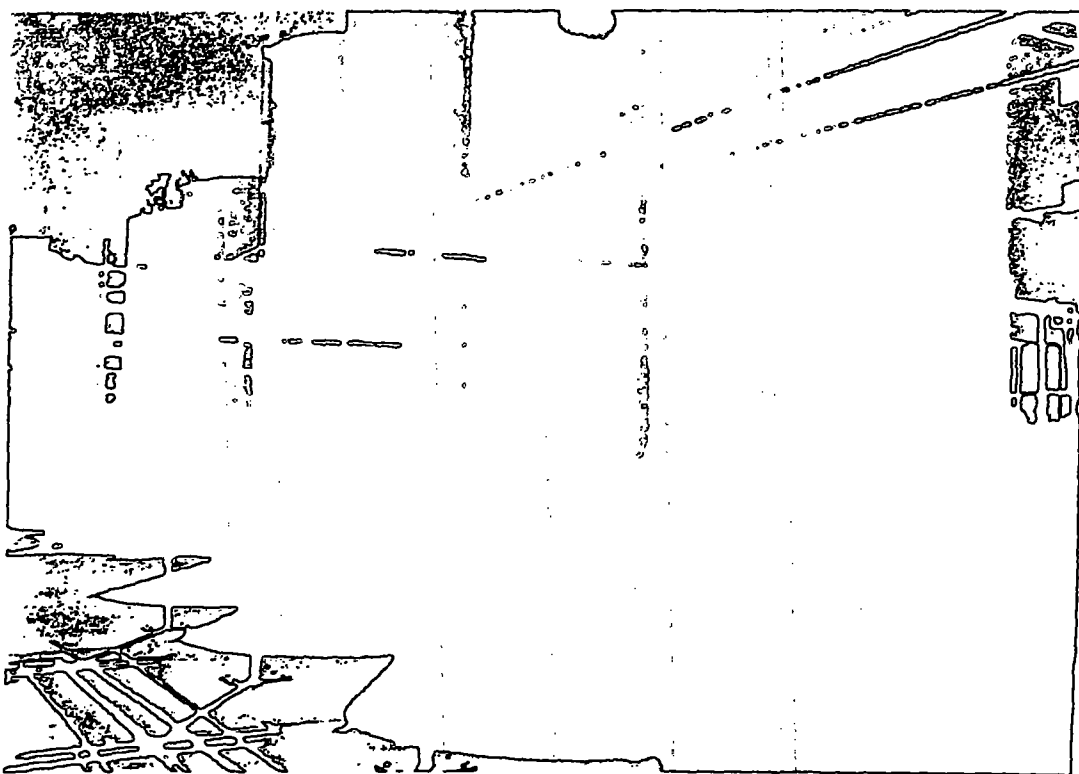
3. Two discharge tanks, two detention tanks in the center, and the city effluent monitoring/sampling unit to the far right.



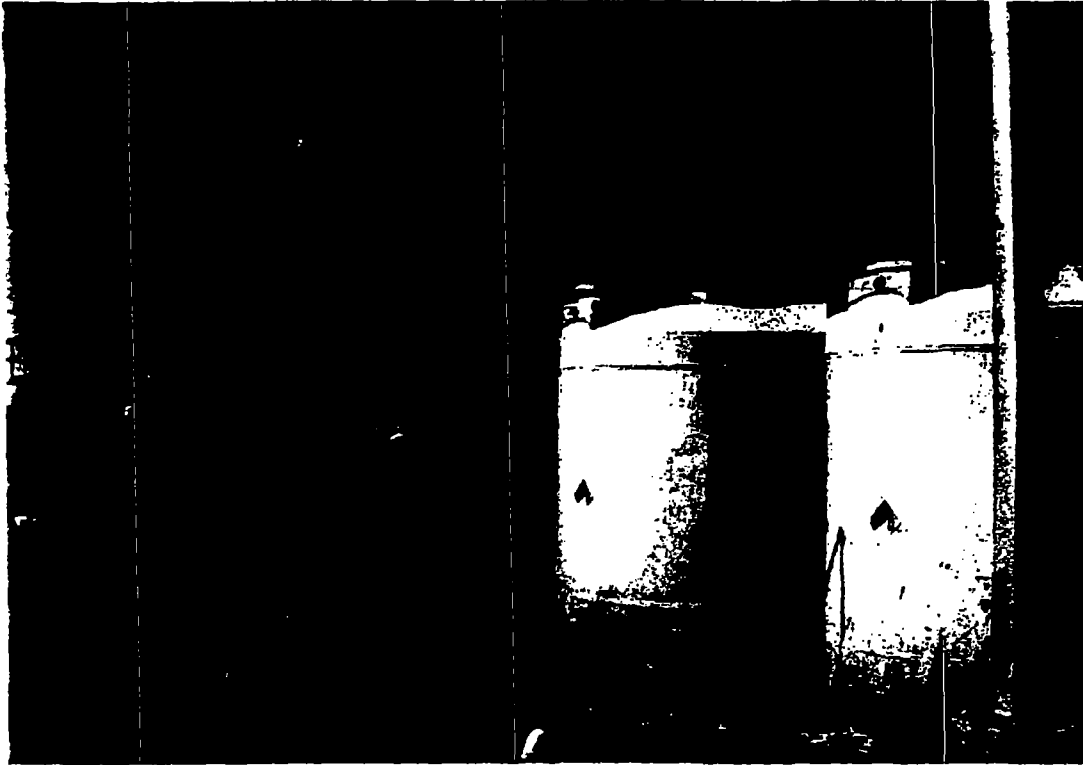
4. Discharge tank, oil/water separator in the center of the photo (empty), and the treatment area.



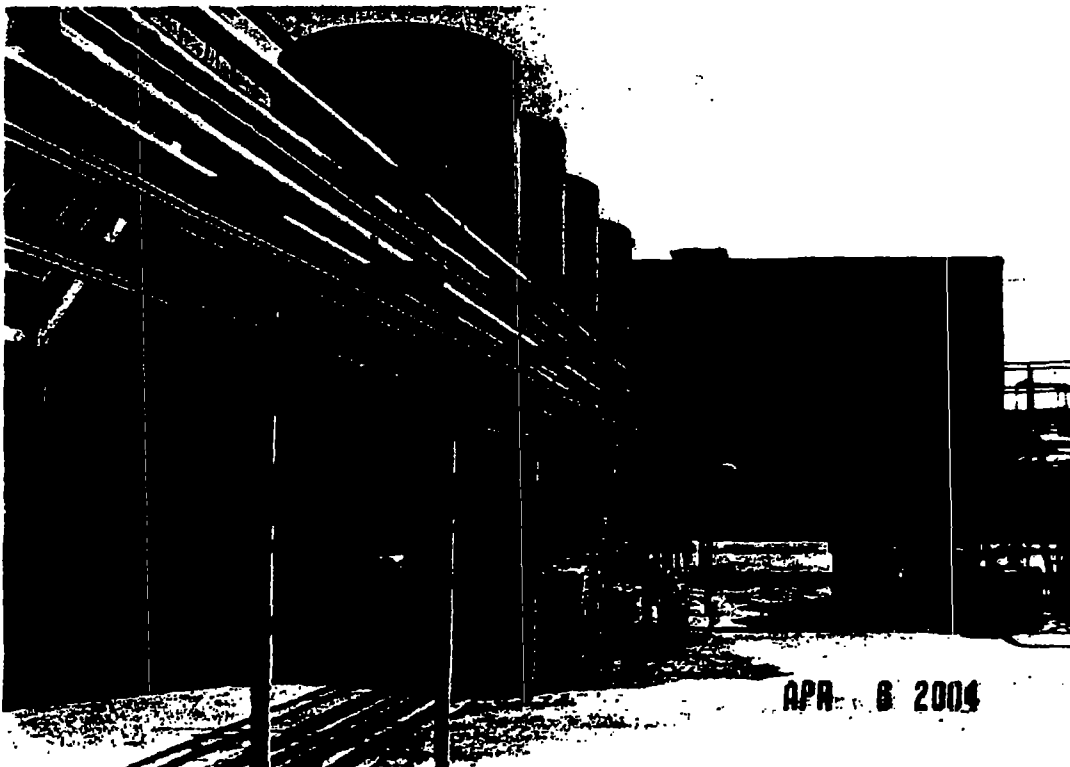
5. "Used Oil" tank (SH-1), containing 20,000 gallons "flock water and unknown mixture," boiler (not used), air compressor, air tank, and pump station.



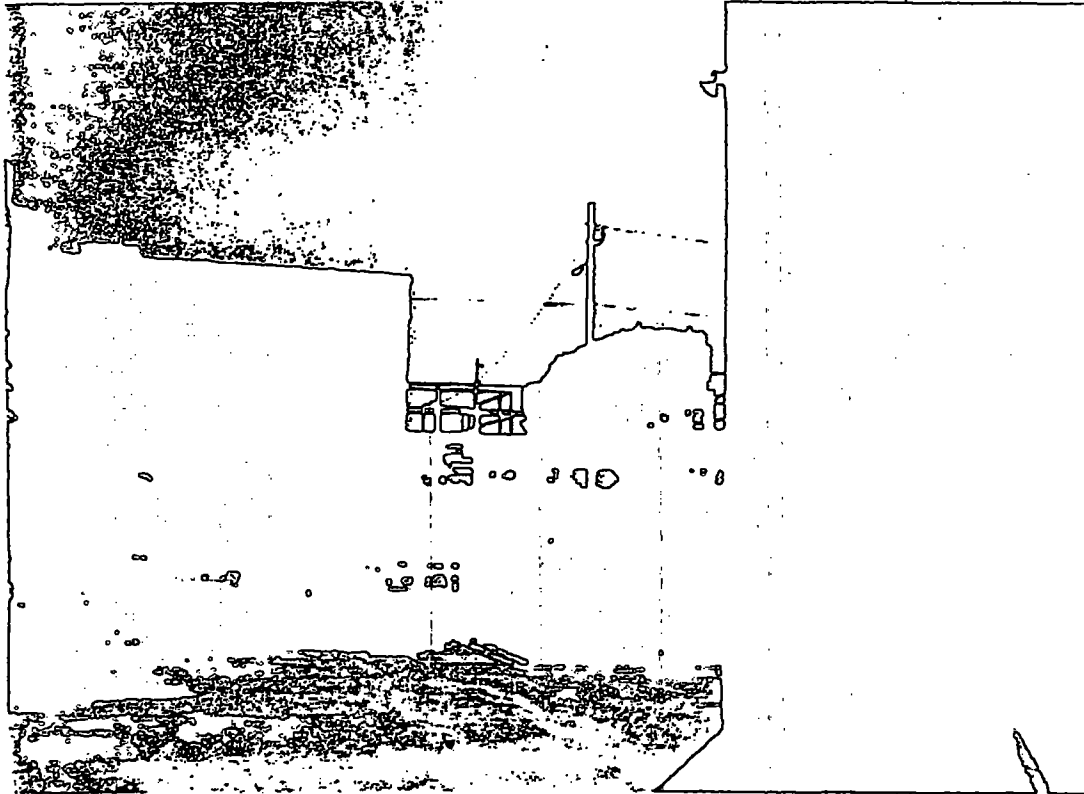
6. "Used Oil" tanks that actually each contain 20,000 gallons "flock water and unknown mixture."



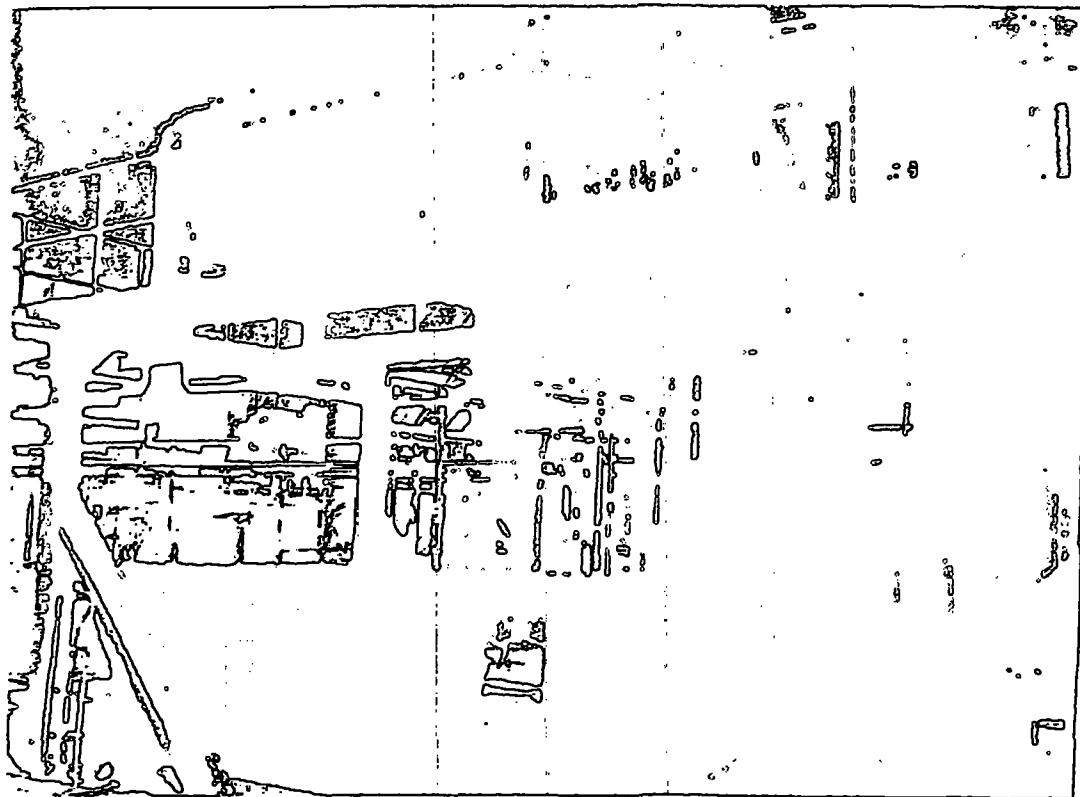
7. Treatment tanks, fill station (small green unit) and bulk storage of treatment chemicals. One of the two spill containment traps/sumps can be seen in the foreground.



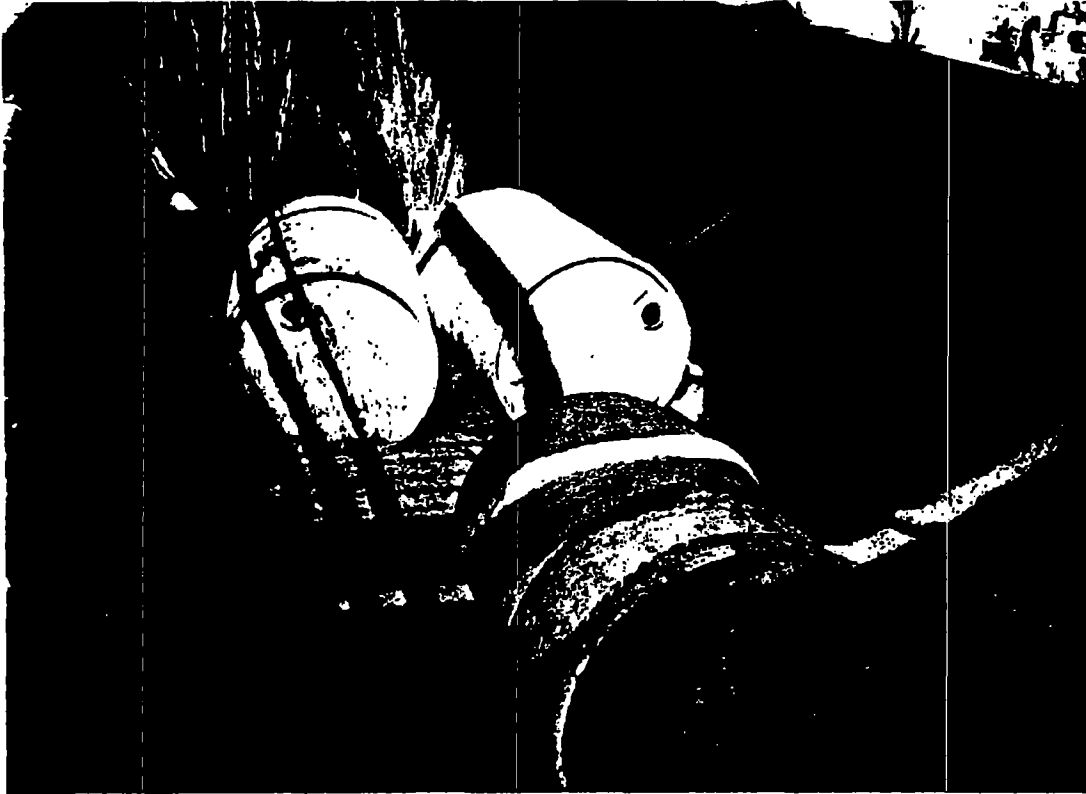
8. Treatment tanks, treatment chemicals in totes, and the solids tanks on the right that are connected to the filter press. The smaller containers on the right are used for polymer and lime mixing.



9. Solids tanks and filter press. RW-2 in the foreground contained filter press water, which is reused in the treatment process.



10. Filter press that drops semi-solid material into the roll-off container.



11. Inside the roll-off container that receives filter press sludge. According to Mr. DeMarco, there is some liquid that is released to the container. The landfill requires the filter sludge to be as dry as possible, so BCX adds sand to further solidify the watery sludge. The filter press was not in use during the inspection. The empty drums seen in this photo were going to the landfill for disposal as solid waste according to Mr. DeMarco.





3/12/04

APR 6 2004

SS 1 20,000 Flock water uk mixt  
SS 2 20,000 Flock water uk mixtu

RW 1 16,000 Filter press water  
RW 2 18,000 Filter press water

SH 1 20,000 Flock water y/k mixture  
SH 2 20,000 Flock water y/k mixture  
SH 3 20,000 Flock water y/k mixtur  
SH 4 20,000 Flockwater y/k mixture

CD 1 30,000 Flock water y/k mixture  
CD 2 30,000 Flock water y/k mixture  
CD 3 30,000 GP

OP 1 20,000 GP  
OP 2 20,000 GP  
OP 3 20,000 Flock water y/k mixture  
OP 4 20,000 Flock water y/k mixture

DP 1 44,000 Flockwater y/k mixture  
DP 2 36,000 Treated water

CT 1 empty  
CT 2 10,000 Treated water  
CT 3 8,000 washwater  
CT 4 10,000 Treated water  
CT 5 empty  
CT 6 10,000 Treated  
CT 7 10,000 Treat  
CT 8 5,000 wash wa

APR 6 2004

Frac A	18,000 GP
Frac B	18,000 GP
Frac C	18,000 GP
Frac D	22,000 Hawaiian Tropic / Color

Totals of ALL water

Treated: 76,000 - 80,000

Filter press water 34,000

F-A Pacific: 124,000

wash water: 13,000

Flock water: 264,000

Hawaiian T / colomer 22,000

## REFERENCE 24

# **Georgia Department of Natural Resources**

2 Martin Luther King, Jr. Drive, SE, Suite 1066 East, Atlanta, Georgia 30334-9000

Lonice C. Barrett, Commissioner

Environmental Protection Division

Carol A. Couch, Ph.D., Director

PHONE 404/657-8831 FAX 404/463-6676

April 23, 2004

Mr. Phil DeMarco  
Plant Manager  
BCX, Incorporated  
901 Frances Street  
Waycross, GA 31501

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

**SUBJECT: NOTICE OF VIOLATION**  
Used Oil Processor Inspection  
BCX Waycross Facility (BCX, Incorporated)  
Waycross, Ware County  
EPA I.D. Number GAR000030007

Dear Mr. DeMarco:

On April 6, 2004, John Short of the Generator Compliance Program conducted a compliance evaluation inspection of the referenced facility. BCX, Inc. was evaluated for used oil processing activities because the facility notified as a Used Oil Processor in 2001.

BCX, Inc. was observed storing unidentified waste on-site in aboveground storage tanks. Because BCX, Inc. cannot discharge treated industrial wastewater to the City of Waycross POTW, tanks holding material became waste accumulation tanks and are therefore subject to hazardous waste requirements since BCX, Inc. has not determined if wastes stored in these tanks are hazardous or non-hazardous wastes.

Hazardous waste generators in Georgia are required to comply with Georgia's Hazardous Waste Management Act (O.C.G.A. 12-8-60 et. seq.), the Georgia Rules of Hazardous Waste Management (Chapter 391-3-11), and the Federal regulations adopted by reference. The following violation of Title 40 of the Code of Federal Regulations (CFR), Part 262 was observed during the inspection:

40 CFR Section 262.11, "Hazardous Waste Determination" – because the owner/operator failed to determine the contents of 27 tanks located in the facility's aboveground tank farm and in the four flocculation box tanks.

This violation should be corrected immediately. Please notify the Environmental Protection Division (EPD) how BCX, Inc. plans to handle the material in each container for disposal.

**BCX, Incorporated**  
An Environmental / Energy Company



June 3, 2004

Georgia Department of Natural Resources  
2 Martin Luther King, Jr. Dr., SE  
Suite 1056  
East Atlanta, GA 30334-9000

Freddie L. Dunn, Jr.  
Unit Coordinator  
Hazardous Waste Compliance Unit

Dear Mr. Dunn:

In response to the Notice of Violation dated April 23, 2004, the materials contained on-site at the BCX Wastewater Treatment Facility, 3 Folkm Street, Waycross, GA. are non-hazardous. Mr. Scott Murphy, who was formerly our Chief Chemist and Compliance Officer during the period that the existing material was delivered, processed, and treated, and was in charge of the identity and profiling of this material.

Mr. Murphy would have in-depth knowledge about the remaining product in the twenty-seven (27) tanks and I respectfully ask that you contact him as he would be better able to identify and explain the chemical makeup of this non-hazardous material.

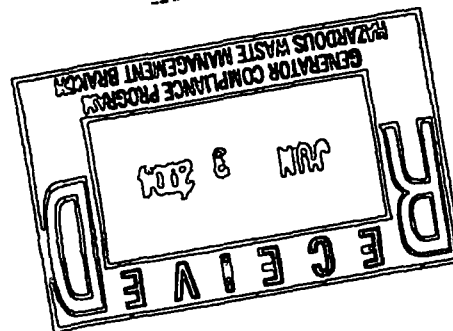
Mr. Murphy is currently employed by ESG Engineering and is in charge of rectifying the problems at the City of Waycross Treatment Plant. Mr. Murphy may be reached at the following numbers: Cell (912) 218-2476, Office (912) 285-9621, Home (912) 287-2995.

If I can be of further assistance please do not hesitate to contact me.

Sincerely,

Ferrell J. Carden  
President

FJC/st

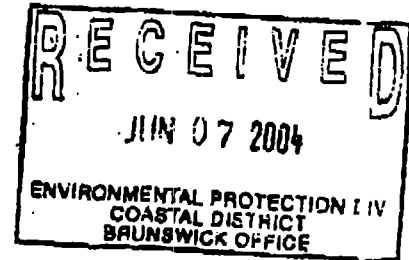


## REFERENCE 25

**BCX**, Incorporated  
An Environmental / Energy Company

June 2, 2004

Environmental Protection Division  
Carolyn Hill  
4220 International Parkway  
Suite 101  
Atlanta, GA 30354



Dear Mrs. Hill;

In reference to our telephone conversation of June 2, 2004, regarding the accidental discharge of non-hazardous waste water I provide you with the following information, as you requested. The discharge of approximately 4-5,000 gallons of non-hazardous waste water occurred at 43 Polk Street, Waycross, Georgia 31501. The cause appeared to be from a broken gasket from the front manhole cover of a frac-tank. The frac-tank number is F33RR and is a tank that was rented by our company, BCX, Inc.

The manhole cover was tightened and the product remaining in the tank is below the manhole cover and there appears to be no further danger of discharge from this tank.

I will report any other findings regarding this subject area. Please do not hesitate to give me a call.

Sincerely,

Ferrell J. Carden  
President

FJC/st

## REFERENCE 26



# Georgia Department of Natural Resources

2 Martin Luther King Jr. Drive, SE, Suite 1066 East, Atlanta, Georgia 30334-1

Lonice C. Barrett, Commissioner

Environmental Protection Division

Carol A. Couch, Ph.D., Director

Office: 404/857-8831 FAX: 404/463-1111

## MEMORANDUM

**DATE:** July 29, 2004  
**TO:** Freddie L. Dunn, Jr. *FLD*  
**FROM:** Valincia Darby *VD*  
**SUBJECT:** Sampling Results  
BCX, Incorporated  
Waycross, Ware County  
GAR00003007

BCX, Inc. is a solid waste treatment facility that also notified as a used oil facility on December 11, 2001. The facility is located in downtown Waycross at the intersection of Francis Street and Folks Street. On June 14<sup>th</sup> Darrell Crosby, Manager of the EPD's Coastal District, informed the Generator Compliance Program of the June 2, 2004, release of 4,000-5,000 gallons of unknown liquid waste from a 10,000-gallon portable tank. The tank was leased by BCX for extra storage capacity. The Generator Compliance Program responded by initiating an investigation of the facility on June 23, 2004. This investigation consisted of the sampling of two locations. First, the background sample was obtained from a condensed, vegetated area upgradient from the release. The other sample was obtained from the spill site approximately two feet from the tank that had the release. The samples were placed on ice and transported to the EPD Laboratory on June 24<sup>th</sup> in order to be tested for metals, volatiles and semivolatiles.

The laboratory results indicate that the soil sample that was obtained from the area of the release contained .13 mg/kg of barium, but this was not enough to warrant a TCLP analysis. Analysis of the background sample detected levels of arsenic at 12 mg/kg, barium at 44 mg/kg, cadmium at 1.0 mg/kg, chromium at 15 mg/kg and lead at 110 mg/kg. Notification is required under the Hazardous Sites Response Act (HSRA) since the soil concentration for lead exceeded the 75 mg/kg HSRA trigger. Because of the amount of lead in the sample, TCLP extraction was warranted. The sample did not fail for TCLP, but barium was detected at .24 mg/L. The regulatory level for barium is 100 mg/L. The analytical results from the EPD Laboratory are attached.

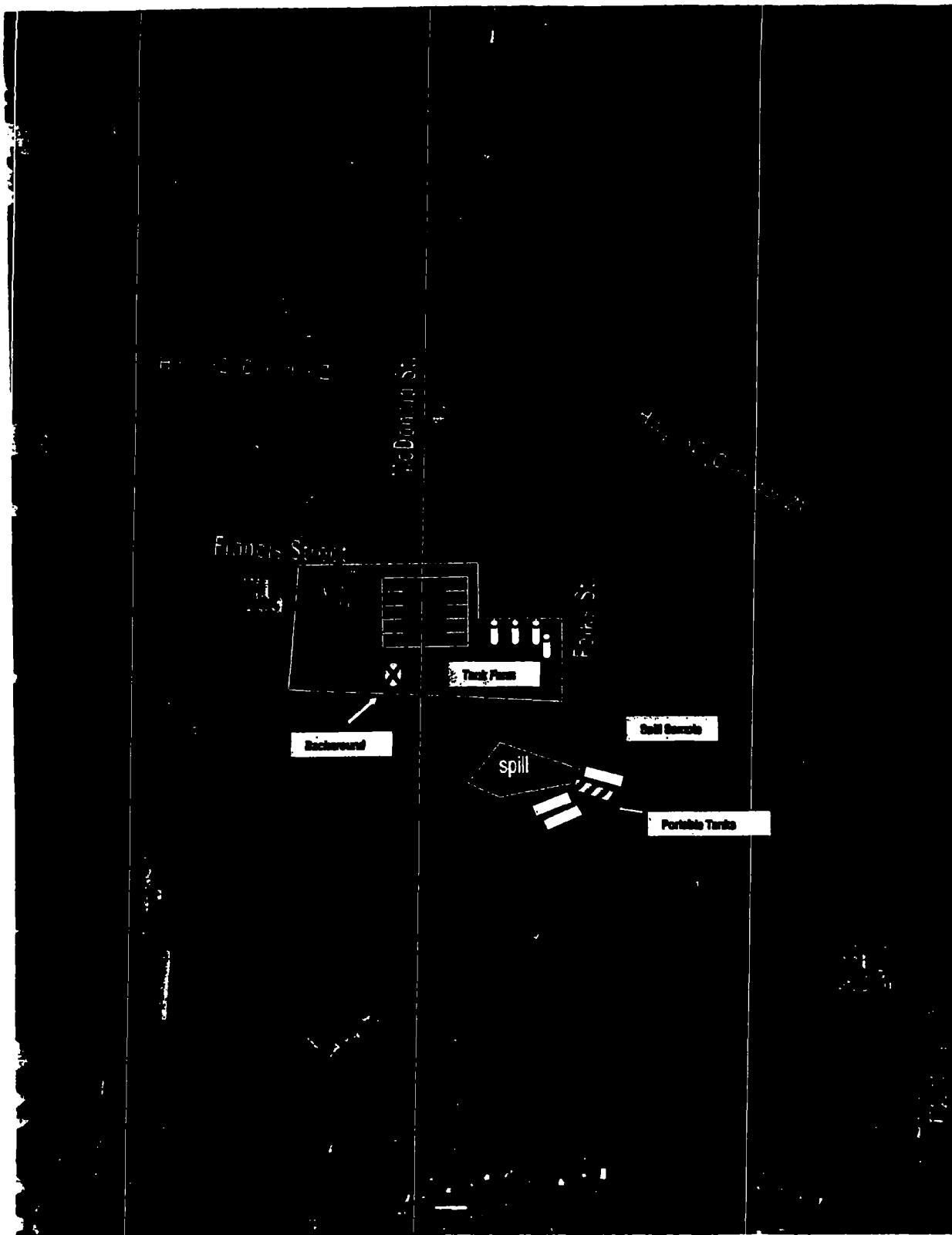
Attachments: Chart Summarizing Laboratory Results  
Aerial Photograph of sample locations  
Chain of Custody  
Laboratory Sample Request  
Laboratory Results (2)

c: Renée Hudson Goodley  
File: BCX, Incorporated, Waycross  
S:\drive\Darby\fy04\bcx sampling results memo1.doc

# BCX LABORATORY RESULTS

LABORATORY NUMBER	SAMPLE TYPE	PARAMETER ANALYZED	ANALYTICAL RESULTS	TCLP REGULATORY LIMIT	HSRA REGULATORY LIMIT
9773	Background soil sample	TCLP Metals Volatiles Semi-Volatiles	Arsenic – 12 mg/kg Barium – 44 mg/kg Cadmium – 1.0 mg/kg Chromium – 15 mg/kg Lead – 110 mg/kg	5.0 mg/L 100.0 mg/L 1.0 mg/L 5.0 mg/L 5.0 mg/L	20 mg/kg 1000 mg/kg 2.0 mg/kg 100 mg/kg 75 mg/kg
9774	Soil sample of waste	TCLP Metals Volatiles Semi-Volatiles	Barium – 13 mg/kg	100.0 mg/L	1000.0 mg/kg

1. The analytical results are totals presented in mg/kg.
2. The TCLP regulatory limits are presented in mg/L.
3. The HSRA regulatory limits are presented in mg/kg.
4. Lead exceeded the 75 mg/kg HSRA regulatory limit which trigger notification under the Hazardous Sites Response Act.



- Legend
- ⊗ Background Sample
  - ▨ Spill Tank

**HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)  
REQUEST FOR LABORATORY ANALYSIS**

Facility Name/Location: BCX Waycross Facility, Waycross Georgia  
 Sample Collected By/Phone: Valencia Darby, Freddie Dunn (404) 657-8881  
 Collection Date: 10/23/04 LAB No. \_\_\_\_\_  
 Date Submitted To Lab: 9773 10/24/04

HWMB LOG NUMBER: \_\_\_\_\_  
 Fill a separate Request Sheet for each sample tested

Analyte Requested By: Routine ☒ Other (specify) \_\_\_\_\_

Sample Description (check one)

Waste \_\_\_\_\_ Bulk/Sludges ☒  
 Ground Water \_\_\_\_\_ Surface Water \_\_\_\_\_ Sludge \_\_\_\_\_  
 Drinking Water Well \_\_\_\_\_

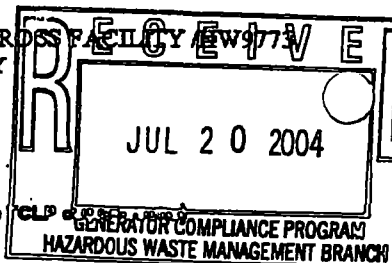
Concentration of Organics Requested (estimated): High \_\_\_\_\_ Low \_\_\_\_\_ Other (e.g., rinse water - specify) \_\_\_\_\_

Description Sample including Source and Known Proportions (e.g. P- \_\_\_\_\_

Applicable Hazardous Waste Codes (if known): \_\_\_\_\_

Special Procedures: \_\_\_\_\_

Sample ID AB53881  
 Location: HWMB  
 Description: BCX WAYCROSS FACILITY #9773  
 Collector: DUNN/DARBY  
 Site: \_\_\_\_\_



**ANALYSIS REQUIRED**

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total values indicate a positive TCLP result.)

**1. TOTAL ORGANICS**

Semi-Volatiles ☒  
 (Acid & Base Neutral)  
 Volatiles ☒  
 Pesticides \_\_\_\_\_  
 Herbicides \_\_\_\_\_  
 Organophosphorus Pesticides \_\_\_\_\_  
 PCBs \_\_\_\_\_  
 BTEX \_\_\_\_\_  
 Total Petroleum Hydrocarbons \_\_\_\_\_

Organics Special Requests: \_\_\_\_\_

**2. TOTAL METALS**

ICP Matrix Scan ☒  
 (Ag, As, Ba, Cd, Cr, Ni, Pb, Se)  
 Mercury \_\_\_\_\_  
 Metals Special Requests: \_\_\_\_\_

1 4 OZ JARS  
10 8 OZ JARS  
2 16 OZ JARS  
9 Encores

**3. TCLP ORGANICS If warranted**

Volatiles ☒  
 Semi-Volatiles (Acid & Base Neutral) ☒  
 Additional Specific Organics for TCLP: \_\_\_\_\_

Pesticides \_\_\_\_\_  
 Herbicides \_\_\_\_\_

**4. TCLP METALS ANALYSIS If warranted**

TCLP Metals (Ag, As, Ba, Cd, Cr, Ni, Pb, Se)  
 Mercury ☒

Additional Metals for TCLP: \_\_\_\_\_

**5. ADDITIONAL ANALYSIS REQUESTED (see list on back):** \_\_\_\_\_

Reviewed By (HWMB): F. Dunn  
 Approved By (HWMB): Valencia Darby

Date: 6/18/04 Reviewed By (EPD Lab): \_\_\_\_\_  
 Date: 9-18-04 Date (EPD Lab): \_\_\_\_\_

S:\drive\forms\Request for Lab Analysis.doc

**Preservative Confirmed**

Ph <2 \_\_\_\_\_ >12 \_\_\_\_\_  
 Temp 6.0



**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION**

455 14th Street NW, Atlanta, GA 30318-7900  
(404) 206-5269

**LABORATORY REPORT**

<b>TO: Georgia Env Protection Divison</b> <b>Hazardous Waste Mgmt Branch</b> <b>205 Butler St SE Suite 1154E</b> <b>Atlanta, GA 30334</b>		<b>Date Collected:</b> 6/23/2004 <b>Time Collected:</b> 12:57 <b>Sample Collector:</b> DUNN/DARBY <b>Chlorination:</b> <b>Sample Type:</b>
<b>Sample ID:</b> AE53881 <b>Facility Name:</b> Bcx Waycross Facility /Hw9773 <b>Site ID:</b> HWMB <b>Location ID:</b> <b>Location Descr:</b> HW9773 BACKGROUND	<b>Received By:</b> TNB <b>Date Received:</b> 6/24/2004 <b>Time Received:</b> 2:44 PM <b>Project:</b> HW <b>Reporting Date:</b> 7/16/2004 <b>Received Temperature:</b> 0.0 ° C	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS ANALYST	DATE	MCL or QC Range
<b>8260B In Soil QC Batch 68932</b>									
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260B 45		ug/Kg	5.8	KDD	6/28/2004	41 to 63.5
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260B 44		ug/Kg	5.8	KDD	6/28/2004	36 to 62.5
Toluene-d8(Surrogate QC Std.)			EPA 8260B 47		ug/Kg	5.8	KDD	6/28/2004	34.5 to 56.5
Fluorobenzene(Surrogate QC Std.)			EPA 8260B 43		ug/Kg	5.8	KDD	6/28/2004	35.5 to 58.5
Dichlorodifluoromethane	34668		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
Chloromethane	34418		EPA 8260B Not Detected		ug/Kg	12	KDD	6/28/2004	
Vinyl chloride	39175		EPA 8260B Not Detected		ug/Kg	2.3	KDD	6/28/2004	
Bromomethane	34413		EPA 8260B Not Detected		ug/Kg	12	KDD	6/28/2004	
Chloroethane	34311		EPA 8260B Not Detected		ug/Kg	12	KDD	6/28/2004	
Trichlorofluoromethane	34488		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
1,1-Dichloroethene	34501		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
Acetone	81552		EPA 8260B Not Detected		ug/Kg	120	KDD	6/28/2004	
1,1,2-Trichlorotrifluoroethane	81611		EPA 8260B Not Detected		ug/Kg	12	KDD	6/28/2004	
Iodomethane	77424		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
Carbon disulfide	77041		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
Methyl acetate	77032		EPA 8260B Not Detected		ug/Kg	12	KDD	6/28/2004	
Methylene chloride	34423		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
trans-1,2-Dichloroethene	34546		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
Methyl tert-butyl ether	48491		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
1,1-Dichloroethane	34496		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
Vinyl acetate	77057		EPA 8260B Not Detected		ug/Kg	58	KDD	6/28/2004	
2,2-Dichloropropane	77170		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
cis-1,2-Dichloroethane	77093		EPA 8260B Not Detected		ug/Kg	5.8	KDD	6/28/2004	
2-Butanone	81595		EPA 8260B Not Detected		ug/Kg	120	KDD	6/28/2004	

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Metals:	Mark Tolbert	404-206-5240
Organics:	Danny Reed	404-206-5252
GC Mass Spec:	Steve Bryan	404-206-5260
Microbiology:	Viola Reynolds	404-206-5210

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS ANALYST	DATE	MCL or QC Range
Bromochloromethane	77297		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Form	32108		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,1,1-Trichloroethane	34508		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Cyclohexane	81570		EPA 8260B	Not Detected	ug/Kg	12	KDD	6/28/2004	
Carbon tetrachloride	32102		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,1-Dichloropropene	77168		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Benzene	34030		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2-Dichloroethane	32103		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Trichloroethene	39180		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Methylcyclohexane			EPA 8260B	Not Detected	ug/Kg	12	KDD	6/28/2004	
1,2-Dichloropropene	34541		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Dibromomethane	77598		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Bromodichloromethane	32101		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
cis-1,3-Dichloropropene	34704		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
4-Methyl-2-pentanone	81598		EPA 8260B	Not Detected	ug/Kg	58	KDD	6/28/2004	
Toluene	34010		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
trans-1,3-Dichloropropene	34899		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,1,2-Trichloroethane	34511		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Tetrachloroethene	34475		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,3-Dichloropropane	77173		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
2-Hexanone	77103		EPA 8260B	Not Detected	ug/Kg	58	KDD	6/28/2004	
Dibromochloromethane	32105		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2-Dibromoethane	77851		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Chlorobenzene	34301		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,1,1,2-Tetrachloroethane	77582		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Ethylbenzene	34371		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Isopropylbenzene	77135		EPA 8260B	Not Detected	ug/Kg	12	KDD	6/28/2004	
Styrene	77135		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Bromoform	77128		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Isopropylbenzene	32104		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Bromobenzene	77223		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,1,2,2-Tetrachloroethane	81555		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2,3-Trichloropropane	34518		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
N-Propylbenzene	77443		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
2-Chlorotoluene	77224		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
4-Chlorotoluene	77275		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,3,5-Trimethylbenzene	77277		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
tert-Butylbenzene	77228		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2,4-Trimethylbenzene	77353		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
sec-Butylbenzene	77222		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,3-Dichlorobenzene	77350		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
p-Isopropyltoluene	34588		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,4-Dichlorobenzene	77358		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2-Dichlorobenzene	34571		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
n-Butylbenzene	34538		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2-Dibromo-3-chloropropane	77342		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	

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GC Mass Spec:	Steve Bryan	404-206-5280
Microbiology:	Viola Reynolds	404-206-5210

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYST	ANALYSIS DATE	MCL or QC Range
1,2,4-Trichlorobenzene	34551		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2,4-Trichlorobutadiene	38702		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Naphthalene	34696		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
1,2,3-Trichlorobenzene	77613		EPA 8260B	Not Detected	ug/Kg	5.8	KDD	6/28/2004	
Total Hydrocarbons			EPA 8260B	170 TIE	ug/Kg		KDD	6/28/2004	
Total Aldehydes			EPA 8260B	130 TIE	ug/Kg		KDD	6/28/2004	
<b>8270 Semi-Vol in SOIL QC Batch 68933</b>									
2-Fluorophenol(Surrogate QC Std.)			EPA 8270C	88	ug/kg (dw)	0.00	PS	7/1/2004	30 to 108
Phenol-d5(Surrogate QC Std.)			EPA 8270C	94	ug/kg (dw)	0.00	PS	7/1/2004	43 to 111
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	89	ug/kg (dw)	0.00	PS	7/1/2004	54 to 112
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	92	ug/kg (dw)	0.00	PS	7/1/2004	57 to 120
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	100	ug/kg (dw)	0.00	PS	7/1/2004	20 to 130
Terphenyl-d14(Surrogate QC Std.)			EPA 8270C	110	ug/kg (dw)	0.00	PS	7/1/2004	64 to 123
Pyridine	77045		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
n-Nitrosodimethylamine	34438		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
2-Picoline	77088		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Methylmethanesulfonate	73595		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Ethylmethanesulfonate	73571		EPA 8270C	Not Detected	ug/kg (dw)	2200	PS	7/1/2004	
Aniline	77089		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Benzaldehyde			EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Phenol	34694		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
bis(2-Chloroethyl)ether	34273		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
2-Chlorophenol	34586		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
1,3-Dichlorobenzene	34568		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
1,4-Dichlorobenzene	34571		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Benzyl Alcohol	77147		EPA 8270C	Not Detected	ug/kg (dw)	2200	PS	7/1/2004	
Chlorobenzene	34536		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
2-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Bis(2-Chloroisopropyl)ether	34283		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Acetophenone	81553		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
4-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
N-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Hexachloroethane	34396		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Nitrobenzene	34447		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
N-Nitrosopiperidine	73619		EPA 8270C	Not Detected	ug/kg (dw)	2200	PS	7/1/2004	
Isophorone	34408		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
2-Nitrophenol	34591		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
2,4-Dimethylphenol	34606		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Bis(2-Chloroethoxy)methane	34278		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Benzoic Acid	77247		EPA 8270C	Not Detected	ug/kg (dw)	5600	PS	7/1/2004	
2,4-Dichlorophenol	34601		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
1,2,4-Trichlorobenzene	34551		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
aa-Dimethyl-Phenethylamine	73564		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Naphthalene	34696		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
4-Chloroaniline	73529		EPA 8270C	Not Detected	ug/kg (dw)	2200	PS	7/1/2004	
2,6-Dichlorophenol	77541		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Hexachlorobutadiene	38702		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	

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Caprolactam			EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
N-isobutylamine	73609		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
4-Chloro-3-Methylphenol	34452		EPA 8270C	Not Detected	ug/kg (dw)	2200 PS	7/1/2004	
2-Methylnaphthalene	77416		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
1,2,4,5-Tetrachlorobenzene	77734		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Hexachlorocyclopentadiene	34388		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2,4,6-Trichlorophenol	34621		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2,4,5-Trichlorophenol	77687		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
1,1'-Biphenyl			EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2-Chloronaphthalene	34581		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
1-Chloronaphthalene			EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2-Nitroaniline	78142		EPA 8270C	Not Detected	ug/kg (dw)	5600 PS	7/1/2004	
Dimethylphthalate	34341		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Acenaphthylene	34200		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2,6-Dinitrotoluene	34626		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
3-Nitroaniline	78300		EPA 8270C	Not Detected	ug/kg (dw)	5600 PS	7/1/2004	
Acenaphthene	34205		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2,4-Dinitrophenol	34616		EPA 8270C	Not Detected	ug/kg (dw)	5600 PS	7/1/2004	
4-Nitrophenol	34646		EPA 8270C	Not Detected	ug/kg (dw)	5600 PS	7/1/2004	
Dibenzofuran	81302		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Pentachlorobenzene	77793		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2,4-Dinitrotoluene	34611		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
1-Naphthylamine	73600		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2-Naphthylamine	73601		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Diethylphthalate	34336		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
4-Chlorophenyl-Phenylether	34381		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
4-Nitroaniline	34641		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
4-Nitroaniline	30342		EPA 8270C	Not Detected	ug/kg (dw)	2200 PS	7/1/2004	
Diphenylamine	77579		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
4,6-Dinitro-2-Methylphenol	34657		EPA 8270C	Not Detected	ug/kg (dw)	5600 PS	7/1/2004	
N-Nitrosodiphenylamine	34433		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
1,2-Diphenylhydrazine	34346		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
4-Bromophenyl-phenylether	34636		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Phenacetin	62018		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Hexachlorobenzene	39700		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Atrazine	39033		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
4-Aminobiphenyl	77581		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Pentachlorophenol	39032		EPA 8270C	Not Detected	ug/kg (dw)	5600 PS	7/1/2004	
Pronamide	39080		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Pentachloronitrobenzene	81316		EPA 8270C	Not Detected	ug/kg (dw)	2200 PS	7/1/2004	
Phenanthrene	34461		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Anthracene	34220		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Carbazole	82618		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Di-n-Butylphthalate	39110		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Fluoranthene	34376		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	
Benzidine	39120		EPA 8270C	Not Detected	ug/kg (dw)	1100 PS	7/1/2004	

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mg/L: milligrams/liter  
mg/kg: milligrams/kilogram  
ug/kg: micrograms/kilogram  
ng/g: micrograms/gram  
ppm: parts per million  
ppb: parts per billion  
cfu/L: organisms/liter

<: less than  
MCL: Maximum Contaminant Level  
RL: Reporting Limit  
LSPC: result less than lower specification  
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Organics:	Danny Reed	404-206-5252
GC Mass Spec:	Steve Bryan	404-206-5260
Microbiology:	Viola Reynolds	404-206-5210



ANALYTE	PARAMETER		EPA		QUALIFIER	ANALYSIS			MCL or QC Range
	CODE	NOTE	METHOD	RESULT		RL	ANALYST	DATE	
Pyrene	34489		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
4-ethylaminoazobenzene	73558		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Butylbenzylphthalate	34292		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Benzo[a]anthracene	34526		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
3,3'-Dichlorobenzidine	34631		EPA 8270C	Not Detected	ug/kg (dw)	2200	PS	7/1/2004	
Chrysene	34320		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Bis(2-Ethylhexyl)phthalate	39100		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Di-n-octylphthalate	34596		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Benzo[b]fluoranthene	34230		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Benzo[k]fluoranthene	34242		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
7,12-Dimethylbenz(a)anthracene	73559		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Benzo[a]pyrene	34247		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
3-Methylcholanthrene	73591		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Dibenz(a,j)acridine			EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Indeno[1,2,3-cd]pyrene	34403		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Dibenz[a,h]anthracene	34556		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Benzo[g,h,i]perylene	34621		EPA 8270C	Not Detected	ug/kg (dw)	J 1100	PS	7/1/2004	
Alpha-BHC	39337		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Gamma-BHC	39340		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Beta-BHC	39338		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Delta-BHC	34259		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Heptachlor	39410		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Aldrin	39330		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Heptachlor Epoxide	39420		EPA 8270C	Not Detected	ug/kg (dw)	2800	PS	7/1/2004	
Endosulfan 1	34381		EPA 8270C	Not Detected	ug/kg (dw)	5600	PS	7/1/2004	
Dieldrin	39380		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
DE	39320		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Endosulfan 2	39390		EPA 8270C	Not Detected	ug/kg (dw)	2700	PS	7/1/2004	
Endosulfan 2	34356		EPA 8270C	Not Detected	ug/kg (dw)	5600	PS	7/1/2004	
p,p'-DDD	39310		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Endrin Aldehyde	34366		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Endosulfan Sulfate	34351		EPA 8270C	Not Detected	ug/kg (dw)	2800	PS	7/1/2004	
p,p'-DDT	39300		EPA 8270C	Not Detected	ug/kg (dw)	1100	PS	7/1/2004	
Hexadecanoic acid			EPA 8270C	1300 TIE	ug/kg (dw)		PS	7/1/2004	
Octadecanoic acid			EPA 8270C	4300 TIE	ug/kg (dw)		PS	7/1/2004	
Dibenzylbutyrolactone			EPA 8270C	1300 TIE	ug/kg (dw)		PS	7/1/2004	
Total Hydrocarbons			EPA 8270C	4400 TIE	ug/kg (dw)		PS	7/1/2004	
<b>QC Batch 689:2</b>									
Semi-Volatile TCLP Warranted?			EPA 1311	No	Yes/No	REG.LEV. PS		7/2/2004	
<b>QC Batch 689:4</b>									
Volatile TCLP Warranted?			EPA 1311	No	Yes/No	REG.LEV. KDD		7/1/2004	
<b>ICP Metals HW/ in TCLP Extracts QC Batch 69245</b>									
Silver	01077		EPA 6010B	Not Detected	mg/L	0.01	LA	7/14/2004	5
Arsenic	01002		EPA 6010B	Not Detected	mg/L	0.08	LA	7/14/2004	5
Barium	01007		EPA 6010B	0.24	mg/L	0.01	LA	7/14/2004	100
Cadmium	01027		EPA 6010B	Not Detected	mg/L	0.01	LA	7/14/2004	1
Chromium	01034		EPA 6010B	Not Detected	mg/L	0.02	LA	7/14/2004	5
<div> <div> ug/L: micrograms/liter  mg/L: milligrams/liter  mg/kg: milligrams/kilogram  ug/kg: micrograms/kilogram  ug/g: micrograms/gram  n: parts per million  p: parts per billion  ug/L: organisms/liter </div> <div> &lt;: less than  MCL: Maximum Contaminant Level  RL: Reporting Limit  LSPC: result less than lower specification  USPC: result greater than upper specification  TIE: Tentatively Identified or Estimated  VIOL: Violation (result exceeds MCL) </div> <div> <b>Laboratory Contacts:</b>  Inorganics: Pat Sammons 404-206-5239  Metals: Mark Tolbert 404-206-5240  Organics: Danny Reed 404-206-5252  GC Mass Spec: Steve Bryan 404-206-5260  Microbiology: Viola Reynolds 404-206-5210 </div> </div>									

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS ANALYST	DATE	MCL or QC Range
Lead	01051		EPA 6010B	Not Detected	mg/L	0.09	LA	7/14/2004	5
Selenium	01147		EPA 6010B	Not Detected	mg/L	0.19	LA	7/14/2004	1
ICP Metals HW in Solids QC Batch 68919									
Silver	01078		EPA 6010B	Not Detected	mg/kg (dw)	10	LA	7/7/2004	
Arsenic	01003		EPA 6010B	12	mg/kg (dw)	8.0	LA	7/7/2004	
Barium	01008		EPA 6010B	44	mg/kg (dw)	1.0	LA	7/7/2004	
Cadmium	01028		EPA 6010B	1.0	mg/kg (dw)	1.0	LA	7/7/2004	
Chromium	01029		EPA 6010B	15	mg/kg (dw)	2.0	LA	7/7/2004	
Lead	01052		EPA 6010B	110	mg/kg (dw)	9.0	LA	7/7/2004	
Selenium	01148		EPA 6010B	Not Detected	mg/kg (dw)	19	LA	7/7/2004	
QC Batch 68953									
Metals TCLP Warranted?			EPA 1311	yes	Yes/No	REG.LEV.AGV		7/13/2004	

COMMENTS: \$827CS- EPA 8270C- Sample had one internal standard compound, Perylene-d12 (41% response, limits 50-200%) with area response outside acceptable control limits. All associated compounds are flagged with a "J", for estimated values. LCS results were within acceptable control limits. 7-070204-274.

COMMENTS: ICPHS-6010B: ICP Metals - Reporting limits raised due to matrix interference.

COMMENTS: \$R\_ICPHS-6010B: ICP Metals - Matrix Spike had one analyte, Lead (146% recovery, limits 75-125%), with a percent recovery outside acceptable control limits due to high concentration of target analytes in sample. LCS results acceptable for all analytes. 2-070704-202

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HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)  
REQUEST FOR LABORATORY ANALYSIS

Facility Name/Location: BCX Waycross Facility, Waycross Georgia  
Sample Collected By/Phone: Valencia Darby, Freddie Dunn (404) 657-8824  
Collection Date: 6/23/04 LAB No. \_\_\_\_\_  
Date Submitted To Lab: 9774 6/24/04

HWMB LOG NUMBER: \_\_\_\_\_  
*File a separate Request Sheet for each sample point*

Analysis Needed By: Routine ☒ Other (specify) \_\_\_\_\_

Sample Description (check one)

Waste \_\_\_\_\_  
Ground Water \_\_\_\_\_

Soil/Sediment ☒  
Surface Water \_\_\_\_\_

Sludge \_\_\_\_\_  
Drinking Water Well \_\_\_\_\_

Concentration of Organics Requested (estimated): High \_\_\_\_\_ Low \_\_\_\_\_ Other (e.g., rhin blank - specify) \_\_\_\_\_

Describe Sample Including Source and Known Properties (e.g., \_\_\_\_\_)

Applicable Hazardous Waste Codes (if known) \_\_\_\_\_

Special Precautions: \_\_\_\_\_



Sample ID AE53883  
Location: HWMB  
Description: BCX WAYCROSS FACILITY /HW9774  
Collector: DUNN/DARBY  
Site: \_\_\_\_\_

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

Semi-Volatiles ☒  
(Acid & Base/Neutral)  
Volatiles ☒  
Pesticides  
Herbicides  
Organophosphorus Pesticides  
PCB  
BTEX  
Total Petroleum Hydrocarbon

Organics Special Requests: \_\_\_\_\_

2. TOTAL METALS

ICP Metals Scan ☒  
(Ag,As,Ba,Cd,Cr,Ni,Pb,Se)  
Mercury  
Metals Special Requests: \_\_\_\_\_

1 4 OZ JARS  
6 8 OZ JARS  
2 16 OZ JARS

4 Encores

3. TCLP ORGANICS *If warranted*

Volatiles ☒  
Semi-Volatiles (Acid & Base/Neutral) ☒  
Additional Specific Organics for TCLP: \_\_\_\_\_

Pesticides  
Herbicides

4. TCLP METALS ANALYSIS *If warranted*

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se)  
Mercury

☒ Additional Metals for TCLP: \_\_\_\_\_

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): \_\_\_\_\_

Reviewed By: (HWMB): F. J. Dunn

Approved By: (HWMB): Freddie Dunn

Date: 6/18/04

Date: 6/18/04

Reviewed By: (EPD Lab): \_\_\_\_\_

Date: (EPD Lab): \_\_\_\_\_

Preservative Confirmed

Ph <2 \_\_\_\_\_ >12 \_\_\_\_\_  
Temp 0-0

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION**

455 14th Street NW, Atlanta, GA 30318-7900  
(404) 206-5269

**LABORATORY REPORT**

<b>TO: Georgia Env Protection Division</b> <b>Hazardous Waste Mgmt Branch</b> <b>205 Butler St SE Suite 1154E</b> <b>Atlanta, GA 30334</b>		<b>Date Collected:</b> 6/23/2004 <b>Time Collected:</b> 14:05 <b>Sample Collector:</b> DUNN/DARBY <b>Chlorination:</b> <b>Sample Type:</b>
<b>Sample ID:</b> AE53883 <b>Facility Name:</b> Bcx Waycross Facility /Hw9774 <b>Site ID:</b> HWMB <b>Location ID:</b> <b>Location Descr:</b> HW9774 SPILL SITE	<b>Received By:</b> TNB <b>Date Received:</b> 6/24/2004 <b>Time Received:</b> 2:44 PM <b>Project:</b> HW <b>Reporting Date:</b> 7/16/2004 <b>Received Temperature:</b> 0.0 ° C	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS ANALYST	DATE	MCL or QC Range
<b>8260B in Soil QC Batch 68932</b>									
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260B 45		ug/Kg	5.5	KDD	6/28/2004	41 to 62
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260B 45		ug/Kg	5.5	KDD	6/28/2004	38 to 62
Trichloroethane-d8(Surrogate QC Std.)			EPA 8260B 45		ug/Kg	5.5	KDD	6/28/2004	34.5 to 56
fluorobenzene(Surrogate QC Std.)			EPA 8260B 44		ug/Kg	5.5	KDD	6/28/2004	35.5 to 56
Dibromodifluoromethane	34668		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Chloromethane	34418		EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
Vinyl chloride	39175		EPA 8260B	Not Detected	ug/Kg	2.2	KDD	6/28/2004	
Bromomethane	34413		EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
Chloroethane	34311		EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
Trichlorofluoromethane	34488		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,1-Dichloroethene	34501		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Acetone	81552		EPA 8260B	Not Detected	ug/Kg	110	KDD	6/28/2004	
1,1,2-Trichlorotrifluoroethane	81811		EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
Iodomethane	77424		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Carbon disulfide	77041		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Methyl acetate	77032		EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
Methylene chloride	34423		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
trans-1,2-Dichloroethene	34548		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Methyl tert-butyl ether	48491		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,1-Dichloroethane	34498		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Vinyl acetate	77057		EPA 8260B	Not Detected	ug/Kg	55	KDD	6/28/2004	
2,2-Dichloropropane	77170		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
cis-1,2-Dichloroethene	77093		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
2-Butanone	81595		EPA 8260B	Not Detected	ug/Kg	110	KDD	6/28/2004	

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ANALYTE	PARAMETER		EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS		MCL or QC Range
	CODE	NOTE					ANALYST	DATE	
Bromochloromethane	77297		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Bromomethane	32106		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,1,1-Trichloroethane	34506		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Cyclohexane	81570		EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
Carbon tetrachloride	32102		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,1-Dichloropropene	77168		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Benzene	34030		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,2-Dichloroethane	32103		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Trichloroethene	39180		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Methylcyclohexane			EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
1,2-Dichloropropane	34541		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Dibromomethane	77596		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Bromodichloromethane	32101		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
cis-1,3-Dichloropropene	34704		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
4-Methyl-2-pentanone	81596		EPA 8260B	Not Detected	ug/Kg	55	KDD	6/28/2004	
Toluene	34010		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
trans-1,3-Dichloropropene	34699		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,1,2-Trichloroethane	34511		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Tetrachloroethene	34475		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,3-Dichloropropane	77173		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
2-Hexanone	77103		EPA 8260B	Not Detected	ug/Kg	55	KDD	6/28/2004	
Dibromochloromethane	32105		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,2-Dibromoethane	77651		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Chlorobenzene	34301		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,1,1,2-Tetrachloroethane	77582		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Ethylbenzene	34371		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Isobutylene	77135		EPA 8260B	Not Detected	ug/Kg	11	KDD	6/28/2004	
Isobutylene	77135		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Styrene	77128		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Bromoform	32104		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Isopropylbenzene	77223		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Bromobenzene	81555		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,1,2,2-Tetrachloroethane	34516		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,2,3-Trichloropropane	77443		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
N-Propylbenzene	77224		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
2-Chlorotoluene	77275		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
4-Chlorotoluene	77277		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,3,5-Trimethylbenzene	77226		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
tert-Butylbenzene	77353		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,2,4-Trimethylbenzene	77222		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
sec-Butylbenzene	77350		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,3-Dichlorobenzene	34566		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
p-Isopropyltoluene	77356		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,4-Dichlorobenzene	34571		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,2-Dichlorobenzene	34536		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
n-Butylbenzene	77342		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,2-Dibromo-3-chloropropane			EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYST	ANALYSIS DATE	MCL or QC Range
1,2-Trichlorobenzene	34551		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,3-Dichlorobutadiene	38702		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
Naphthalene	34698		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
1,2,3-Trichlorobenzene	77813		EPA 8260B	Not Detected	ug/Kg	5.5	KDD	6/28/2004	
<b>8270 Semi-Vol in SOIL QC Batch 68933</b>									
2-Fluorophenol(Surrogate QC Std.)			EPA 8270C	85	ug/kg (dw)	0.00	PS	7/1/2004	30 to 108
Phenol-d5(Surrogate QC Std.)			EPA 8270C	91	ug/kg (dw)	0.00	PS	7/1/2004	43 to 111
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	85	ug/kg (dw)	0.00	PS	7/1/2004	54 to 112
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	91	ug/kg (dw)	0.00	PS	7/1/2004	57 to 120
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	110	ug/kg (dw)	0.00	PS	7/1/2004	20 to 130
Terphenyl-d14(Surrogate QC Std.)			EPA 8270C	120	ug/kg (dw)	0.00	PS	7/1/2004	64 to 123
Pyridine	77045		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
n-Nitrosodimethylamine	34438		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Picoline	77088		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Methylmethanesulfonate	73595		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Ethylmethanesulfonate	73571		EPA 8270C	Not Detected	ug/kg (dw)	2600	PS	7/1/2004	
Aniline	77089		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Benzaldehyde			EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Phenol	34694		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
bis(2-Chloroethyl)ether	34273		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Chlorophenol	34586		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1,3-Dichlorobenzene	34588		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1,4-Dichlorobenzene	34571		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Benzyl Alcohol	77147		EPA 8270C	Not Detected	ug/kg (dw)	2600	PS	7/1/2004	
1,2-Dichlorobenzene	34536		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Bis(2-Chloroisopropyl)ether	34283		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Benzenone	81553		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
4-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
N-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Hexachloroethane	34398		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Nitrobenzene	34447		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
N-Nitrosopiperidine	73619		EPA 8270C	Not Detected	ug/kg (dw)	2600	PS	7/1/2004	
Isophorone	34408		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Nitrophenol	34591		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2,4-Dimethylphenol	34606		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Bis(2-Chloroethoxy)methane	34278		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Benzoic Acid	77247		EPA 8270C	Not Detected	ug/kg (dw)	6800	PS	7/1/2004	
2,4-Dichlorophenol	34801		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1,2,4-Trichlorobenzene	34551		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
aa-Dimethyl-Phenethylamine	73584		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Naphthalene	34698		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
4-Chloroaniline	73529		EPA 8270C	Not Detected	ug/kg (dw)	2600	PS	7/1/2004	
2,6-Dichlorophenol	77541		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Hexachlorobutadiene	38702		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Caprolactam			EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
N-Nitroso-di-n-butylamine	73609		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	

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#### Laboratory Contacts:

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GC Mass Spec:	Steve Bryan	404-206-5260
Microbiology:	Viola Reynolds	404-206-5210

ANALYTE	PARAMETER		EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS		MCL or QC Range
	CODE	NOTE					ANALYST	DATE	
4-Chloro-3-Methylphenol	34452		EPA 8270C	Not Detected	ug/kg (dw)	2600	PS	7/1/2004	
2,3-Dichloronaphthalene	77416		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1,2,4,5-Tetrachlorobenzene	77734		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Hexachlorocyclopentadiene	34388		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2,4,6-Trichlorophenol	34621		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2,4,5-Trichlorophenol	77687		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1,1'-Biphenyl			EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Chloronaphthalene	34581		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1-Chloronaphthalene			EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Nitroaniline	78142		EPA 8270C	Not Detected	ug/kg (dw)	6600	PS	7/1/2004	
Dimethylphthalate	34341		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Acenaphthylene	34200		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2,6-Dinitrotoluene	34628		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
3-Nitroaniline	78300		EPA 8270C	Not Detected	ug/kg (dw)	6600	PS	7/1/2004	
Acenaphthene	34205		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2,4-Dinitrophenol	34616		EPA 8270C	Not Detected	ug/kg (dw)	6600	PS	7/1/2004	
4-Nitrophenol	34648		EPA 8270C	Not Detected	ug/kg (dw)	6600	PS	7/1/2004	
Dibenzofuran	81302		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Pentachlorobenzene	77793		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2,4-Dinitrotoluene	34611		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1-Naphthylamine	73600		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Naphthylamine	73601		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Diethylphthalate	34338		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Fluorene	34381		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
4-Chlorophenyl-Phenylether	34641		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
2-Nitroaniline	30342		EPA 8270C	Not Detected	ug/kg (dw)	2600	PS	7/1/2004	
2-Naphthylamine	77579		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
4,6-Dinitro-2-Methylphenol	34657		EPA 8270C	Not Detected	ug/kg (dw)	6600	PS	7/1/2004	
N-Nitrosodiphenylamine	34433		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
1,2-Diphenylhydrazine	34348		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
4-Bromophenyl-phenylether	34636		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Phenacetin	82018		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Hexachlorobenzene	39700		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Atrazine	39033		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
4-Aminobiphenyl	77581		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Pentachlorophenol	39032		EPA 8270C	Not Detected	ug/kg (dw)	6600	PS	7/1/2004	
Pronamide	39080		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Pentachloronitrobenzene	81316		EPA 8270C	Not Detected	ug/kg (dw)	2600	PS	7/1/2004	
Phenanthrene	34461		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Anthracene	34220		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Carbazole	82618		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Di-n-Butylphthalate	39110		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Fluoranthene	34376		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Benzidine	39120		EPA 8270C	Not Detected	ug/kg (dw) J	1300	PS	7/1/2004	
Pyrene	34469		EPA 8270C	Not Detected	ug/kg (dw) J	1300	PS	7/1/2004	
p-Dimethylaminoazobenzene	73558		EPA 8270C	Not Detected	ug/kg (dw) J	1300	PS	7/1/2004	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS ANALYST	DATE	MCL or QC Range
Benzophthalate	34292		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Benzo[a]anthracene	34528		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
3,4-Dichlorobenzidine	34631		EPA 8270C	Not Detected	ug/kg (dw)	J 2600	PS	7/1/2004	
Chrysene	34320		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Bis(2-Ethylhexyl)phthalate	39100		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Di-n-octylphthalate	34598		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Benzo[b]fluoranthene	34230		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Benzo[k]fluoranthene	34242		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
7,12-Dimethylbenz(a)anthracene	73559		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Benzo[a]pyrene	34247		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
3-Methylcholanthrene	73591		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Dibenz(a,h)acridine			EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Indeno[1,2,3-cd]pyrene	34403		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Dibenz[a,h]anthracene	34558		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Benzo(g,h,i)perylene	34621		EPA 8270C	Not Detected	ug/kg (dw)	J 1300	PS	7/1/2004	
Alpha-BHC	39337		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Gamma-BHC	39340		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Beta-BHC	39338		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Delta-BHC	34259		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Heptachlor	39410		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Aldrin	39330		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Heptachlor Epoxide	39420		EPA 8270C	Not Detected	ug/kg (dw)	3300	PS	7/1/2004	
Endosulfan 1	34381		EPA 8270C	Not Detected	ug/kg (dw)	6800	PS	7/1/2004	
Dieldrin	39380		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
p,p'-DDE	39320		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Endrin	39380		EPA 8270C	Not Detected	ug/kg (dw)	3200	PS	7/1/2004	
Endosulfan 2	34358		EPA 8270C	Not Detected	ug/kg (dw)	6800	PS	7/1/2004	
DDT	39310		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Endrin Aldehyde	34368		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Endosulfan Sulfate	34351		EPA 8270C	Not Detected	ug/kg (dw)	3300	PS	7/1/2004	
p,p'-DDT	39300		EPA 8270C	Not Detected	ug/kg (dw)	1300	PS	7/1/2004	
Hexadecanoic acid			EPA 8270C	2800 TIE	ug/kg (dw)		PS	7/1/2004	
Complex alcohols			EPA 8270C	25000 TIE	ug/kg (dw)		PS	7/1/2004	
(Z,Z)-9,12-Octadecadienoic acid			EPA 8270C	1800 TIE	ug/kg (dw)		PS	7/1/2004	
Total Hydrocarbons			EPA 8270C	6800 TIE	ug/kg (dw)		PS	7/1/2004	
Octadecanoic acid			EPA 8270C	1500 TIE	ug/kg (dw)		PS	7/1/2004	
<b>QC Batch 68952</b>									
Semi-Volatile TCLP Warranted?			EPA 1311	No	Yes/No	REG.LEV.PS		7/2/2004	
<b>QC Batch 68954</b>									
Volatile TCLP Warranted?			EPA 1311	No	Yes/No	REG.LEV.KDD		7/1/2004	
<b>ICP Metals HW In Solids QC Batch 68919</b>									
Silver	01078		EPA 8010B	Not Detected	mg/kg (dw)	10 LA		7/7/2004	
Arsenic	01003		EPA 8010B	Not Detected	mg/kg (dw)	80 LA		7/7/2004	
Barium	01008		EPA 8010B	13	mg/kg (dw)	10 LA		7/7/2004	
Cadmium	01028		EPA 8010B	Not Detected	mg/kg (dw)	10 LA		7/7/2004	
Chromium	01029		EPA 8010B	Not Detected	mg/kg (dw)	20 LA		7/7/2004	
Lead	01052		EPA 8010B	Not Detected	mg/kg (dw)	90 LA		7/7/2004	

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 Organics: Danny Reed 404-208-5252  
 GC Mass Spec: Steve Bryan 404-208-5280  
 Microbiology: Viola Reynolds 404-208-5210



ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER RL	ANALYSIS ANALYST	DATE	MCL or QC Range
Sum	01148		EPA 6010B	Not Detected	mg/kg (dw)	190	LA	7/7/2004	
atch 68953									
Metals TCLP Warranted?			EPA 1311	no	Yes/No	REG.LEV. AGV		7/13/2004	

COMMENTS: \$827CS- EPA 8270C- Sample had two internal standard compounds, Chrysene-d12 (48% response, limits 50-200%) and Perylene-d12 (32% response, limits 50-200%) with area responses outside acceptable control limits. All associated compounds are flagged with a "J", for estimated values. LCS results were within acceptable control limits. 7-070204-274.

COMMENTS: ICPHS-6010B: ICP Metals - Reporting limits raised due to matrix interference.

COMMENTS:

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Microbiology:	Viola Reynolds	404-206-5210

## REFERENCE 27

# Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, SE, Suite 1066 East, Atlanta, Georgia 30334-9000

Lonice C. Barrett, Commissioner

Environmental Protection Division

Carol A. Couch, Ph.D., Director

Office: 404/657-8831 FAX: 404/463-8676

July 20, 2004

Mr. Phil DeMarco  
Plant Manager  
BCX, Incorporated  
901 Francis Street  
Waycross, Georgia 31501

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

**SUBJECT: PROPOSED CONSENT ORDER**  
BCX, Incorporated  
Waycross, Ware County  
EPA Identification Number: GAR000030007

Dear Mr. DeMarco:

Please find enclosed a proposed Consent Order between the Georgia Environmental Protection Division ("EPD") and BCX, Incorporated concerning violations of Georgia's Rules of Hazardous Waste Management and Solid Waste Management. The proposed Order is based upon violations observed during inspections conducted at the facility by representatives of the Division on April 23, and June 23, 2004.

The proposed Consent Order offers an amicable disposition of EPD's allegations by complying with certain conditions and paying a monetary settlement, as specified in the proposed Order. We hope to resolve this matter by **August 20, 2004**. If you agree, please sign and date the proposed Consent Order **under the company's name** and return it to the following address by **August 20, 2004**:

**Mr. Freddie L. Dunn, Jr.**  
**2 Martin Luther King Jr. Drive, S.E., Suite 1066 East**  
**Atlanta, Georgia 30334-9000**

If you have any questions, please contact Mr. Dunn at (404) 657-8831 before **August 20, 2004**. You will be provided a copy of the Consent Order after the Director signs it. Thank you in advance for your cooperation in this matter.

Sincerely,



Jennifer R. Kaduck

Chief

Hazardous Waste Management Branch

JRK/VRD/jkl

Enclosures: (2)

c: Renée Hudson Goodley

✓File: BCX, Incorporated, Waycross

S:\RDRIVE\Darby\04\BCX CO Letter.doc

## REFERENCE 28

**LEBOEUF, LAMB, GREENE & MACRAE**  
L.L.P.

A LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

NEW YORK  
WASHINGTON, D.C.  
ALBANY  
BOSTON  
HARRISBURG  
HARTFORD  
HOUSTON  
JACKSONVILLE  
LOS ANGELES  
NEWARK  
PITTSBURGH  
SALT LAKE CITY  
SAN FRANCISCO

50 NORTH LAURA STREET  
SUITE 2800  
JACKSONVILLE, FL 32202-3650  
(904) 354-8000  
FACSIMILE: (904) 353-1673

E-MAIL ADDRESS: DRICHARD@LLGM.COM  
WRITER'S DIRECT DIAL: (904) 630-5342  
WRITER'S DIRECT FACSIMILE: (904) 366-1560

LONDON  
(A LONDON-BASED  
MULTINATIONAL PARTNERSHIP)

PARIS  
BRUSSELS  
JOHANNESBURG  
(PTY) LTD.  
MOSCOW  
RIYADH  
(AFFILIATED OFFICE)  
BISHKEK  
ALMATY  
BEIJING

August 19, 2004

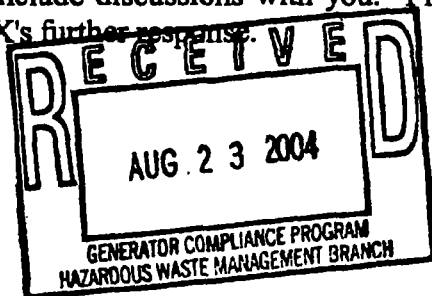
Mr. Freddie L. Dunn, Jr.  
Georgia Department of Natural Resources  
2 Martin Luther King, Jr. Drive, SE, Suite 1066 East  
Atlanta, Georgia 30334-9000

Re: Proposed Consent Order  
BCX, Incorporated  
Waycross, Ware County  
EPA Identification Number: GAR0000300007

Dear Mr. Dunn:

We are very recently in receipt of your letter and proposed Consent Order related to the BCX facility in Waycross, Georgia. BCX has not yet located appropriate local counsel to assist them. However, since we represent them with regard to federal EPA issues, they have asked that we request additional information regarding the calculation of the proposed settlement figure. Please provide your rationale and any matrix information which you have relied upon.

I am advised that the owners of the subject facility are working hard to address your concerns and look forward to resolving all outstanding issues as soon as possible. Part of that effort will include discussions with you. Please forward the requested information for review prior to BCX's further response.



Sincerely,

Daniel D. Richardson

DDR/dw

cc: BCX Inc.

**RECORD OF TELEPHONE CONVERSATION  
GENERATOR COMPLIANCE PROGRAM**

**DATE:** October 26, 2004  
**TIME:** 4:08 pm

**FILE:** BCX Waycross  
**EPA ID:** GAR000030007

**SPOKE WITH:** Mr. Daniel D. Richardson  
**TITLE:** Attorney with Lewis, Longman and Walker  
**ADDRESS:** 9428 Baymeadows Road  
**CITY:** Jacksonville  
**STATE/ZIP:** Florida - 32256  
**TELEPHONE NUMBER:** (904) 737-2020

**SUBJECT:** BCX Consent Order

**SUMMARY OF CALL:** I called Mr. Richardson in response to his letter dated August 19, 2004. In this letter he was asking how EPD determined the \$50,000.00 penalty amount. I explained to him the two violations were both maximum for deviation and potential for harm on the EPA matrix. Mr. Richardson no longer works for LeBoeuf, Lamb, Greene & MacRae. He now works for Lewis, Longman and Walker. I told him that we have not yet received the laboratory data from EPA. I indicated that once we get the data we will have an idea what is being stored at the site.

**ACTION REQUIRED:** Get another response from the company. Wait on laboratory results from EPA.

**SIGNATURE:** *Freddie L. Dennis, Jr.*

**FOLLOW-UP RESPONSES/ADDITIONAL COMMENTS:**

On November 3, 2004, I called Mr. Richardson back and asked that he submit some kind of proposal with his new letterhead and to get the discussion about the facility going and how they plan to resolve the issues at the site. I told him we just have to wait on laboratory data before we can conclude what is being stored on-site.

**SIGNATURE:**

**File:** S:\Rdrive\Freddie\Record of Telephone Conversation 10/26/2004.doc



# LEWIS, LONGMAN & WALKER, P.A.

ATTORNEYS AT LAW

HELPING SHAPE  
FLORIDA'S FUTURE®

www.llw-law.com

REPLY TO JACKSONVILLE

November 10, 2004

Mr. Freddie L. Dunn, Jr.  
Unit Coordinator  
Hazardous Waste Compliance Unit  
Georgia Department of Natural Resources  
2 Martin Luther King Jr. Drive, SE  
Suite 1066  
Atlanta, Georgia 30334-9000

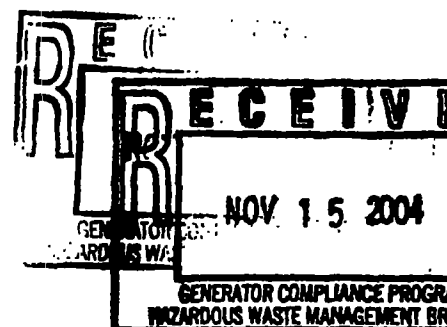
Re: BCX, Inc., Waycross, Georgia

Dear Mr. Dunn:

BCX, Inc. has received your proposed Consent Order with regard to its facility in Waycross, Georgia. We have spoken to you about this matter several times and appreciate your indulgence as we attempt to work out a viable plan of action. We are currently waiting on the results of the tank sampling so that we can estimate the cost of removing the material currently on site. Because the facility has no current income, any resources for effectuating an overall resolution must be very carefully managed.

As you know, the BCX facility is in good condition and represents a sizable investment. It appears that any plan must result in bringing the facility back on line. It is possible that additional pretreatment equipment may be necessary in order to meet the concerns of the POTW and to further assure that the POTW is successful in meeting its discharge requirements. As a general concept, we would like you to consider a term of the Consent Order which would give BCX, Inc. credit for dollars spent on new pretreatment equipment against its penalty to your Department.

There is one important assumption in the Consent Order which is in error. In paragraph D it states that the City of Waycross terminated BCX's connection to the sewer system. That is not really the case. BCX felt that during its dialogue with the POTW, it



*Bradenton*  
1001 3rd Avenue West  
Suite 670  
Bradenton, FL 34205  
(941) 708-4040  
Fax: (941) 708-4024

*Jacksonville*  
9428 Baymeadows Road  
Suite 625  
Jacksonville, FL 32256  
(904) 737-2020  
Fax: (904) 737-3221

*Tallahassee*  
Post Office Box 10788 (32302)  
125 South Gadsden Street  
Suite 300  
Tallahassee, FL 32301  
(850) 222-5702  
Fax: (850) 224-9242

*West Palm Beach*  
1700 Palm Beach Lakes Blvd.  
Suite 1000  
West Palm Beach, FL 33401  
(561) 640-0820  
Fax: (561) 640-8202

Freddie L. Dunn, Jr.  
November 10, 2004  
Page 2

did not want to be accused of discharging and causing an upset to the POTW. Therefore, BCX unilaterally halted its discharges. The POTW did not terminate BCX's right to discharge under its pretreatment permit. In fact, the POTW has never done so. We would suggest that this fact impacts the clarity of the alleged violations in the Consent Order. We would suggest the facility continues to be exempt from permitting under the Solid Waste Management Act because, in the final analysis, it still has the permitted right to discharge to the POTW. We would ask you to ponder that concept as we move forward with discussions.

As I have indicated to you in our telephone conferences, my clients are attempting to develop a business plan to resume full operations in Waycross. This is a complex task. A bank, potential investors, the City and your Department are all parts to the puzzle. There is no lack of motivation to find a solution. Immediately after we receive the characterization of the material in the tanks, my clients will confer with consultants to review the possibilities. We look forward to working closely with you to resolve your concerns as part of the overall plan of action. Let's plan to talk again about two weeks after the analytical is received.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dan Richardson", written in black ink.

Daniel D. Richardson

DDR:lt



## REFERENCE 29

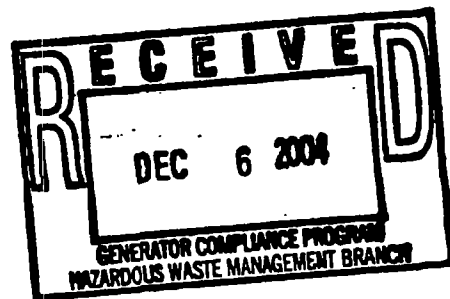


**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

29

Mr. Mark Smith, Chief  
Hazardous Waste Management Branch  
Environmental Protection Division  
Department of Natural Resources  
205 Butler Street  
Suite 1154, East Tower  
Atlanta, GA 30334



SUBJ: Seven Out LLC Site, Waycross, Georgia

Dear Mr. Smith:

The U.S. Environmental Protection Agency's Emergency Response and Removal Branch (ERRB) conducted a site investigation at the above referenced site for potential removal action eligibility under the National Contingency Plan (NCP). The site investigation was conducted at the request of the State of Georgia.

The Seven Out Site is located in Waycross, Ware County, Georgia. The facility operated as an industrial wastewater treatment facility for approximately two years. The Site has 41 storage/treatment tanks with a combined capacity of approximately 450,000 gallons. After treatment, the wastewater was discharged to an on-site City of Waycross publicly owned treatment works (POTW) hook-up. Due to the failure to meet discharge limits throughout its operation, the facility received eight enforcement letters from the City of Waycross. On March 1, 2004, the City of Waycross disconnected the facility's POTW connection.

On August 23, 2004, On-Scene Coordination Terry Stilman conducted a removal assessment at the Site. Almost all of the tanks were found to be full, including 4 temporary 20,000 gallon tanks. Thirty-three of the facility's tanks were sampled for fixed lab analysis. Several soil samples were also taken from stained areas. Analytical results were found as high as 270 mg/L for acetone and 1 mg/L for benzene in the tanks, and 151 mg/kg for arsenic in the soils.

While this Site could be considered a high priority for removal eligibility, the State of Georgia is presently trying to resolve all of the issues related to the contents of the tanks and the future operation of the facility. A final determination by EPA of removal eligibility will therefore await the results of the State of Georgia's negotiations with the facility owner. Should the State of Georgia decide to refer this Site to EPA, a final determination of removal eligibility will be made by the OSC assigned to the Site.

If you have any questions concerning ERRB's determination, please contact Terry Sullivan, OSC, at (404) 562-8748, or Matt Taylor, Chief of the Removal Operations Section, at (404) 562-8759.

Sincerely,

A handwritten signature in cursive script, appearing to read "A. Shane Hitchcock".

A. Shane Hitchcock, Chief  
Emergency Response & Removal Branch

Attachment

cc: Fred Dunn, GA-EPD  
Stacey Haire, EPA-EAD  
Mike Norman, EPA-Site Evaluation Section

## REFERENCE 30

# **Georgia Department of Natural Resources**

2 Martin Luther King, Jr. Drive, SE, Suite 1066 East, Atlanta, Georgia 30334-9000

Noel Holcomb, Commissioner  
Environmental Protection Division

Carol A. Couch, Ph.D., Director

Office: 404/657-8831 FAX: 404-463-6676

January 21, 2005

Mr. Shane Hitchcock  
Emergency Response and Removal Branch  
U. S. EPA, Region IV  
61 Forsyth Street, SW, 11<sup>th</sup> Floor  
Atlanta, Georgia 30303

**SUBJECT: BCX Waycross Facility Referral**  
901 Francis Street  
Waycross, Ware County  
EPA Identification Number: GAR000030007

Dear Mr. Hitchcock:

The Georgia Environmental Protection Division (EPD) requests EPA's assistance with the remediation of the BCX Waycross Facility in Ware County. This Waycross facility notified EPD as a used oil processor, but operated a wastewater treatment plant that failed to meet the discharge limits for the City of Waycross' Publicly Owned Treatment Works (POTW). On March 1, 2004, the City of Waycross disconnected the facility's connection to the POTW, and the facility has not been in operation since that time. The facility has been storing their acids and bases used for treating wastewater along with their processed and unprocessed wastewaters in storage and process tanks on-site. When the facility discontinued processing wastewaters, it ended up with an overflow of incoming wastewater, which had to be stored in four rented portable/temporary tanks that were placed on the adjoining property owned by CSX. As a result of storing hazardous waste and unidentified wastewaters, the facility has been out of compliance since March of 2004. The owner/operators were sent a proposed Consent Order on July 20, 2004, but have not yet entered into a Consent Order agreement with the EPD.

EPD requested your assistance to sample the waste in tanks and any suspected contaminated soil at the site during the summer. On August 23 to 26, 2004, your contractor, TetraTech, sampled 41 storage and process tanks and stained soil at the site and had them analyzed. The analysis indicated that some hazardous waste constituents were present in some of the tanks and in the soil at the site. The acid and alkaline materials stored in tanks at the site are corrosive (D002) and are considered to be a RCRA hazardous waste. EPD is concerned about this site because this facility has open tanks completely full of waste that may overflow at any time, there are floor drains and vats that are partially covered to prevent someone from falling into them, and there is limited security on-site with no limited access to the site. This site is a potential threat to the local community and the environment.

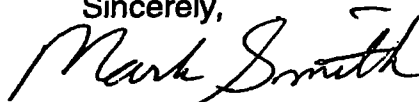
Letter to Mr. Shane Hitchcock  
January 21, 2005  
Page 2

Our State Superfund Program does not have sufficient money at this time to remove the waste or provide security for this site due to State budget cuts and limited staff resources. Now that the wastes at the site have been characterized, we believe that all of the wastes at the site need to be removed as soon as possible and security provided for this site.

Since EPA is currently working to remediate similar problems found at the corporate office in Jacksonville, Florida, and has been working with BCX's legal and corporate personnel regarding similar environmental issues as determined at the Waycross site, EPA's Emergency Response and Removal Branch is in a better position to quickly resolve the problems at this site.

Thank you in advance for your cooperation in this matter. If you need any additional information, please have your staff contact Mr. Freddie L. Dunn, Jr. or Ms. Renée Hudson Goodley, Manager of the Generator Compliance Program at (404) 657-8831.

Sincerely,



Mark Smith  
Chief

Hazardous Waste Management Branch

MS/FLD/fld

---

~~File: BCX Waycross Facility (Seven Out LLC), Waycross~~  
EPA Correspondence - FY2005  
Facility Referrals - FY2005

S:\drive\Freddie\BCX Seven Out Waycross ERRB Letter.doc

## REFERENCE 31

**United States Environmental Protection Agency  
Region IV  
POLLUTION REPORT**

**Date:** Thursday, April 07, 2005  
**From:** Terry Stilman, On-Scene Coordinator

**Subject:** Emergency Response  
Seven Out  
901 Frances Street, Waycross, GA

<b>POLREP No.:</b>	2	<b>Site #:</b>	A4FY
<b>Reporting Period:</b>	1/27 - 4/7	<b>D.O. #:</b>	
<b>Start Date:</b>	1/27/2005	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	1/27/2005	<b>Response Type:</b>	Emergency
<b>Completion Date:</b>		<b>NPL Status:</b>	Non NPL
<b>CERCLIS ID #:</b>	GAN000407811	<b>Incident Category:</b>	Removal Action
<b>RCRIS ID #:</b>		<b>Contract #</b>	

**Site Description**

The Site is located at 901 Francis Street, Waycross, Georgia. The past operational history of the site involved the storage and treatment of industrial waste water. Most of the tanks are full of waste water from the operation. The tanks are located adjacent to a public road in an area frequented by area residents and workers. Before the start of EPA's action some of the tanks were uncovered and overflowing. Access to the Site is unrestricted.

EPA arrived on-scene to reduce the threats posed by the Site through the following actions:

Emergency stabilization of the secondary containment and the tanks which have been observed to be overflowing;

Sampling of waste from tanks and secondary containment to determine the specific nature of the contents;

Bulking of waste materials and disposal off site;

Determination of the extent of sludge and soil contamination and disposal off-site;

Movement and/or removal of tanks to allow for the safe clean-up of the Site.

**Current Activities**

During the week of 28-JAN-05, EPA arrived on-scene to stabilize the leaking tanks of waste and overflowing secondary containment. Approximately 60,000 gallons of waste water was pumped to 3 temporary tanks.

After procurement of off-site disposal facilities, EPA remobed to the Site on 28-MAR-05 to remove all pumpable waste from the facility's tanks. Approximately 280,000 gallons of waste water has been shipped off-site for disposal to date.



On 04-APR-05, drums of waste found on-site were sampled in anticipation of disposal off-site.

#### Planned Removal Actions

Off-site disposal of pumpable waste to continue.

All tanks will be temporarily covered to prevent further accumulation of rainwater mixed with the sludge remaining in the tanks.

Three of the four temporary tanks found outside of temporary containment during EPA's initial assessment will be deconned and released to the tanks' owner. One tank cannot be deconned due to the large quantity of sludge. Each tank held approximately 20,000 gallons of waste water.

Drummed waste will be disposed of off-site pending results of analysis.

#### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$225,000.00	\$128,098.00	\$96,902.00	43.07%
USCG- GST	\$5,000.00	\$3,000.00	\$2,000.00	40.00%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$230,000.00</b>	<b>\$131,098.00</b>	<b>\$98,902.00</b>	<b>43.00%</b>

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

[epaosc.net/sevenout](http://epaosc.net/sevenout)

## REFERENCE 32

**United States Environmental Protection Agency  
Region IV  
POLLUTION REPORT**

**Date:** Monday, April 18, 2005  
**From:** Terry Stilman, On-Scene Coordinator  
**Subject:** Emergency Response  
Seven Out  
901 Frances Street, Waycross, GA

<b>POLREP No.:</b>	3	<b>Site #:</b>	A4FY
<b>Reporting Period:</b>	4/05/05 - 4/13/05	<b>D.O. #:</b>	
<b>Start Date:</b>	1/27/2005	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	1/27/2005	<b>Response Type:</b>	Emergency
<b>Completion Date:</b>		<b>NPL Status:</b>	Non NPL
<b>CERCLIS ID #:</b>	GAN000407811	<b>Incident Category:</b>	Removal Action
<b>RCRIS ID #:</b>		<b>Contract #</b>	

**Site Description**

The Site is located at 901 Francis Street, Waycross, Georgia. The past operational history of the site involved the storage and treatment of industrial waste water. Most of the tanks are full of waste water from the operation. The tanks are located adjacent to a public road in an area frequented by area residents and workers. Before the start of EPA's action some of the tanks were uncovered and overflowing. Access to the Site is unrestricted.

EPA arrived on-scene to reduce the threats posed by the Site through the following actions:

Emergency stabilization of the secondary containment and the tanks which have been observed to be overflowing;

Sampling of waste from tanks and secondary containment to determine the specific nature of the contents;

Bulking of waste materials and disposal off site;

Determination of the extent of sludge and soil contamination and disposal off-site;

Movement and/or removal of tanks to allow for the safe clean-up of the Site.

**Current Activities**

EPA, ERRS and the USCG-GST onsite. USCG-GST providing safety and contractor monitoring.

Waste Water removal and sampling of drums and small tanks continue.

Approximately 292,000 gallons of waste water has been shipped off-site for disposal to date.

All three frac tanks used by EPA to temporarily hold waste water have been deconned and returned to Baker tanks. Three out of the four frac tanks initially found on-site have been emptied of waste

water and returned to Baker tanks. One frac tank has approximately five feet of hardened sludge and remains on-site.

All drums and small tanks have been sampled and haz-catted. Disposal samples have been submitted for laboratory analysis. Disposal to be determined by the results of the analytical.

Four 5,000 gallon poly tanks of material used by Seven Out for the treatment of waste water have been sampled and submitted to the original chemical supplier for possible return of the product.

The Site was demobbed on April 13, 2005 to await the results of analysis.

#### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$225,000.00	\$128,098.00	\$96,902.00	43.07%
USCG- GST	\$5,000.00	\$3,000.00	\$2,000.00	40.00%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$230,000.00</b>	<b>\$131,098.00</b>	<b>\$98,902.00</b>	<b>43.00%</b>

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

[epaossc.net/sevenout](http://epaossc.net/sevenout)

## REFERENCE 33

**United States Environmental Protection Agency  
Region IV  
POLLUTION REPORT**

**Date:** Friday, June 10, 2005  
**From:** Terry Stilman, On-Scene Coordinator

**Subject:** Final POLREP  
Seven Out  
901 Frances Street, Waycross, GA

<b>POLREP No.:</b>	4	<b>Site #:</b>	A4FY
<b>Reporting Period:</b>	1/27/05 - 6/10/05	<b>D.O. #:</b>	
<b>Start Date:</b>	1/27/2005	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	1/27/2005	<b>Response Type:</b>	Emergency
<b>Completion Date:</b>		<b>NPL Status:</b>	Non NPL
<b>CERCLIS ID #:</b>	GAN000407811	<b>Incident Category:</b>	Removal Action
<b>RCRIS ID #:</b>		<b>Contract #</b>	

**Site Description**

The Site is located at 901 Francis Street, Waycross, Georgia. The past operational history of the site involved the storage and treatment of industrial waste water. Most of the tanks were full of waste water from the operation. The tanks are located adjacent to a public road in an area frequented by area residents and workers. Before the start of EPA's action some of the tanks were uncovered and overflowing. Access to the Site is unrestricted.

On 27 January 2005, OSC Stilman mobilized to the Seven Out Tank Site to conduct a removal site evaluation, based on a request from the State of Georgia, Department of Natural Resources, Environmental Protection Division (EPD) and the City of Waycross. On 26 January 2005, both EPD and the City of Waycross contacted EPA regarding an overflow of facility tanks, causing wastes from the tanks to overflow into secondary containment. Secondary containment was also reportedly overflowing. While conducting a reconnaissance of the site, OSC Stilman discovered approximately forty-one abandoned tanks on the site, located near a public road bordering the site. Thirty-seven of the tanks are located within a low concrete secondary containment wall that was overflowing. Four of the tanks were outside of secondary containment. The secondary containment was overflowing with a mixture of rainwater and waste (waste water) from uncovered tanks. The waste water was flowing over the secondary containment wall into a drainage ditch. The total amount of waste water in the tanks were estimated to be 450,000 gallons.

The Seven Out facility notified EPD as a used oil processor, but operated a wastewater treatment plant that failed to meet the discharge limits for the City of Waycross's Publicly Owned Treatment Works (POTW). On March 1, 2004, the City of Waycross disconnected the facility's connection to the POTW, and the facility has not been in operation since that time. When the facility discontinued processing wastewaters, it ended up with an overflow of incoming wastewater, which had to be stored in four rented portable/temporary tanks that were placed on the adjoining property owned by CSX. At the time of EPA's assessment those tanks were still on-site. The EPD considered the facility to be incorrectly storing hazardous waste and out of compliance with State of Georgia regulations.

During the week of August 23, 2004, EPA sampled the tanks, at the request of the EPD. Acetone, benzene, sulfuric acid, sodium hydroxide and other hazardous constituents were found. On 27 January 2005, OSC Stilman found the facility abandoned. Facility buildings were also found open and unlocked. One facility building housed what appeared to be a small testing laboratory.

EPA arrived on-scene to reduce the threats posed by the Site through the following actions:

Emergency stabilization of the secondary containment and the tanks which had been observed to be overflowing;

Sampling of waste from tanks and secondary containment to determine the specific nature of the contents;

Bulking of waste materials and disposal off site;

Determination of the extent of sludge and soil contamination and disposal off-site;

Movement and/or removal of tanks to allow for the safe clean-up of the Site.

#### **Current Activities**

EPA, ERRS and the USCG-GST arrived onsite to stabilize the Site. USCG-GST providing safety and contractor monitoring.

Based on the analytical information collected by EPA's START contractor, waste water from the on-site tanks was shipped off-site.

Approximately 350,000 gallons of waste water was shipped off-site for disposal.

All three frac tanks used by EPA to temporarily hold waste water were deconned and returned to Baker tanks. Three out of the four frac tanks initially found on-site have been emptied of waste water and returned to Baker tanks. One frac tank has approximately five feet of hardened sludge and remains on-site. Of the tanks remaining, all contain some amount of sludge. All pumpable waste has been removed.

All drums and small tanks have been sampled and haz-catted. Based on laboratory analysis, the containers were consolidated and the waste disposed of off-site.

In addition approximately 3,000 gallons of sodium hydroxide and 3,000 gallons of ferrous chloride have been shipped off-site for recycling. Four 5,000 gallon poly tanks of low and high pH material used by Seven Out for the treatment of waste water remain on-site.

The Site was demobbed on June 10, 2005.

#### **Planned Removal Actions**

EPA Fund lead activities have been completed.

#### **Next Steps**

A determination will be made as to the appropriate mechanism to address the remaining Site wastes. An additional removal action may be necessary to address the sludge in the tanks and the reactive materials still stored on Site.

**Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$225,000.00	\$211,257.00	\$13,743.00	6.11%
USCG- GST	\$5,000.00	\$3,000.00	\$2,000.00	40.00%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$230,000.00</b>	<b>\$214,257.00</b>	<b>\$15,743.00</b>	<b>6.84%</b>

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

**Disposition of Wastes**

Waste Stream	Quantity	Manifest #	Disposal Facility
Corrosive (Acidic) D002, D007	1100 gallons	1	Clean Harbors, Baltimore, MD
Corrosive (Basic) D002	275 gallons	1	Clean Harbors, Baltimore, MD
Potassium Permanganate, D001	55 gallons	1	Clean Harbors, Baltimore, MD
Bisulfites D002	55 gallons	1	Clean Harbors, Baltimore, MD
Hydrogen Peroxide D001	55 gallons	1	Clean Harbors, Baltimore, MD
Oxidizing Liquid D001	55 gallons	1	Clean Harbors, Baltimore, MD
Non-Haz Waste Water	352,600 gallons		Water Recovery, Jacksonville, FL and Onyx Pecan Road Landfill, Valdosta, GA

[www.epaosc.org/sevenout](http://www.epaosc.org/sevenout)



## REFERENCE 34

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<b>4.0</b>	<b>Health and Safety</b>
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<b>6.0</b>	<b>Financial Summary</b>
<b>Appendix A</b>	<b>Detail Cost Breakdown</b>
<b>Appendix B</b>	<b>Waste Disposal Information</b>

## **1.0 INTRODUCTION**

WRS was issued Task Order F4-0032 under ERRS contract number S4-68-02-06 on January 27, 2005, to mobilize personnel, materials, and equipment to complete the requested Task Order Statement of Work activities at this facility that operated as an industrial wastewater treatment plant until March 2004. The facility property has 37 storage/treatment tanks and four frac tanks with a combined capacity of over 450,000 gallons. Waste water was previously treated in the batch mode process with chemicals normally stored on site consisting of sodium hydroxide, aluminum sulfate, ferric acid, and sulfuric acid. The Task Order Statement of Work requested the liquids in the AST's and containment area be containerized to mitigate the threat of potential release and stabilize the site to assist future operations in the tank farm containment area. In addition, the Statement of Work requested the removal, transportation, and disposal of the wastewater contained in the bulk storage tanks and secondary containment area, as directed by the OSC. WRS was issued a ceiling of \$100,000, with modification 0001 increasing the ceiling to \$225,000.

## **2.0 SUMMARY OF ACTIVITIES**

As stated above, WRS was issued an emergency response Task Order on January 27, 2005 to respond to liquids in the tank farm secondary containment area, potentially from rainwater and possible overflow from the open top process tanks. As directed by the OSC, WRS mobilized personnel, materials and equipment to stabilize the site with the transfer of liquids from the tank farm containment area and the open top process and storage tanks into temporary storage tanks. WRS personnel completed the transfer of approximately 40,000 gallons of liquids into temporary storage tanks and demobilized the site on January 30, 2005 pending solicitation of subsequent transportation and disposal services. WRS issued an IFB for site disposal services to execute a subcontract for site T&D services following proper EPA review and consent procedures.

WRS personnel mobilized to site on March 28, 2005 to continue Task Order Statement of Work activities and perform site T&D operations through selected subcontractor Environmental Outsource. Site activities in April 2005 involved the removal, transportation and disposal of approximately 330,000 gallons of non-hazardous liquids from the site AST's, including approximately 198,200 gallons for solidification and disposal at Onyx Pecan Row Landfill in Valdosta, Georgia and 137,900 gallons for waste water treatment at Water Recovery Incorporated in Jacksonville, Florida.

WRS also sampled four 6,000 gallon storage tanks of virgin products used for processing at the site. These samples were to verify purity of these products for WRS to recycle as a cost savings to the EPA versus disposal costs. A WRS Chemist was on site this month to HazCat several drums, totes and other miscellaneous containers. Mike Ingle, WRS Chemist II, developed the IFB for disposal of these waste streams.

Site activities resumed as scheduled on June 6, 2005. WRS disposed of the following five waste streams: acidic liquid, caustic liquid, potassium permanganate, hydrogen peroxide, and oxidizer liquid. In addition, WRS shipped off for recycling 3500 gallons each of sodium chlorite solution and aluminum ferric solution. Demobilization occurred on June 10, 2005.

### Utilized Resources

Personnel	Equipment	Materials
Project Manager (1) Field Accountant (1) Foreman (1) Chemist (1) Equipment Operator (1) Laborer (2)	Pick up Truck (3) Forklift (1) Frac Tank (3) 3" Transfer Pump (2) 60' Man Lift (1) 30 Ton Crane (1) 1" Chemical Pump(1) 185 CFM Air Compressor 16" Cargo Trailer	40' X 80' Tarpaulin (1) 1000" X 3/8" Rope 3" Suction Hose 4" PVC Pipe and Various Fittings

### 3.0 TRANSPORTATION AND DISPOSAL

Description	EPA Waste Codes	Quantity	Unit of Measure
Non-Haz Industrial Waste Water		336600	Gallons
Waste Corrosive Liquid, Acidic, Inorganic, NOS (Sulfuric & Hydrochloric Acid) 8, UN3264, Pg II	D002, D007	1100	Gallons
Waste Corrosive Liquid, Basic, Inorganic, NOS (Sodium Hydroxide) 8 UN3266, Pg II	D002	275	Gallons
Potassium Permanganate Solid, 5.1 UN1490, Pg II	D001	55	Gallons
Bisulfite Aqueous Solution, NOS 8 UN2693, Pg II	D002	55	Gallons
Hydrogen Peroxide Aqueous Solution, > 40% < 60% Hydrogen Peroxide, 5.1 UN2014, Pg II	D001	55	Gallons
Oxidizing Liquids, NOS 5.1 UN3139, Pg I	D001	110	Gallons

### 4.0 HEALTH AND SAFETY

WRS personnel adhered strictly to the Site Specific Health and Safety Plan as prepared by the WRS Corporate Health and Safety Officer. There were no accidents or injuries on the site. All operations were conducted in accordance with the health and safety plan.

## 5.0 PROBLEMS AND RESOLUTION

WRS encountered no problems performing this Task Order Statement of Work.

## 6.0 FINANCIAL SUMMARY

As stated in Section 1 of the report, Task Order F4-0032 under contract number 68-S4-02-06 for the ceiling amount of \$ 100,000 for the specified scope of work. Modification 0001 was issued to increase the ceiling to \$ 225,000. No provisional rates were established under this Task Order.

Description	Vendor	Cost Of Services	Percent of Total Cost
Transportation and Disposal of regulated and non-regulated wastes	Environmental Outsource	\$ 97,238.01	46.87 %

The projected Final Cost for the Task Order is \$ 207,466.52, recognizing a balance of funding for de-obligation of \$ 17,533.48. A detailed cost breakdown for this Task Order is provided in Appendix A. The current summary of the project financials through April 4, 2006 is as follows:

TO #	Obligated Ceiling	Deobligated Funds	Cumulative Personnel	Cumulative Equipment	Cumulative OFCs	Pending Total	Cumulative Total	% of Ceiling
F4-0032	\$ 225,000	\$ 0	\$ 52,394.90	\$ 5,387.90	\$ 149,683.72	\$ 0	\$ 207,466.52	92.21 %

**APPENDIX B**  
**WASTE MANIFESTS/CERCLA OFF-SITE DISPOSAL REPORTS**  
**AND CERTIFICATES OF DISPOSAL/DESTRUCTION**



**WRS Infrastructure and  
Environment, Inc.**

5555 Oakbrook Parkway  
Norcross, Georgia 30093  
Tel (770) 446-0002  
Fax (770) 446-6999

**February 20, 2006**

Mr. Terry Stillman  
On Scene Coordinator  
U.S. EPA Region IV, ERRB  
Atlanta Federal Center, 11<sup>th</sup> floor  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

Dear Mr. Stillman,

In accordance with Section J, Attachment F-1, the CERCLA Off-site Disposal Report for the Seven Out site, Task Order number 0032 under contract number 68-S4-02-06 is enclosed with this correspondence. In addition, this letter contains the completed disposal information, including a waste generation report, copies of all signed manifests and the corresponding Certificate of Disposal.

I appreciate your time and attention regarding this matter. If there are any questions or comments concerning this report, I may be contacted at (770) 446-0002.

Sincerely,

Mark Bicksler, CHMM  
Program Manager  
WRS Infrastructure & Environment, Inc.  
mbicksler@wrsie.com

CERCLA OFF-SITE DISPOSAL REPORT

Acid

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
**Waycross, GA.**  
**ID# GAND00407811**

2. Type of action (Check two)

☒ Removal  
☐ Remedial

☒ Fund-financed  
☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

☐ solvents  
☐ dioxins/furans  
☐ cyanides  
☐ heavy metals  
(specify metals)  
☒ acids  
☐ PCBs  
☐ halogenated organics  
☐ other RCRA-listed hazardous  
Wastes (specify waste)  
☐ non-hazardous or de-listed wastes

Form:

☐ wastewater  
☒ liquid waste  
☐ organic sludge  
( $> 1\%$  total solids)  
☐ inorganic sludge  
( $< 1\%$  total org. carbon)  
☐ contaminated soil  
and debris  
☐ solidified sludges

4. Quantity of waste:

**1100 gallons**

5. Range, average, and/or representative concentrations of contaminants of concern:

**$>40\%$  &  $<60\%$  concentrated solution**

6. Pre-treatment of waste before transportation: **None**

☐ precipitation  
☐ solidification  
☐ stabilization

☐ neutralization  
☐ fixation  
☐ other( )



7. Receiving RCRA facility name/location/I.D. number/units:

**Clean Harbors**  
**1910 Russell St**  
**Baltimore, MD**  
**USEPA ID# MDD98055189**  
**1100 Gallons**

8. Receiving Region:

9. Receiving Region Off-site Contact (RROC):

10. Date (s) of shipments: **06/01/05**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input checked="" type="checkbox"/> incineration	<input type="checkbox"/> solidification / landfill
<input type="checkbox"/> land treatment	<input type="checkbox"/> injection
<input type="checkbox"/> Recovery / re-use	<input type="checkbox"/> other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal for Solidification only: \$2,5019.00**

**CERCLA OFF-SITE DISPOSAL REPORT**

Caustic

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
**Waycross, GA.**  
**ID# GAND00407811**

2. Type of action (Check two)

☒ Removal  
☐ Remedial

☒ Fund-financed  
☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

Form:

☐ solvents  
☐ dioxins/furans  
☐ cyanides  
☐ heavy metals  
(specify metals)  
☒ caustic  
☐ PCBs  
☐ halogenated organics  
☐ other RCRA-listed hazardous  
Wastes (specify waste)  
☐ non-hazardous or de-listed wastes

☐ wastewater  
☒ liquid waste  
☐ organic sludge  
( > 1% total solids)  
☐ inorganic sludge  
( < 1% total org. carbon)  
☐ contaminated soil  
and debris  
☐ solidified sludges

4. Quantity of waste:

**275**

5. Range, average, and/or representative concentrations of contaminants of concern:

**>40% & <60% concentrated solution**

6. Pre-treatment of waste before transportation: **None**

☐ precipitation  
☐ solidification  
☐ stabilization

☐ neutralization  
☐ fixation  
☐ other( )

7. Receiving RCRA facility name/location/I.D. number/units:

**Clean Harbors  
1910 Russell St  
Baltimore, MD  
USEPA ID# MDD98055189  
275 Gallons**

8. Receiving Region:

9. Receiving Region Off-site Contact (RROC):

10. Date (s) of shipments: **06/01/05**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input checked="" type="checkbox"/> incineration	<input type="checkbox"/> solidification / landfill
<input type="checkbox"/> land treatment	<input type="checkbox"/> injection
<input type="checkbox"/> Recovery / re-use	<input type="checkbox"/> other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal for Solidification only: \$500.00**

**CERCLA OFF-SITE DISPOSAL REPORT**

**Hydrogen Peroxide**

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
**Waycross, GA.**  
**ID# GAND00407811**

2. Type of action (Check two)

☒ Removal                      ☒ Fund-financed  
☐ Remedial                      ☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

Form:

<input type="checkbox"/> solvents	<input type="checkbox"/> wastewater
<input type="checkbox"/> dioxins/furans	<input checked="" type="checkbox"/> liquid waste
<input type="checkbox"/> cyanides	<input type="checkbox"/> organic sludge
<input type="checkbox"/> heavy metals	<input type="checkbox"/> (> 1% total solids)
<input type="checkbox"/> (specify metals)	<input type="checkbox"/> inorganic sludge
<input type="checkbox"/> acids	<input type="checkbox"/> (< 1% total org. carbon)
<input type="checkbox"/> PCBs	<input type="checkbox"/> contaminated soil
<input type="checkbox"/> halogenated organics	<input type="checkbox"/> and debris
<input checked="" type="checkbox"/> other RCRA-listed hazardous	<input type="checkbox"/> solidified sludges
Wastes (specify waste)	
<input type="checkbox"/> non-hazardous or de-listed wastes	

4. Quantity of waste:

**55 gallons**

5. Range, average, and/or representative concentrations of contaminants of concern:

**>40% & <60% concentrated solution**

6. Pre-treatment of waste before transportation: **None**

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input type="checkbox"/> solidification	<input type="checkbox"/> fixation
<input type="checkbox"/> stabilization	<input type="checkbox"/> other( )

7. Receiving RCRA facility name/location/I.D. number/units:

**Clean Harbors**  
**1910 Russell St**  
**Baltimore, MD**  
**USEPA ID# MDD98055189**  
**1100 Gallons**

8. Receiving Region:

9. Receiving Region Off-site Contact (RROC):

10. Date (s) of shipments: **06/01/05**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input checked="" type="checkbox"/> incineration	<input type="checkbox"/> solidification / landfill
<input type="checkbox"/> land treatment	<input type="checkbox"/> injection
<input type="checkbox"/> Recovery / re-use	<input type="checkbox"/> other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal for Solidification only: \$399.00**

CERCLA OFF-SITE DISPOSAL REPORT  
Oxidizing Liquid

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
**Waycross, GA.**  
**ID# GAND00407811**

2. Type of action (Check two)

☒ Removal  
☐ Remedial

☒ Fund-financed  
☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

Form:

☐ solvents  
☐ dioxins/furans  
☐ cyanides  
☐ heavy metals  
☐ (specify metals)  
☐ acids  
☐ PCBs  
☐ halogenated organics  
☒ other RCRA-listed hazardous  
Wastes (specify waste)  
☐ non-hazardous or de-listed wastes

☐ wastewater  
☒ liquid waste  
☐ organic sludge  
( > 1% total solids)  
☐ inorganic sludge  
( < 1% total org. carbon)  
☐ contaminated soil  
and debris  
☐ solidified sludges

4. Quantity of waste:

**110 gallons**

5. Range, average, and/or representative concentrations of contaminants of concern:

6. Pre-treatment of waste before transportation: **None**

☐ precipitation  
☐ solidification  
☐ stabilization

☐ neutralization  
☐ fixation  
☐ other( )

7. Receiving RCRA facility name/location/I.D. number/units:

**Clean Harbors**  
**1910 Russell St**  
**Baltimore, MD**  
**USEPA ID# MDD98055189**  
**110 Gallons**

8. Receiving Region:

9. Receiving Region Off-site Contact (RROC):

10. Date (s) of shipments: **06/01/05**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input checked="" type="checkbox"/> incineration	<input type="checkbox"/> solidification / landfill
<input type="checkbox"/> land treatment	<input type="checkbox"/> injection
<input type="checkbox"/> Recovery / re-use	<input type="checkbox"/> other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal for Solidification only: \$310.00**

CERCLA OFF-SITE DISPOSAL REPORT

Potassium Permanganate

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
**Waycross, GA.**  
**ID# GAND00407811**

2. Type of action (Check two)

☒ Removal  
☐ Remedial

☒ Fund-financed  
☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

Form:

☐ solvents  
☐ dioxins/furans  
☐ cyanides  
☐ heavy metals  
(specify metals)  
☒ acids  
☐ PCBs  
☐ halogenated organics  
☐ other RCRA-listed hazardous  
Wastes (specify waste)  
☐ non-hazardous or de-listed wastes

☐ wastewater  
☐ liquid waste  
☐ organic sludge  
( > 1% total solids)  
☐ inorganic sludge  
( < 1% total org. carbon)  
☐ contaminated soil  
and debris  
☐ solidified sludges  
☒ solids

4. Quantity of waste:

**55 gallons**

5. Range, average, and/or representative concentrations of contaminants of concern:

**Commercial use concentration**

6. Pre-treatment of waste before transportation: **None**

☐ precipitation  
☐ solidification  
☐ stabilization

☐ neutralization  
☐ fixation  
☐ other( )



7. Receiving RCRA facility name/location/I.D. number/units:

**Clean Harbors**  
**1910 Russell St**  
**Baltimore, MD**  
**USEPA ID# MDD98055189**  
**55 Gallons**

8. Receiving Region:

9. Receiving Region Off-site Contact (RROC):

10. Date (s) of shipments: **06/01/05**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input checked="" type="checkbox"/> incineration	<input type="checkbox"/> solidification / landfill
<input type="checkbox"/> land treatment	<input type="checkbox"/> injection
<input type="checkbox"/> Recovery / re-use	<input type="checkbox"/> other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal for Solidification only: \$370.00**

CERCLA OFF-SITE DISPOSAL REPORT

Sodium Bisulfite

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
**Waycross, GA.**  
**ID# GAND00407811**

2. Type of action (Check two)

☒ Removal  
☐ Remedial

☒ Fund-financed  
☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

Form:

☐ solvents  
☐ dioxins/furans  
☐ cyanides  
☐ heavy metals  
(specify metals)  
☐ acids  
☐ PCBs  
☐ halogenated organics  
☒ other RCRA-listed hazardous  
Wastes (specify waste)  
☐ non-hazardous or de-listed wastes

☐ wastewater  
☒ liquid waste  
☐ organic sludge  
( $> 1\%$  total solids)  
☐ inorganic sludge  
( $< 1\%$  total org. carbon)  
☐ contaminated soil  
and debris  
☐ solidified sludges  
☐ solids

4. Quantity of waste:

**55 gallons**

5. Range, average, and/or representative concentrations of contaminants of concern:

**Commercial use aqueous solution**

6. Pre-treatment of waste before transportation: **None**

☐ precipitation  
☐ solidification  
☐ stabilization

☐ neutralization  
☐ fixation  
☐ other( )

7. Receiving RCRA facility name/location/I.D. number/units:

**Clean Harbors**  
**1910 Russell St**  
**Baltimore, MD**  
**USEPA ID# MDD98055189**  
**55 Gallons**

8. Receiving Region:

9. Receiving Region Off-site Contact (RROC):

10. Date (s) of shipments: **06/01/05**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input checked="" type="checkbox"/> incineration	<input type="checkbox"/> solidification / landfill
<input type="checkbox"/> land treatment	<input type="checkbox"/> injection
<input type="checkbox"/> Recovery / re-use	<input type="checkbox"/> other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal for Solidification only: \$159.00**

CERCLA OFF-SITE DISPOSAL REPORT

Solidification

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
**Waycross, GA.**  
**ID# GAND00407811**

2. Type of action (Check two)

☒ Removal  
☐ Remedial

☒ Fund-financed  
☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

☐ solvents  
☐ dioxins/furans  
☐ cyanides  
☐ heavy metals  
(specify metals)  
☐ acids  
☐ PCBs  
☐ halogenated organics  
☐ other RCRA-listed hazardous  
Wastes (specify waste)  
☒ non-hazardous or de-listed wastes

Form:

☒ wastewater  
☐ liquid waste  
☐ organic sludge  
( $> 1\%$  total solids)  
☐ inorganic sludge  
( $< 1\%$  total org. carbon)  
☐ contaminated soil  
and debris  
☐ solidified sludges

4. Quantity of waste:

**192,500 gallons**

5. Range, average, and/or representative concentrations of contaminants of concern:

**See attached analytical report**

6. Pre-treatment of waste before transportation: **None**

☐ precipitation  
☐ solidification  
☐ stabilization

☐ neutralization  
☐ fixation  
☐ other( )

7. Receiving RCRA facility name/location/I.D. number/units:

**Chesser Island Rd. Landfill, Inc.  
Folkston, GA.**

**Onyx Pecan Row Landfill, LLC  
Valdosta, GA.**

**10,500 Gallons**

**191,000 Gallons**

8. Receiving Region: **IV**

9. Receiving Region Off-site Contact (RROC): **Terry Stillman**

10. Date (s) of shipments: **See attachment # 1, waste generation report**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

☐ precipitation

☐ neutralization

☐ incineration

☒ solidification / landfill

☐ land treatment

☐ injection

☐ Recovery / re-use

☐ other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal for Solidification only: \$62,560.00**

**CERCLA OFF-SITE DISPOSAL REPORT**

**Water Treatment**

Information Required for CERCLA Off-site Waste Management Activities.

1. Superfund Site name/State/CERCLIS SSID number: **SevenOut Site**  
Waycross, GA.  
ID# GAND00407811

2. Type of action (Check two)

☒ Removal  
☐ Remedial

☒ Fund-financed  
☐ PRP-financed

3. Type (check one) and form (check one) of waste; if more than one type, attach separate sheets for this and remaining questions for each type:

Type:

Form:

☐ solvents  
☐ dioxins/furans  
☐ cyanides  
☐ heavy metals  
(specify metals)  
☐ acids  
☐ PCBs  
☐ halogenated organics  
☐ other RCRA-listed hazardous  
Wastes (specify waste)  
☒ non-hazardous or de-listed wastes

☒ wastewater  
☐ liquid waste  
☐ organic sludge  
( $> 1\%$  total solids)  
☐ inorganic sludge  
( $< 1\%$  total org. carbon)  
☐ contaminated soil  
and debris  
☐ solidified sludges

4. Quantity of waste:

**134,600 gallons**

5. Range, average, and/or representative concentrations of contaminants of concern:

**See attached analytical report**

6. Pre-treatment of waste before transportation: **None**

☐ precipitation  
☐ solidification  
☐ stabilization

☐ neutralization  
☐ fixation  
☐ other( )

7. Receiving RCRA facility name/location/I.D. number/units:

1. Water Recovery Inc.  
1819 Albert St.  
Jacksonville, FL  
RCRA ID# FLR000069062

8. Receiving Region: **IV**

9. Receiving Region Off-site Contact (RROC): **Terry Stillman**

10. Date (s) of shipments: **See attachment # 1, waste generation report**

11. Pre-treatment of waste at site before final treatment or disposal: **None**

12. Final method of treatment or disposal/unit receiving:

<input type="checkbox"/> precipitation	<input type="checkbox"/> neutralization
<input type="checkbox"/> incineration	<input type="checkbox"/> landfill
<input type="checkbox"/> land treatment	<input type="checkbox"/> injection
<input checked="" type="checkbox"/> recovery / re-use	<input type="checkbox"/> other ( )

13. Cost of activities:

**Total for Project:**

**Transportation & Disposal Waste Water only: \$30,422.00**

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.  
**Lab Order:** 0408B38  
**Project:** Seven Out  
**Lab ID:** 0408B38-015

**Client Sample ID:** F237  
**Collection Date:** 8/25/2004 3:35:00 PM  
**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>MERCURY, TCLP</b>		<b>SW1311/7470A</b>			<b>(SW7470A)</b>		<b>Analyst: EM</b>
Mercury	BRL	0.00400		mg/L	49366	1	9/8/2004 10:54:04 AM
<b>ICP METALS, TCLP</b>		<b>SW1311/6010B</b>			<b>(SW3010A)</b>		<b>Analyst: BB</b>
Arsenic	BRL	0.250		mg/L	49227	1	9/2/2004 3:13:00 AM
Barium	BRL	0.500		mg/L	49227	1	9/2/2004 3:13:00 AM
Cadmium	BRL	0.0250		mg/L	49227	1	9/2/2004 3:13:00 AM
Chromium	BRL	0.0500		mg/L	49227	1	9/2/2004 3:13:00 AM
Lead	0.0630	0.0500		mg/L	49227	1	9/2/2004 3:13:00 AM
Selenium	BRL	0.100		mg/L	49227	1	9/2/2004 3:13:00 AM
Silver	BRL	0.0250		mg/L	49227	1	9/2/2004 3:13:00 AM
<b>METALS, TOTAL</b>		<b>SW6010B</b>			<b>(SW3010A)</b>		<b>Analyst: BB</b>
Aluminum	BRL	1.00		mg/L	49140	1	9/1/2004 9:42:00 PM
Antimony	BRL	0.100		mg/L	49140	1	9/1/2004 9:42:00 PM
Arsenic	BRL	0.250		mg/L	49140	1	9/1/2004 9:42:00 PM
Barium	BRL	0.100		mg/L	49140	1	9/1/2004 9:42:00 PM
Beryllium	BRL	0.0500		mg/L	49140	1	9/1/2004 9:42:00 PM
Cadmium	BRL	0.0250		mg/L	49140	1	9/1/2004 9:42:00 PM
Calcium	7.23	0.500		mg/L	49140	1	9/1/2004 9:42:00 PM
Chromium	BRL	0.0500		mg/L	49140	1	9/1/2004 9:42:00 PM
Cobalt	BRL	0.100		mg/L	49140	1	9/1/2004 9:42:00 PM
Copper	0.142	0.0500		mg/L	49140	1	9/1/2004 9:42:00 PM
Iron	11.1	0.500		mg/L	49140	1	9/1/2004 9:42:00 PM
Lead	BRL	0.0500		mg/L	49140	1	9/1/2004 9:42:00 PM
Magnesium	0.902	0.500		mg/L	49140	1	9/1/2004 9:42:00 PM
Manganese	0.112	0.0250		mg/L	49140	1	9/1/2004 9:42:00 PM
Nickel	BRL	0.100		mg/L	49140	1	9/1/2004 9:42:00 PM
Potassium	7.17	2.50		mg/L	49140	1	9/3/2004 10:52:00 AM
Selenium	BRL	0.100		mg/L	49140	1	9/1/2004 9:42:00 PM
Silver	BRL	0.0500		mg/L	49140	1	9/1/2004 9:42:00 PM
Sodium	1450	5.00		mg/L	49140	1	9/3/2004 10:52:00 AM
Thallium	BRL	0.100		mg/L	49140	1	9/1/2004 9:42:00 PM
Vanadium	BRL	0.0500		mg/L	49140	1	9/1/2004 9:42:00 PM
Zinc	2.03	0.100		mg/L	49140	1	9/1/2004 9:42:00 PM
<b>MERCURY, TOTAL</b>		<b>SW7470A</b>			<b>(SW7470A)</b>		<b>Analyst: EM</b>
Mercury	BRL	0.00020		mg/L	49318	1	9/3/2004 12:47:00 PM
<b>TCL-SEMIVOLATILE ORGANICS</b>		<b>SW8270C</b>			<b>(SW3520)</b>		<b>Analyst: YH</b>
1,1'-Biphenyl	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2,4,5-Trichlorophenol	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
2,4,6-Trichlorophenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM

**Qualifiers:**  
 ° Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits



**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.

**Client Sample ID:** F237

**Lab Order:** 0408B38

**Collection Date:** 8/25/2004 3:35:00 PM

**Project:** Seven Out

**Lab ID:** 0408B38-015

**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL-SEMI-VOLATILE ORGANICS</b>		<b>SW8270C</b>		<b>(SW3520)</b>			<b>Analyst: YH</b>
2,4-Dichlorophenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2,4-Dimethylphenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2,4-Dinitrophenol	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
2,4-Dinitrotoluene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2,6-Dinitrotoluene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2-Chloronaphthalene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2-Chlorophenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2-Methylnaphthalene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2-Methylphenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
2-Nitroaniline	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
2-Nitrophenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
3,3'-Dichlorobenzidine	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
3-Nitroaniline	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
4,6-Dinitro-2-methylphenol	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
4-Bromodiphenyl ether	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
4-Chloro-3-methylphenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
4-Chloroaniline	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
4-Chlorophenyl phenyl ether	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
4-Methylphenol	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
4-Nitroaniline	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
4-Nitrophenol	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
Acenaphthene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Acenaphthylene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Acetophenone	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Anthracene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Atrazine	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Benz(a)anthracene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Benzaldehyde	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Benzo(a)pyrene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Benzo(b)fluoranthene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Benzo(g,h,i)perylene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Benzo(k)fluoranthene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Bis(2-chloroethoxy)methane	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Bis(2-chloroethyl)ether	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Bis(2-chloroisopropyl)ether	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Bis(2-ethylhexyl)phthalate	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Butyl benzyl phthalate	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Caprolactam	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Carbazole	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Chrysene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.  
**Lab Order:** 0408B38  
**Project:** Seven Out  
**Lab ID:** 0408B38-015

**Client Sample ID:** F237  
**Collection Date:** 8/25/2004 3:35:00 PM  
**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS</b>		<b>SW8270C</b>		<b>(SW3520)</b>			<b>Analyst: YH</b>
Dibenz(a,h)anthracene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Dibenzofuran	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Diethyl phthalate	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Dimethyl phthalate	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Di-n-butyl phthalate	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Di-n-octyl phthalate	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Fluoranthene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Fluorene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Hexachlorobenzene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Hexachlorobutadiene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Hexachlorocyclopentadiene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Hexachloroethane	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Indeno(1,2,3-cd)pyrene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Isophorone	150	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Naphthalene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Nitrobenzene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
N-Nitrosodl-n-propylamine	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
N-Nitrosodiphenylamine	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Pentachlorophenol	BRL	250		µg/L	49104	1	8/31/2004 8:35:00 PM
Phenanthrene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Phenol	260	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Pyrene	BRL	100		µg/L	49104	1	8/31/2004 8:35:00 PM
Surr: 2,4,6-Tribromophenol	37.5	47-146	S	%REC	49104	1	8/31/2004 8:35:00 PM
Surr: 2-Fluorobiphenyl	34.3	37-136	S	%REC	49104	1	8/31/2004 8:35:00 PM
Surr: 2-Fluorophenol	45.7	23.9-109		%REC	49104	1	8/31/2004 8:35:00 PM
Surr: 4-Terphenyl-d14	26.2	21.8-145		%REC	49104	1	8/31/2004 8:35:00 PM
Surr: Nitrobenzene-d5	49.4	32.3-136		%REC	49104	1	8/31/2004 8:35:00 PM
Surr: Phenol-d5	45.9	10-109		%REC	49104	1	8/31/2004 8:35:00 PM
<b>TCL VOLATILE ORGANICS</b>		<b>SW8260B</b>		<b>(SW5030B)</b>			<b>Analyst: AD</b>
1,1,1-Trichloroethane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,1,2,2-Tetrachloroethane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,1,2-Trichloroethane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,1-Dichloroethane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,1-Dichloroethene	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,2,4-Trichlorobenzene	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,2-Dibromo-3-chloropropane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,2-Dibromoethane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,2-Dichlorobenzene	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,2-Dichloroethane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM
1,2-Dichloropropane	BRL	100		µg/L	49197	20	8/31/2004 4:50:00 PM

**Qualifiers:**  
 \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.  
**Lab Order:** 0408B38  
**Project:** Seven Out  
**Lab ID:** 0408B38-015

**Client Sample ID:** F237  
**Collection Date:** 8/25/2004 3:35:00 PM  
**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual Units	BatchID	DF	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		<b>SW8260B</b>	<b>(SW5030B)</b>	<b>Analyst: AD</b>		
1,3-Dichlorobenzene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
1,4-Dichlorobenzene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
2-Butanone	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
2-Hexanone	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
4-Methyl-2-pentanone	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
Acetone	BRL	400	µg/L	49197	20	8/31/2004 4:50:00 PM
Benzene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Bromodichloromethane	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Bromoforn	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Bromomethane	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Carbon disulfide	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Carbon tetrachloride	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Chlorobenzene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Chloroethane	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
Chloroform	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Chloromethane	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
cis-1,2-Dichloroethene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
cis-1,3-Dichloropropene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Cyclohexane	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Dibromochloromethane	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Dichlorodifluoromethane	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
Ethylbenzene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Freon-113	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
Isopropylbenzene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
m,p-Xylene	BRL	200	µg/L	49197	20	8/31/2004 4:50:00 PM
Methyl acetate	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Methyl tert-butyl ether	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Methylcyclohexane	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Methylene chloride	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
o-Xylene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Styrene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Tetrachloroethene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Toluene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
trans-1,2-Dichloroethene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
trans-1,3-Dichloropropene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Trichloroethene	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Trichlorofluoromethane	BRL	100	µg/L	49197	20	8/31/2004 4:50:00 PM
Vinyl chloride	BRL	40	µg/L	49197	20	8/31/2004 4:50:00 PM
Surr: 4-Bromofluorobenzene	103	63.1-121	%REC	49197	20	8/31/2004 4:50:00 PM
Surr: Dibromofluoromethane	97.3	69.5-126	%REC	49197	20	8/31/2004 4:50:00 PM

Qualifiers:	* Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL Below Reporting Limit	E	Value above quantitation range
	H Holding time for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit Reporting Limit	S	Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

CLIENT: Tetra Tech EM Inc.

Client Sample ID: F237

Lab Order: 0408B38

Collection Date: 8/25/2004 3:35:00 PM

Project: Seven Out

Lab ID: 0408B38-015

Matrix: AQUEOUS

Analytes	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8260B		(SW5030B)			Analyst: AD
Surr: Toluene-d8	101	74.2-120	%REC		49197	20	8/31/2004 4:50:00 PM

Qualifiers:

- ° Value exceeds Maximum Contaminant Level
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- Rpt Limit Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P NELAC analyte certification pending
- S Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.

**Client Sample ID:** G107D

**Lab Order:** 0408B38

**Collection Date:** 8/25/2004 4:30:00 PM

**Project:** Seven Out

**Lab ID:** 0408B38-017

**Matrix:** AQUEOUS

Analyte:	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>MERCURY, TCLP</b>							
Mercury	BRL	0.00400		mg/L	49366	1	9/8/2004 10:57:44 AM
<b>ICP METALS, TCLP</b>							
Arsenic	BRL	0.250		mg/L	49227	1	9/2/2004 3:30:00 AM
Barium	BRL	0.500		mg/L	49227	1	9/2/2004 3:30:00 AM
Cadmium	BRL	0.0250		mg/L	49227	1	9/2/2004 3:30:00 AM
Chromium	BRL	0.0500		mg/L	49227	1	9/2/2004 3:30:00 AM
Lead	BRL	0.0500		mg/L	49227	1	9/2/2004 3:30:00 AM
Selenium	BRL	0.100		mg/L	49227	1	9/2/2004 3:30:00 AM
Silver	BRL	0.0250		mg/L	49227	1	9/2/2004 3:30:00 AM
<b>METALS, TOTAL</b>							
Aluminum	2.22	0.200		mg/L	49140	1	9/1/2004 9:50:00 PM
Antimony	BRL	0.0200		mg/L	49140	1	9/1/2004 9:50:00 PM
Arsenic	BRL	0.0500		mg/L	49140	1	9/1/2004 9:50:00 PM
Barium	0.175	0.0200		mg/L	49140	1	9/1/2004 9:50:00 PM
Beryllium	BRL	0.0100		mg/L	49140	1	9/1/2004 9:50:00 PM
Cadmium	BRL	0.0050		mg/L	49140	1	9/1/2004 9:50:00 PM
Calcium	182	0.100		mg/L	49140	1	9/1/2004 9:50:00 PM
Chromium	BRL	0.0100		mg/L	49140	1	9/1/2004 9:50:00 PM
Cobalt	BRL	0.0200		mg/L	49140	1	9/1/2004 9:50:00 PM
Copper	0.130	0.0100		mg/L	49140	1	9/1/2004 9:50:00 PM
Iron	140	0.100		mg/L	49140	1	9/1/2004 9:50:00 PM
Lead	BRL	0.0100		mg/L	49140	1	9/1/2004 9:50:00 PM
Magnesium	28.1	0.100		mg/L	49140	1	9/1/2004 9:50:00 PM
Manganese	3.09	0.0050		mg/L	49140	1	9/1/2004 9:50:00 PM
Nickel	0.138	0.0200		mg/L	49140	1	9/1/2004 9:50:00 PM
Potassium	94.1	5.00		mg/L	49140	10	9/3/2004 11:01:00 AM
Selenium	BRL	0.0200		mg/L	49140	1	9/1/2004 9:50:00 PM
Silver	BRL	0.0100		mg/L	49140	1	9/1/2004 9:50:00 PM
Sodium	3640	10.0		mg/L	49140	10	9/3/2004 11:01:00 AM
Thallium	BRL	0.0200		mg/L	49140	1	9/1/2004 9:50:00 PM
Vanadium	BRL	0.0100		mg/L	49140	1	9/1/2004 9:50:00 PM
Zinc	1.38	0.0200		mg/L	49140	1	9/1/2004 9:50:00 PM
<b>MERCURY, TOTAL</b>							
Mercury	BRL	0.00020		mg/L	49318	1	9/3/2004 12:47:00 PM
<b>TCL-SEMIVOLATILE ORGANICS</b>							
1,1'-Biphenyl	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2,4,5-Trichlorophenol	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
2,4,6-Trichlorophenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM

Qualifiers:	• Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL Below Reporting Limit	E	Value above quantitation range
	H Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit Reporting Limit	S	Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.

**Client Sample ID:** G107D

**Lab Order:** 0408B38

**Collection Date:** 8/25/2004 4:30:00 PM

**Project:** Seven Out

**Lab ID:** 0408B38-017

**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS</b>		<b>SW8270C</b>		<b>(SW3520)</b>			<b>Analyst: YH</b>
2,4-Dichlorophenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2,4-Dimethylphenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2,4-Dinitrophenol	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
2,4-Dinitrotoluene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2,6-Dinitrotoluene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2-Chloronaphthalene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2-Chlorophenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2-Methylnaphthalene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2-Methylphenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
2-Nitroaniline	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
2-Nitrophenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
3,3'-Dichlorobenzidine	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
3-Nitroaniline	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
4,6-Dinitro-2-methylphenol	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
4-Bromophenyl phenyl ether	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
4-Chloro-3-methylphenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
4-Chloroaniline	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
4-Chlorophenyl phenyl ether	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
4-Methylphenol	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
4-Nitroaniline	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
4-Nitrophenol	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
Acenaphthene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Acenaphthylene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Acetophenone	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Anthracene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Atrazine	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Benz(a)anthracene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Benzaldehyde	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Benzo(a)pyrene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Benzo(b)fluoranthene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Benzo(g,h,i)perylene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Benzo(k)fluoranthene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Bis(2-chloroethoxy)methane	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Bis(2-chloroethyl)ether	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Bis(2-chloroisopropyl)ether	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Bis(2-ethylhexyl)phthalate	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Butyl benzyl phthalate	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Caprolactam	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Carbazole	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Chrysene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.  
**Lab Order:** 0408B38  
**Project:** Seven Out  
**Lab ID:** 0408B38-017

**Client Sample ID:** G107D  
**Collection Date:** 8/25/2004 4:30:00 PM  
**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS</b>		<b>SW8270C</b>			<b>(SW3520)</b>		<b>Analyst: YH</b>
Dibenz(a,h)anthracene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Dibenzofuran	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Diethyl phthalate	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Dimethyl phthalate	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Di-n-butyl phthalate	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Di-n-octyl phthalate	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Fluoranthene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Fluorene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Hexachlorobenzene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Hexachlorobutadiene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Hexachlorocyclopentadiene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Hexachloroethane	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Indeno(1,2,3-cd)pyrene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Isophorone	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Naphthalene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Nitrobenzene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
N-Nitrosodl-n-propylamine	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
N-Nitrosodiphenylamine	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Pentachlorophenol	BRL	2500		µg/L	49109	10	9/1/2004 10:56:00 PM
Phenanthrene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Phenol	30000	10000		µg/L	49109	100	9/3/2004 3:17:00 PM
Pyrene	BRL	1000		µg/L	49109	10	9/1/2004 10:56:00 PM
Surr: 2,4,6-Tribromophenol	70.2	47-148		%REC	49109	10	9/1/2004 10:56:00 PM
Surr: 2-Fluorobiphenyl	83.0	37-135		%REC	49109	10	9/1/2004 10:56:00 PM
Surr: 2-Fluorophenol	40.0	23.9-109		%REC	49109	10	9/1/2004 10:56:00 PM
Surr: 4-Terphenyl-d14	9.00	21.9-145	S	%REC	49109	10	9/1/2004 10:56:00 PM
Surr: Nitrobenzene-d5	84.2	32.3-138		%REC	49109	10	9/1/2004 10:56:00 PM
Surr: Phenol-d5	67.1	10-109		%REC	49109	10	9/1/2004 10:56:00 PM
<b>TCL VOLATILE ORGANICS</b>		<b>SW8260B</b>			<b>(SW5030B)</b>		<b>Analyst: AD</b>
1,1,1-Trichloroethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,1,2,2-Tetrachloroethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,1,2-Trichloroethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,1-Dichloroethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,1-Dichloroethene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,2,4-Trichlorobenzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,2-Dibromo-3-chloropropane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,2-Dibromoethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,2-Dichlorobenzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,2-Dichloroethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,2-Dichloropropane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM

Qualifiers:	• Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
BRL	Below Reporting Limit	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
N	Analyte not NELAC certified	P	NELAC analyte certification pending
Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.

**Client Sample ID:** G107D

**Lab Order:** 0408B38

**Collection Date:** 8/25/2004 4:30:00 PM

**Project:** Seven Out

**Lab ID:** 0408B38-017

**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		<b>SW8260B</b>		<b>(SW5030B)</b>			<b>Analyst: AD</b>
1,3-Dichlorobenzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
1,4-Dichlorobenzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
2-Butanone	180	100		µg/L	49197	10	8/31/2004 4:22:00 PM
2-Hexanone	BRL	100		µg/L	49197	10	8/31/2004 4:22:00 PM
4-Methyl-2-pentanone	BRL	100		µg/L	49197	10	8/31/2004 4:22:00 PM
Acetone	8600	1000		µg/L	49197	50	9/1/2004 12:17:00 PM
Benzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Bromodichloromethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Bromoform	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Bromomethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Carbon disulfide	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Carbon tetrachloride	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Chlorobenzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Chloroethane	BRL	100		µg/L	49197	10	8/31/2004 4:22:00 PM
Chloroform	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Chloromethane	BRL	100		µg/L	49197	10	8/31/2004 4:22:00 PM
cis-1,2-Dichloroethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
cis-1,3-Dichloropropene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Cyclohexane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Dibromochloromethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Dichlorodifluoromethane	BRL	100		µg/L	49197	10	8/31/2004 4:22:00 PM
Ethylbenzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Freon-113	BRL	100		µg/L	49197	10	8/31/2004 4:22:00 PM
Isopropylbenzene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
m,p-Xylene	BRL	100		µg/L	49197	10	8/31/2004 4:22:00 PM
Methyl acetate	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Methyl tert-butyl ether	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Methylcyclohexane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Methylene chloride	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
o-Xylene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Styrene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Tetrachloroethene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Toluene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
trans-1,2-Dichloroethene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
trans-1,3-Dichloropropene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Trichloroethene	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Trichlorofluoromethane	BRL	50		µg/L	49197	10	8/31/2004 4:22:00 PM
Vinyl chloride	BRL	20		µg/L	49197	10	8/31/2004 4:22:00 PM
Sum: 4-Bromofluorobenzene	98.1	63.1-121		%REC	49197	50	9/1/2004 12:17:00 PM
Sum: 4-Bromodifluorobenzene	104	63.1-121		%REC	49197	10	8/31/2004 4:22:00 PM

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits



**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

CLIENT: Tetra Tech EM Inc.

Client Sample ID: G107D

Lab Order: 0408B38

Collection Date: 8/25/2004 4:30:00 PM

Project: Seven Out

Lab ID: 0408B38-017

Matrix: AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		<b>SW8260B</b>			<b>(BW5030B)</b>		<b>Analyst: AD</b>
Sum: Dibromofluoromethane	98.9	68.5-128	%REC		49197	50	8/1/2004 12:17:00 PM
Sum: Dibromofluoromethane	95.7	68.5-128	%REC		49197	10	8/31/2004 4:22:00 PM
Sum: Toluene-d8	102	74.2-120	%REC		49197	10	8/31/2004 4:22:00 PM
Sum: Toluene-d8	103	74.2-120	%REC		49197	50	9/1/2004 12:17:00 PM

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits

## Analytical Environmental Services, Inc.

Date: 14-Sep-04

CLIENT: Tetra Tech EM Inc.

Client Sample ID: G300D

Lab Order: 0408B38

Collection Date: 8/25/2004 4:10:00 PM

Project: Seven Out

Lab ID: 0408B38-018

Matrix: AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>MERCURY, TCLP</b>		<b>SW1311/7470A</b>			<b>(SW7470A)</b>		<b>Analyst: EM</b>
Mercury	BRL	0.00400		mg/L	49366	1	9/8/2004 10:59:34 AM
<b>ICP METALS, TCLP</b>		<b>SW1311/6010B</b>			<b>(SW3010A)</b>		<b>Analyst: BB</b>
Arsenic	BRL	0.250		mg/L	49227	1	9/2/2004 3:34:00 AM
Barium	BRL	0.500		mg/L	49227	1	9/2/2004 3:34:00 AM
Cadmium	BRL	0.0250		mg/L	49227	1	9/2/2004 3:34:00 AM
Chromium	BRL	0.0500		mg/L	49227	1	9/2/2004 3:34:00 AM
Lead	0.0724	0.0500		mg/L	49227	1	9/2/2004 3:34:00 AM
Selenium	BRL	0.100		mg/L	49227	1	9/2/2004 3:34:00 AM
Silver	BRL	0.0250		mg/L	49227	1	9/2/2004 3:34:00 AM
<b>METALS, TOTAL</b>		<b>SW6010B</b>			<b>(SW3010A)</b>		<b>Analyst: BB</b>
Aluminum	BRL	1.00		mg/L	49140	1	9/1/2004 9:54:00 PM
Antimony	BRL	0.100		mg/L	49140	1	9/1/2004 9:54:00 PM
Arsenic	BRL	0.250		mg/L	49140	1	9/1/2004 9:54:00 PM
Barium	BRL	0.100		mg/L	49140	1	9/1/2004 9:54:00 PM
Beryllium	BRL	0.0500		mg/L	49140	1	9/1/2004 9:54:00 PM
Cadmium	BRL	0.0250		mg/L	49140	1	9/1/2004 9:54:00 PM
Calcium	8.73	0.500		mg/L	49140	1	9/1/2004 9:54:00 PM
Chromium	BRL	0.0500		mg/L	49140	1	9/1/2004 9:54:00 PM
Cobalt	BRL	0.100		mg/L	49140	1	9/1/2004 9:54:00 PM
Copper	BRL	0.0500		mg/L	49140	1	9/1/2004 9:54:00 PM
Iron	5.47	0.500		mg/L	49140	1	9/1/2004 9:54:00 PM
Lead	BRL	0.0500		mg/L	49140	1	9/1/2004 9:54:00 PM
Magnesium	1.25	0.500		mg/L	49140	1	9/1/2004 9:54:00 PM
Manganese	0.123	0.0250		mg/L	49140	1	9/1/2004 9:54:00 PM
Nickel	BRL	0.100		mg/L	49140	1	9/1/2004 9:54:00 PM
Potassium	8.25	2.50		mg/L	49140	1	9/3/2004 11:05:00 AM
Selenium	BRL	0.100		mg/L	49140	1	9/1/2004 9:54:00 PM
Silver	BRL	0.0500		mg/L	49140	1	9/1/2004 9:54:00 PM
Sodium	1120	5.00		mg/L	49140	1	9/3/2004 11:05:00 AM
Thallium	BRL	0.100		mg/L	49140	1	9/1/2004 9:54:00 PM
Vanadium	BRL	0.0500		mg/L	49140	1	9/1/2004 9:54:00 PM
Zinc	0.703	0.100		mg/L	49140	1	9/1/2004 9:54:00 PM
<b>MERCURY, TOTAL</b>		<b>SW7470A</b>			<b>(SW7470A)</b>		<b>Analyst: EM</b>
Mercury	BRL	0.00160		mg/L	49272	1	9/2/2004 4:32:00 PM
<b>TCL-SEMIVOLATILE ORGANICS</b>		<b>SW8270C</b>			<b>(SW3520)</b>		<b>Analyst: YH</b>
1,1'-Biphenyl	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2,4,5-Trichlorophenol	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
2,4,6-Trichlorophenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

**CLIENT:** Tetra Tech EM Inc.  
**Lab Order:** 0408B38  
**Project:** Seven Out  
**Lab ID:** 0408B38-018

**Client Sample ID:** G300D  
**Collection Date:** 8/25/2004 4:10:00 PM  
**Matrix:** AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS</b>		<b>SW8270C</b>		<b>(SW3520)</b>	<b>Analyst: YH</b>		
2,4-Dichlorophenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2,4-Dimethylphenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2,4-Dinitrophenol	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
2,4-Dinitrotoluene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2,6-Dinitrotoluene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2-Chloronaphthalene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2-Chlorophenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2-Methylnaphthalene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2-Methylphenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
2-Nitroaniline	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
2-Nitrophenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
3,3'-Dichlorobenzidine	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
3-Nitroaniline	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
4,6-Dinitro-2-methylphenol	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
4-Bromophenyl phenyl ether	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
4-Chloro-3-methylphenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
4-Chloroaniline	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
4-Chlorophenyl phenyl ether	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
4-Methylphenol	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
4-Nitroaniline	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
4-Nitrophenol	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
Acenaphthene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Acenaphthylene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Acetophenone	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Anthracene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Atrazine	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Benz(a)anthracene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Benzaldehyde	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Benz(a)pyrene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Benz(b)fluoranthene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Benz(g,h,i)perylene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Benz(k)fluoranthene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Bis(2-chloroethoxy)methane	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Bis(2-chloroethyl)ether	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Bis(2-chloroisopropyl)ether	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Bis(2-ethylhexyl)phthalate	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Butyl benzyl phthalate	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Caprolactam	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Carbazole	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Chrysene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level BRL Below Reporting Limit H Holding times for preparation or analysis exceeded N Analyte not NELAC certified Rpt Limit Reporting Limit	B Analyte detected in the associated Method Blank E Value above quantitation range J Analyte detected below quantitation limits P NELAC analyte certification pending S Spike Recovery outside accepted recovery limits
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**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

CLIENT: Tetra Tech EM Inc.

Client Sample ID: G300D

Lab Order: 0408B38

Collection Date: 8/25/2004 4:10:00 PM

Project: Seven Out

Lab ID: 0408B38-018

Matrix: AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS</b>		<b>SW8270C</b>		<b>(SW3520)</b>			<b>Analyst: YH</b>
Dibenz(a,h)anthracene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Dibenzofuran	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Diethyl phthalate	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Dimethyl phthalate	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Di-n-butyl phthalate	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Di-n-octyl phthalate	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Fluoranthene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Fluorene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Hexachlorobenzene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Hexachlorobutadiene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Hexachlorocyclopentadiene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Hexachloroethane	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Indeno(1,2,3-cd)pyrene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Isophorone	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Naphthalene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Nitrobenzene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
N-Nitrosodi-n-propylamine	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
N-Nitrosodiphenylamine	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Pentachlorophenol	BRL	250		µg/L	49109	1	9/1/2004 3:23:00 PM
Phenanthrene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Phenol	170	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Pyrene	BRL	100		µg/L	49109	1	9/1/2004 3:23:00 PM
Surr: 2,4,6-Tribromophenol	54.1	47-145		%REC	49109	1	9/1/2004 3:23:00 PM
Surr: 2-Fluorobiphenyl	42.4	37-135		%REC	49109	1	9/1/2004 3:23:00 PM
Surr: 2-Fluorophenol	84.5	23.8-109		%REC	49109	1	9/1/2004 3:23:00 PM
Surr: 4-Terphenyl-d14	21.6	21.8-145	8	%REC	49109	1	9/1/2004 3:23:00 PM
Surr: Nitrobenzene-d5	69.2	32.3-135		%REC	49109	1	9/1/2004 3:23:00 PM
Surr: Phenol-d5	73.8	10-109		%REC	49109	1	9/1/2004 3:23:00 PM
<b>TCL VOLATILE ORGANICS</b>		<b>SW8260B</b>		<b>(SW5030B)</b>			<b>Analyst: AD</b>
1,1,1-Trichloroethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,1,2,2-Tetrachloroethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,1,2-Trichloroethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,1-Dichloroethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,1-Dichloroethene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,2,4-Trichlorobenzene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,2-Dibromo-3-chloropropane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,2-Dibromoethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,2-Dichlorobenzene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,2-Dichloroethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,2-Dichloropropane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM

Qualifiers: ° Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analyte certification pending  
 S Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

CLIENT: Tetra Tech EM Inc.

Client Sample ID: G300D

Lab Order: 0408B38

Collection Date: 8/25/2004 4:10:00 PM

Project: Seven Out

Lab ID: 0408B38-018

Matrix: AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
<b>TCL VOLATILE ORGANICS</b>		<b>SW8260B</b>		<b>(SW5030B)</b>			<b>Analyst: AD</b>
1,3-Dichlorobenzene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
1,4-Dichlorobenzene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
2-Butanone	BRL	200		µg/L	49197	20	8/31/2004 3:55:00 PM
2-Hexanone	BRL	200		µg/L	49197	20	8/31/2004 3:55:00 PM
4-Methyl-2-pentanone	BRL	200		µg/L	49197	20	8/31/2004 3:55:00 PM
Acetone	BRL	400		µg/L	49197	20	8/31/2004 3:55:00 PM
Benzene	BRL	100		µg/L	49187	20	8/31/2004 3:55:00 PM
Bromodichloromethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Bromolom	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Bromomethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Carbon disulfide	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Carbon tetrachloride	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Chlorobenzene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Chloroethane	BRL	200		µg/L	49187	20	8/31/2004 3:55:00 PM
Chloroform	BRL	100		µg/L	49187	20	8/31/2004 3:55:00 PM
Chloromethane	BRL	200		µg/L	49197	20	8/31/2004 3:55:00 PM
cis-1,2-Dichloroethene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
cis-1,3-Dichloropropene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Cyclohexane	BRL	100		µg/L	49187	20	8/31/2004 3:55:00 PM
Dibromochloromethane	BRL	100		µg/L	49187	20	8/31/2004 3:55:00 PM
Dichlorodifluoromethane	BRL	200		µg/L	49197	20	8/31/2004 3:55:00 PM
Ethylbenzene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Freon-113	BRL	200		µg/L	49197	20	8/31/2004 3:55:00 PM
Isopropylbenzene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
m,p-Xylene	BRL	200		µg/L	49197	20	8/31/2004 3:55:00 PM
Methyl acetate	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Methyl tert-butyl ether	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Methylcyclohexane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Methylene chloride	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
o-Xylene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Styrene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Tetrachloroethene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Toluene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
trans-1,2-Dichloroethene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
trans-1,3-Dichloropropene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Trichloroethene	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Trichlorofluoromethane	BRL	100		µg/L	49197	20	8/31/2004 3:55:00 PM
Vinyl chloride	BRL	40		µg/L	49197	20	8/31/2004 3:55:00 PM
Sum: 4-Bromofluorobenzene	103	63.1-121		%REC	49197	20	8/31/2004 3:55:00 PM
Sum: Dibromofluoromethane	94.5	69.5-126		%REC	49197	20	8/31/2004 3:55:00 PM

**Qualifiers:**  
 \* Value exceeds Maximum Contaminant Level  
 BRL Below Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 N Analyte not NELAC certified  
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 P NELAC analytic certification pending  
 S Spike Recovery outside accepted recovery limits

**Analytical Environmental Services, Inc.**

Date: 14-Sep-04

CLIENT: Tetra Tech EM Inc.

Client Sample ID: G300D

Lab Order: 0408B38

Collection Date: 8/25/2004 4:10:00 PM

Project: Seven Out

Lab ID: 0408B38-018

Matrix: AQUEOUS

Analyses	Result	Rpt. Limit	Qual	Units	BatchID	DF	Date Analyzed
TCL VOLATILE ORGANICS		SW8280B		(SW5030B)			Analyst: AD
Sum: Toluene-d8	100	74.2-120	%REC		49187	20	8/31/2004 3:55:00 PM

Qualifiers:	°	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

0216-2006

3. Generator Name and Mailing Address

SEVEN JOINT  
701 SPANGLER ST.  
WAYCROSS, GA 31503  
4. Generator's Phone ( 312 ) 336-9402

5. Transporter 1 Company Name

BARNETT TRANSPORTATION, INC.

6. US EPA ID Number

A L Q 9 R 3 1 0 6 4 1 1

A. Transporter's Phone

904-693-1200

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY CORPORATION  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F L R 0 0 0 0 6 9 0 6 2

C. Facility's Phone

904-478-9320

11. Waste Shipping Name and Description

a. non hazardous industrial wastewater

b.

c.

d.

12. Containers.

No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

1.0

1.0

1.0

D. Additional Descriptions for Materials Listed Above

Time In Time Out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-0000  
Bill to: Environmental Outsource LLC  
P.O. Box 715  
Round O, SC 29474 Fax 843-536-1028

WRI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

5/28/2004

3. Generator's Name and Mailing Address

901 FRANCIS BL.  
WAYCROSS, GA 31593

4. Generator's Phone ( ) 228-0402

5. Transporter 1 Company Name

BARNETT TRANSPORTATION, INC.

6. US EPA ID Number

A I 0 9 8 3 1 9 6 1 1 2

A. Transporter's Phone

1 228 393 7200

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F I R 0 0 0 0 6 9 0 0 2

C. Facility's Phone

904-475-0320

11. Waste Shipping Name and Description

a. non hazardous industrial wastewater

12. Containers

No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

1 2 3 4 5 6 7 8 9 0

GENERATOR

D. Additional Descriptions for Materials Listed Above

PH Solid 011

Time In Time out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # 19041 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-0585  
Round O, SC 29474 Fax 843-538-1020

WRI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY



**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest  
Document No.2. Page 1  
of

3/26/2005

3. Generator's Name and Mailing Address

SEVEN COI  
901 FRANCIS ST.  
WAYCROSS, GA 31503

4. Generator's Phone ( 912 ) 348-3402

5. Transporter 1 Company Name

BARNETT TRANSPORTATION, INC.

6. US EPA ID Number

A.L.D. 98318601

A. Transporter's Phone

(404) 273-8900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F.L.R. 000089052

C. Facility's Phone

904-475-9320

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total

Quantity

14. Unit

Wt/Vol

a. NON HAZARDOUS INDUSTRIAL WASTEWATER

...

T, R

5,500.0

G

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

DR SOLID ...

Time In ... Time Out ...

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200

Bill to: Environmental Outsource LLC

WRI Approval #

P.O. Box 715

Ph 843-538-6585

Round O, ST 29474

Fax 843-538-1020

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Shane Patrick ...

Signature

Shane Patrick ...

Month Day Year

03/26/05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JEAN GERMAIN

Signature

Jean Germain

Month Day Year

03/26/05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

# **NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

7/28/2006

3. Generator's Name and Mailing Address

501 FRANCIS ST.  
WAYCROSS, GA 31503

4. Generator's Phone ( 912 ) 338-0402

5. Transporter 1 Company Name

PARMETT TRANSPORTATION, INC.

6. US EPA ID Number

2 6 0 2 8 1 1 0 1 1

A. Transporter's Phone

800-495-1700

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1219 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

5 L R 0 0 0 0 5 9 0 6 2

C. Facility's Phone

904-475-0320

11. Waste Shipping Name and Description

a. non hazardous industrial wastewater

12. Containers

No. Type

13. Total  
Quantity

14. Unit  
Wt/Val

1 1

5.5 0.0

3

D. Additional Descriptions for Materials Listed Above

Time in Time out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-5555  
Round O, SC 29474 Fax 843-538-1928

WCI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

## Emergency Contact Telephone Number

UNIFORM HAZARDOUS  
WASTE MANIFEST

1. Generator's US EPA ID No.

GA.D0040791.1

Manifest  
Document No.

002

2. Page 1  
of 1Information in the shaded areas is  
not required by Federal law.

Generator's Name and Mailing Address

USEPA  
601 Fairview St  
Atlanta, GA 30303

4. Generator's Phone

(770) 469-6527 ext 13

5. Transporter 1 Company Name

SPARKS  
NCR 666137517  
US EPA ID Number  
INDUSTRIAL WASTE 54126164

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Chlor-Alkyls  
710 Russell St  
Baltimore, MD 21230

10. US EPA ID Number

(781) 549-1300  
WDD 98.0555189

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

HM  
a. D001 Hydrogen Peroxide aqueous solution with more  
than 10% but not more than 60% hydrogen peroxide  
S.L. UN2014, PG II

b. D001 Oxidizing liquid, NOS S.L. UN3139, PG I

c.

d.

12. Containers

No. Type

1. Df

2. Df

13. Total  
Quantity

5.5

5.5

Gal

Gal

14. Unit  
Wt/Vol

Gal

Gal

Gal

Gal

15. Waste No.

D001

D001

D001

D001

D001

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimized the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Terry Sullivan

Signature

Terry Sullivan

Month Day Year

10/6/7/05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

K. Sullivan

Signature

K. Sullivan

Month Day Year

10/13/05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

K. Sullivan

Signature

K. Sullivan

Month Day Year

10/13/05

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

K. Sullivan

Signature

K. Sullivan

Month Day Year

10/13/05

GENERATOR'S COPY



# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

State of Georgia & State Origin		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/11/15	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-209	Total Tare Weight			Manifest # <b>01 - 001 - 77620</b>		
1. Work Site Name & Address Seven Oaks 901 Francis St. Waycross, GA 31503					Work Site Telephone # 912/338-0402		
2. Generator Name & Address Seven Oaks					Generator Telephone # Seven Oaks		
3. Description of Materials Non-Hazardous Non-Regulated Waste water				4. Containers Number Type 1 D1		5. Total Tons 3,000 GAL.	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Shene Ruffin / City Manager		Signature Required 			Month Day Year 4/11/15		
Transporter #1 Name and Address U.S. Waste Logistics 1738 Hall Park Dr Bellingham, WA 98201				Transporter #1 Telephone # 425 231 2001		Date of Pick-Up Month Day Year 04/11/15	
Type/Print Name & Title Disposal Clerk		Signature Required 					
9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title		Signature Required					
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit #				Special Instructions (229) 241-8440			
Type/Print Name		Signature Required			Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Generator	County & State of Origin G.A.	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date Loaded 01/11/05	Date Delivered
	Vehicle Lic # or Cont ID #	Waste Acceptance Form # 03-11-009	Total Tare Weight	Manifest # 01 - 001 - 77619			
	1. Work Site Name & Address Seven Oak 201 Francis St. Waverly, GA 31160				Work Site Telephone # 912/338-6402		
	2. Generator Name & Address Seven				Generator Telephone # Seven		
	3. Description of Materials		4. Containers Number	Type	5. Total Tons		
	Non-Hazardous Non-Regulated Waste water		1	DT	3,300 Gall.		
	6. Special Handling Instructions/Additional Information						
	7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
	Type/Print Name & Title		Signature Required			Month Day Year	
	[Signature]		[Signature]			01/11/05	
Transporters	8. Transporter #1 Name and Address Eddie Thompson 1100 S. W. 11th St. Valdosta, GA 31601		Transporter #1 Telephone # 229-343-4130		Date of Pick-Up Month Day Year 01/11/05		
	Type/Print Name & Title		Signature Required				
	9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
	Type/Print Name & Title		Signature Required				
Disposal Facility	10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSW) GA DER Permit #			Special Instructions			
	Type/Print Name		Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

& State of Origin _____ / _____		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>	Date Loaded 01/11/03	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 03-01-001	Total Tare Weight		Manifest # <b>01 - 001 - 77618</b>			
1. Work Site Name & Address Seven Oak 901 Francis St. Marietta, GA 30067					Work Site Telephone # 912-330-0112		
2. Generator Name & Address Same					Generator Telephone # Same		
3. Description of Materials			4. Containers Number Type		5. Total Tons		
Non-Hazardous Non-Regulated Waste water			1 DT		3.250 Gall.		
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Daniel Miller		Signature Required 			Month Day Year 01/11/03		
Transporter #1 Name and Address U.S. Waste Logistics 178 Hill Street Marietta, GA 30067		Transporter #1 Telephone # 262-281-7201			Date of Pick-Up Month Day Year 01/11/03		
Type/Print Name & Title Daniel Miller		Signature Required 			Date of Pick-Up Month Day Year		
9. Transporter #2 Name and Address		Transporter #2 Telephone #			Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required			Date of Pick-Up Month Day Year		
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440				Special Instructions			
Type/Print Name		Signature Required			Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Co. / & State of Origin Waste / GA	Municipal/Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date Loaded 04/1/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-905	Total Tare Weight	Manifest # 01 - 001 - 77617			
1. Work Site Name & Address Seven Old 901 Francis St. Waycross, GA 31593				Work Site Telephone # 912/338-0102		
2. Generator Name & Address Scum				Generator Telephone # Scum		
3. Description of Materials		4. Containers Number	Type	5. Total Tons		
Non-Hazardous Non-Regulated Waste water		1	DT	7.000		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title SK		Signature Required 		Month Day Year 04/1/05		
8. Transporter #1 Name and Address US... ... ... 32047		Transporter #1 Telephone # 229-241-2001		Date of Pick-Up Month Day Year 04/1/05		
Type/Print Name & Title Russell ...		Signature Required 				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required		Disposal Date Month Day Year		

L NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.





## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

State of Origin: GA		Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date Loaded 04/11/05	Date Delivered
Vehicle Lic # or Cojt ID #		Waste Acceptance Form # 15-01-2009	Total Tare Weight		Manifest # <b>01 - 001 - 77616</b>		
1. Work Site Name & Address Pecan Row 200 Francis St. Waverly, GA 31103					Work Site Telephone # 912/338-0402		
2. Generator Name & Address Jesse					Generator Telephone # None		
3. Description of Materials Non-Hazardous Non-Regulated Waste water				4. Containers Number 1 Type OF	5. Total Tons 5.500 tons		
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Shawn E. [Signature]			Signature Required		Month Day Year 04/11/05		
Transporter #1 Name and Address LAWSON TRANSPORT 3101 TOWNHILL CHURCH VALDOSTA GA 31601			Transporter #1 Telephone # 229-263-8304		Date of Pick-Up Month Day Year 04/11/05		
Type/Print Name & Title			Signature Required				
9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title			Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions				
Type/Print Name			Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin Waycross, GA	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 01/07/05	Date Delivered
Vehicle Lic # or Cont ID # 7	Waste Acceptance Form # 05-01-002	Total Tare Weight		Manifest # 01 - 001 - 77615		
1. Work Site Name & Address Seven Out 201 Francis St. Waycross, GA 31593				Work Site Telephone # 912/338-0402		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials		4. Containers Number Type		5. Total Tons		
Non-Hazardous Non-Regulated Waste water		1 01		3.200 Gall.		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title James R. Kilduff, B. S. Director of EPA		Signature Required <i>[Signature]</i>			Month Day Year 01/07/05	
Transporter #1 Name and Address 1524 Hall Road SW Marietta, GA 30067		Transporter #1 Telephone # 770-231-7001		Date of Pick-Up Month Day Year 01/07/05		
Type/Print Name & Title David Cook		Signature Required <i>[Signature]</i>				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

Generator

Transporters

Disposal Facility

County & State of Origin GA / GA	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>	Date Loaded 01/07/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-000	Total Tare Weight		Manifest # <b>01 - 001 - 77614</b>		
1. Work Site Name & Address Seven Oaks 501 Pecan Row Waycross, GA 31505				Work Site Telephone # 912/332-0102		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials		4. Containers Number Type		5. Total Tons		
Non-Hazardous Non-Regulated Waste water		1. DI		5.500 Gals.		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Steve Ricketts - Dir. Operations		Signature Required <i>Steve Ricketts</i>		Month Day Year 04/07/05		
8. Transporter #1 Name and Address BARNETT TRUCKING CO 1000 N. COLUMBIA ST TALLAHASSEE, FL 32220		Transporter #1 Telephone # 904-613-3800		Date of Pick-Up Month Day Year 04/07/05		
Type/Print Name & Title <i>Steve Ricketts</i>		Signature Required <i>Steve Ricketts</i>				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/07/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 03-01-009	Total Tare Weight		Manifest # 01 - 001 - 77613		
1. Work Site Name & Address Section Out 901 Francis St. Waycross, GA 32183				Work Site Telephone # 912/338-0102		
2. Generator Name & Address Sumco				Generator Telephone # Sumco		
3. Description of Materials Non-Hazardous Non-Regulated White water			4. Containers Number 1 Type DT	5. Total Tons 5.400		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane Anderson, Sr. Director of EPA		Signature Required <i>Shane Anderson</i>			Month Day Year 04/07/05	
8. Transporter #1 Name and Address LAWSON TRANSPORT 6151 TRUMPING COLONY VALDOSTA, GA 31601			Transporter #1 Telephone # 229-543-4603		Date of Pick-Up Month Day Year 04/07/05	
Type/Print Name & Title			Signature Required			
9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title			Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions			
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Generator

Transporters

Disposal Facility

County & State of Origin Ware / GA	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/07/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01 909	Total Tare Weight		Manifest # <b>01 - 001 - 77612</b>		
1. Work Site Name & Address Seven Out 901 Francis St. Waycross, GA 31503				Work Site Telephone # 912/338-0102		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials		4. Containers Number		Type	5. Total Tons	
Non-Hazardous Non-Regulated Waste water		1		DT	5,000	
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane R. [Signature]		Signature Required [Signature]			Month Day Year 04/07/05	
Transporter #1 Name and Address Environmental Remediation Services 700 Valley Station Ave Tucker, GA 30084		Transporter #1 Telephone # 770-241-9192		Date of Pick-Up Month Day Year 04/07/05		
Type/Print Name & Title Nicholas A. Pugliese TH		Signature Required [Signature]			Date of Pick-Up Month Day Year	
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DEIR Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Generator	County & State of Origin GA	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/07/05	Date Delivered
	Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-909	Total Tare Weight	Manifest # 01 - 001 - 77611			
	1. Work Site Name & Address Seven Cnd 901 Francis St. Waycross, GA. 31503					Work Site Telephone # 912/336-0102	
	2. Generator Name & Address Same					Generator Telephone # Same	
Generator	3. Description of Materials			4. Containers Number Type	5. Total Tons		
	Non-Hazardous Non-Regulated Waste water			1 DT	5.560		
Transporters	6. Special Handling Instructions/Additional Information						
	7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
	Type/Print Name & Title Shane R. Ford, By Director of EPA		Signature Required <i>Shane R. Ford</i>			Month Day Year 04/07/05	
	8. Transporter #1 Name and Address Dixie 4111 TOWN RD MONTICELLO, TN 37133 TOWNVILLE, TN 37220		Transporter #1 Telephone # 615-497-7600		Date of Pick-Up Month Day Year 04/07/05		
Transporters	Type/Print Name & Title <i>Buddy Horton</i>		Signature Required <i>Buddy Horton</i>				
	9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Disposal Facility	Type/Print Name & Title			Signature Required			
	10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions			
Disposal Facility	Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Generator

Transporters

Disposal Facility

County & State of Origin Wart	Municipal Solid Waste (MSW) Yes No	Non-MSW Yes No	Non-Friable Asbestos Yes No	Friable Asbestos Yes No	Date Loaded 01/07/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 01-000	Total Tare Weight	Manifest # 01 - 001 - 77610			
1. Work Site Name & Address Seven Oak 901 Francis St. Waycross, GA 32187				Work Site Telephone # 912-338-0402		
2. Generator Name & Address Seven				Generator Telephone # Seven		
3. Description of Materials Non-Hazardous Non-Regulated Waste water		4. Containers Number 1 Type DT		5. Total Tons 2.100		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane Ralston, District Manager		Signature Required <i>Shane Ralston</i>			Month Day Year 01/07/05	
8. Transporter #1 Name and Address 105 Hall Park Dr. Waycross, GA 32187		Transporter #1 Telephone # (229) 241-2001			Date of Pick-Up Month Day Year 01/07/05	
Type/Print Name & Title Richard L. Ralston		Signature Required <i>Richard L. Ralston</i>				
9. Transporter #2 Name and Address		Transporter #2 Telephone #			Date of Pick-Up Month Day Year	
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DIER Permit #		Special Instructions (229) 241-8440				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

City & State of Origin		Municipal Solid Waste (MSW) Yes No	Non-MSW Yes No	Non-Friable Asbestos Yes No	Friable Asbestos Yes No	Date Loaded 04/06/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01 709		Total Tare Weight		Manifest # 01 - 001 - 77609	
1. Work Site Name & Address Seven Oaks 501 Francis St. Valdosta, GA 31603						Work Site Telephone # 912/338-0102	
2. Generator Name & Address Name						Generator Telephone # Name	
3. Description of Materials				4. Containers Number Type		5. Total Tons	
Non-Hazardous Non-Regulated Waste water				1 DT		5,000 Gal.	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title				Signature Required		Month Day Year	
Transporter #1 Name and Address Francis Street Environmental Services, Inc. 1540 N. 34th St. Tomball, TX 77375				Transporter #1 Telephone # 281-731-0759		Date of Pick-Up Month Day Year 04/06/05	
Type/Print Name & Title M. L. S. [Signature]				Signature Required [Signature]			
9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title				Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440				Special Instructions			
Type/Print Name				Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

Generator

Transporters

Disposal Facility

County & State of Origin Wayne / GA	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 01/06/05	Date Delivered
Vehicle Lic # 7 or Cont ID # 142	Waste Acceptance Form # 05-01-000	Total Tare Weight		Manifest # 01 - 001 - 77608		
1. Work Site Name & Address Seven Out 901 Francis St. Wayne, GA 31103				Work Site Telephone # 912/339-0401		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials Non-Hazardous Non-Regulated Waste water		4. Containers Number 1 Type DT		5. Total Tons 3.200		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane R. [Signature]		Signature Required [Signature]		Month Day Year 01/06/05		
Transporter #1 Name and Address W.S. [Signature] 170 [Signature] CROWN COVE SPRINGS, FL 32013		Transporter #1 Telephone # 888 241-2001		Date of Pick-Up Month Day Year 01/06/05		
Type/Print Name & Title [Signature]		Signature Required [Signature]				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC. 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/26/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-009		Total Tare Weight		Manifest # 01 - 001 - 77607	
1. Work Site Name & Address Seven Oaks 61 Francis St., Valdosta, GA 31603						Work Site Telephone # 912/328-3107	
2. Generator Name & Address State						Generator Telephone # State	
3. Description of Materials				4. Containers Number Type		5. Total Tons	
Non-Hazardous Non-Regulated Waste water				1 DT		5.6 tons	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Shane R. ...				Signature Required Shane R. ...		Month Day Year 04/26/05	
8. Transporter #1 Name and Address ... ... ... 32043				Transporter #1 Telephone # 869-271-2001		Date of Pick-Up Month Day Year 04/26/05	
Type/Print Name & Title ... ..				Signature Required ... ..			
9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title				Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440				Special Instructions			
Type/Print Name				Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date Loaded 11/24/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 95-01-909	Total Tare Weight	Manifest # <b>01 - 001 - 77606</b>			
1. Work Site Name & Address Pecan Row 201 Pecan Row, Valdosta, GA 31602			Work Site Telephone # 912-738-0402			
2. Generator Name & Address State			Generator Telephone # State			
3. Description of Materials		4. Containers Number	Type	5. Total Tons		
Non-Hazardous Non-Regulated Waste water		1	DI	0.00		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Steve Rayford, Environmental Mgr		Signature Required <i>Steve Rayford</i>		Month Day Year 24/04/05		
Transporter #1 Name and Address 7601 Highway 100 Valdosta, GA 31602		Transporter #1 Telephone # (229) 241-8440		Date of Pick-Up Month Day Year 04/06/05		
Type/Print Name & Title Nicholas A. Pugliese III		Signature Required <i>Nicholas A. Pugliese III</i>				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-01912 (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

City & State or Origin		Municipal Solid Waste (MSW): Yes <input type="checkbox"/> No <input type="checkbox"/>		Non-MSW Yes <input type="checkbox"/> No <input type="checkbox"/>		Non-Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>		Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>		Date Loaded 01/01/05		Date Delivered	
Vehicle Lic # or Cont ID # F		Waste Acceptance Form #		Total Tare Weight		Manifest # <b>01 - 001 - 77605</b>							
1. Work Site Name & Address Seven Oaks 101 W. Peachtree Street, GA 31603								Work Site Telephone # 712-336-6002					
2. Generator Name & Address Seven Oaks								Generator Telephone # Same					
3. Description of Materials Non-Hazardous Non-Regulated Waste								4. Containers Number 1		Type DR		5. Total Tons 7.000	
6. Special Handling Instructions/Additional Information													
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.													
Type/Print Name & Title Shane R. Lee, Business Manager				Signature Required <i>[Signature]</i>				Month Day Year 01/01/05					
Transporter #1 Name and Address 131 W. Peachtree Street, SE Atlanta, GA 30303								Transporter #1 Telephone # 404-261-7001		Date of Pick-Up Month Day Year 01/06/05			
Type/Print Name & Title Daniel Lee								Signature Required <i>[Signature]</i>					
9. Transporter #2 Name and Address								Transporter #2 Telephone #		Date of Pick-Up Month Day Year			
Type/Print Name & Title								Signature Required					
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA QER Permit # (229) 241-8440								Special Instructions					
Type/Print Name				Signature Required				Disposal Date Month Day Year					

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin	Municipal Solid Waste (MSW)	Non-MSW	Non-Friable Asbestos	Friable Asbestos	Date Loaded	Date Delivered
	Yes No	Yes No	Yes No	Yes No		
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 95-01 909	Total Tare Weight	Manifest # <b>01 - 001 - 77604</b>			
1. Work Site Name & Address Seven Oak 601 Francis St. Waycross, GA 31503			Work Site Telephone # 912/338-6102			
2. Generator Name & Address Seven			Generator Telephone # Seven			
3. Description of Materials			4. Containers Number	Type	5. Total Tons	
Non-Hazardous Non-Regulated Waste water			1	DT	5,000 GAL.	
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Stone Raiford, L. Director of EPA			Signature Required 		Month Day Year 04/06/05	
Transporter #1 Name and Address FLORIAN & SONS INCORPORATED 10010 10TH AVE JACKSONVILLE, FL 32218			Transporter #1 Telephone # 704-731-8759		Date of Pick-Up Month Day Year 04/06/05	
Type/Print Name & Title Mike Adams			Signature Required 			
9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title			Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions			
Type/Print Name			Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

City & State of Origin	Municipal Solid Waste (MSW)	Non-MSW	Non-Friable Asbestos	Friable Asbestos	Date Loaded	Date Delivered
	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	04/06/05	
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 03-01-039	Total Tare Weight		Manifest # <b>01 - 001 - 77603</b>		
1. Work Site Name & Address Troy On... 101 Peachtree Way... 31601				Work Site Telephone # 912/333-0402		
2. Generator Name & Address ...				Generator Telephone # ...		
3. Description of Materials		4. Containers Number Type		5. Total Tons		
Non-Hazardous Non-Regulated Waste water		1 DT		5,400 GAL.		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Steve Eubank, Sr. Director of...		Signature Required <i>Steve Eubank</i>			Month Day Year 02/16/05	
Transporter #1 Name and Address Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane Valdosta, GA 31601-1109		Transporter #1 Telephone # 912-245-7200		Date of Pick-Up Month Day Year 04/06/05		
Type/Print Name & Title <i>Steve Eubank</i>		Signature Required <i>Steve Eubank</i>				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST



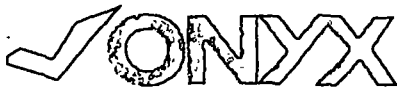
County & State Origin		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input type="checkbox"/>		Non-MSW Yes <input type="checkbox"/> No <input type="checkbox"/>		Non-Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>		Friable Asbestos Yes <input type="checkbox"/> No <input type="checkbox"/>		Date Loaded 11/16/05		Date Delivered			
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 11/16/05		Total Tare Weight				Manifest # <b>01 - 001 - 77602</b>							
1. Work Site Name & Address Seven Out 901 Francis St • Valdosta, GA 31601								Work Site Telephone # 912/536-0402							
2. Generator Name & Address State								Generator Telephone # State							
3. Description of Materials								4. Containers Number		Type		5. Total Tons			
Non-Hazardous Non-Poisonous Waste Water								1		120		5.000			
6. Special Handling Instructions/Additional Information															
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.															
Type/Print Name & Title Shane R. ...				Signature Required Shane R. ...				Month Day Year 11/16/05							
Transporter #1 Name and Address LAWSON ... 2114 ... VALDOSTA, GA 31601								Transporter #1 Telephone # 229-463-4603		Date of Pick-Up Month Day Year 11/16/05					
Type/Print Name & Title Damon ...								Signature Required Damon ...							
9. Transporter #2 Name and Address								Transporter #2 Telephone #		Date of Pick-Up Month Day Year					
Type/Print Name & Title								Signature Required							
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 <u>092-019D (MSWL)</u> GA DER Permit # (229) 241-8440								Special Instructions							
Type/Print Name				Signature Required				Disposal Date Month Day Year							

Generator

Transporters

Disposal Facility

LL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Generator	County & State of Origin	Municipal Solid Waste (MSW) Yes No	Non-MSW Yes No	Non-Friable Asbestos Yes No	Friable Asbestos Yes No	Date Loaded 04/06/05	Date Delivered
	Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-04-103	Total Tare Weight		Manifest # 01 - 001 - 77601		
	1. Work Site Name & Address Riverside 901 Riverside Dr. Waverly, GA 31559					Work Site Telephone # 912-338-0492	
	2. Generator Name & Address None					Generator Telephone # None	
Transporters	3. Description of Materials			4. Containers Number Type	5. Total Tons		
	Non-Hazardous Non-Regulated Waste water			1 100	3,000		
	6. Special Handling Instructions/Additional Information						
	7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Disposal Facility	Type/Print Name & Title Shane R. ...		Signature Required Shane R. ...			Month Day Year 04/06/05	
	8. Transporter #1 Name and Address US ... 470 ... SPRING LAKE SPRINGS FL 32043			Transporter #1 Telephone # 908-261-7001		Date of Pick-Up Month Day Year 04/06/05	
	Type/Print Name & Title Russell ...			Signature Required Russell ...			
	9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Disposal Facility	Type/Print Name & Title			Signature Required			
	10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions			
	Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

City & State Origin / GA	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/06/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-009	Total Tare Weight		Manifest # <b>01 - 001 - 77600</b>		
1. Work Site Name & Address Seven Oak 901 Francis St. Waycross, GA 31503				Work Site Telephone # 912/338-0402		
2. Generator Name & Address State				Generator Telephone # State		
3. Description of Materials Non-Hazardous Non-Regulated Waste water		4. Containers Number 1 Type DT		5. Total Tons 3.7 tons		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane R. [Signature]		Signature Required [Signature]			Month Day Year 04/06/05	
Transporter #1 Name and Address [Address] GREEN OAK SHEDS, - FL 77043		Transporter #1 Telephone # 954-781-1500		Date of Pick-Up Month Day Year 04/06/05		
Type/Print Name & Title [Signature]		Signature Required [Signature]				
9. Transporter #2: Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

LL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

City & State of Origin		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Non-MSW Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Date Loaded 10/10/00		Date Delivered			
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 01-01-000		Total Tare Weight				Manifest # 01 - 001 - 77599							
1. Work Site Name & Address Seven Oak 901 Francis St. Wadley, GA 31793								Work Site Telephone # 912/338-0102							
2. Generator Name & Address Stone								Generator Telephone # Stone							
3. Description of Materials								4. Containers Number		Type		5. Total Tons			
Non-Hazardous Non-Regulated Waste water								1		DT		5,000 GAL.			
6. Special Handling Instructions/Additional Information															
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.															
Type/Print Name & Title Stone, Michael, Jr.								Signature Required <i>[Signature]</i>				Month Day Year 10/10/00			
Transporter #1 Name and Address Environmental Waste Solutions Services 7601 Peachtree Industrial Blvd. Jacksonville, FL 32216								Transporter #1 Telephone # 904-791-1992				Date of Pick-Up Month Day Year 10/10/00			
Type/Print Name & Title Nicholas A. Hughes								Signature Required <i>[Signature]</i>							
9. Transporter #2 Name and Address								Transporter #2 Telephone #				Date of Pick-Up Month Day Year			
Type/Print Name & Title								Signature Required							
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440								Special Instructions							
Type/Print Name								Signature Required				Disposal Date Month Day Year			

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin Ware / GA	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/05/05	Date Delivered
Vehicle Lic # 7 or Cont ID #	Waste Acceptance Form # 05-01-509	Total Tare Weight		Manifest # 01 - 001 - 77598		
1. Work Site Name & Address Seven Out 901 Francis St. Waycross, GA 31503				Work Site Telephone # 912-338-0402		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials			4. Containers Number Type	5. Total Tons		
Non-Hazardous Non-Regulated Waste water			1 DT	3,200 GA		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane Wetherington, L. W. Wetherington		Signature Required <i>[Signature]</i>			Month Day Year 04/05/05	
8. Transporter #1 Name and Address W. S. W. Logistics 973 Hill Park Rd Greenville Springs, FL 32043			Transporter #1 Telephone # 888-281-2000		Date of Pick-Up Month Day Year 04/05/05	
Type/Print Name & Title Drew C. Coker			Signature Required <i>[Signature]</i>			
9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title			Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions			
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Generator

Transporters

Disposal Facility

County & State of Origin WIS 3A	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 01/05/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 03-61-999	Total Tare Weight		Manifest # <b>01 - 001 - 77597</b>		
1. Work Site Name & Address Seven Oak 901 Francis St. Waycross, GA 31593				Work Site Telephone # 912/338-0402		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials Non-Hazardous Non-Regulated Waste water		4. Containers Number 1 Type DT		5. Total Tons 5.00		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title B. J. Ralston, B. J. Ralston, S. J. Ralston		Signature Required <i>[Signature]</i>			Month Day Year 01/05/05	
8. Transporter #1 Name and Address B. J. Ralston, B. J. Ralston, S. J. Ralston 14001 Peachtree Road Tucker, GA 30084		Transporter #1 Telephone # 404-693-7700			Date of Pick-Up Month Day Year 01/05/05	
Type/Print Name & Title <i>[Signature]</i>		Signature Required <i>[Signature]</i>				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

County & State of Origin Wisc / GA		Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/04/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 02-01-005	Total Tare Weight		Manifest # 01 - 001 - 77596		
1. Work Site Name & Address Seven Oak 901 Francis St. Waverost, GA 31003					Work Site Telephone # 912-338-0402		
2. Generator Name & Address Siame					Generator Telephone # Siame		
Generator	3. Description of Materials			4. Containers Number	Type	5. Total Tons	
	Non-Hazardous Non-Regulated Waste water			1	DT	5.500	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Sherry R. Rader, Regional Mgr				Signature Required <i>[Signature]</i>		Month Day Year 04/05/05	
8. Transporter #1 Name and Address Banner Transportation 1400 Peachtree Rd Tucker, GA 30084				Transporter #1 Telephone # 404-673-5800		Date of Pick-Up Month Day Year 04/05/05	
Transporters	Type/Print Name & Title Terrell B Sugar				Signature Required <i>[Signature]</i>		
	9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year
Type/Print Name & Title				Signature Required			
Disposal Facility	10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit #				Special Instructions		
	Type/Print Name		Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin: / CA	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 01/14/03	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-009	Total Tare Weight	Manifest # 01 - 001 - 77594			
1. Work Site Name & Address Seven Oak 901 Francis St. Waycross, GA 31503				Work Site Telephone # 912/333-0102		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials		4. Containers Number	Type	5. Total Tons		
Non-Hazardous Non-Regulated Waste water		1	DT	5,500		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane Williams, Owner		Signature Required 			Month Day Year 01/14/03	
8. Transporter #1 Name and Address LAWSON TRANSPORT 6654 DUNN PINE CIRCLE VALDOSTA, GA 31601		Transporter #1 Telephone # 229-563-4803		Date of Pick-Up Month Day Year 01/05/03		
Type/Print Name & Title Shane Williams		Signature Required 				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 032-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

County & State of Origin Wart / GA		Municipal Solid Waste (MSW) Yes No		Non-MSW Yes No		Non-Friable Asbestos Yes No		Friable Asbestos Yes No		Date Loaded 01/05/05		Date Delivered			
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-009		Total Tare Weight				Manifest # 01 - 001 - 77595							
1. Work Site Name & Address Seven Oak 901 Francis St. Valdosta, GA 31603								Work Site Telephone # 912/338-4102							
2. Generator Name & Address State								Generator Telephone # State							
3. Description of Materials Non-Hazardous Non-Regulated Waste wider								4. Containers Number 1		Type DT		5. Total Tons 3.600 G.M.			
6. Special Handling Instructions/Additional Information															
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.															
Type/Print Name & Title SHANE RALPH, B. Director of Ops				Signature Required <i>Shane Ralph</i>				Month Day Year 01/05/05							
8. Transporter #1 Name and Address ONYX WASTE LOGISTICS								Transporter #1 Telephone # 685-241-2001				Date of Pick-Up Month Day Year 01/05/05			
Type/Print Name & Title K. LISA H. FINEY								Signature Required <i>K. Lisa H. Finey</i>							
9. Transporter #2 Name and Address								Transporter #2 Telephone #				Date of Pick-Up Month Day Year			
Type/Print Name & Title								Signature Required							
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440								Special Instructions							
Type/Print Name				Signature Required				Disposal Date Month Day Year							

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

County & State of Origin		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Date Loaded		Date Delivered	
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-909		Total Tare Weight				Manifest # <b>01 - 001 - 77593</b>					
1. Work Site Name & Address Seven Out 901 Francis St Waycross, GA 31503								Work Site Telephone # 912/333-0102					
2. Generator Name & Address Sant								Generator Telephone # Sant					
3. Description of Materials Non-Hazardous Non-Regulated Waste (wider)								4. Containers Number 1 Type DI		5. Total Tons 5.000			
6. Special Handling Instructions/Additional Information													
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.													
Type/Print Name & Title Shane Kallen, Environmental Services				Signature Required <i>[Signature]</i>				Month Day Year 01/05/05					
8. Transporter #1 Name and Address Environmental Remediation Services 1500 Tallahassee Ave. Jacksonville, FL 32202								Transporter #1 Telephone # 904-711-9952		Date of Pick-Up Month Day Year 04/15/05			
Type/Print Name & Title Nicholas A. Peltier								Signature Required <i>[Signature]</i>					
9. Transporter #2 Name and Address								Transporter #2 Telephone #		Date of Pick-Up Month Day Year			
Type/Print Name & Title								Signature Required					
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440								Special Instructions					
Type/Print Name				Signature Required				Disposal Date Month Day Year					

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



# ONLYX

[illegible]

## Generator

## Transporters

## Disposal Facility

**ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.**

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

County & State of Origin <i>Wisc</i> <i>Pa.</i>		Municipal Solid Waste (MSW) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Non-MSW <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Non-Friable Asbestos <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Friable Asbestos <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Loaded <i>04/05/05</i>	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # <i>05-01-569</i>	Total Tare Weight		Manifest # <b>01 - 001 - 77591</b>		
1. Work Site Name & Address <i>Seven Oak</i> <i>901 Francis St. Waycross, GA 31503</i>					Work Site Telephone # <i>912/338-0102</i>		
2. Generator Name & Address <i>Same</i>					Generator Telephone # <i>Same</i>		
3. Description of Materials				4. Containers Number	Type	5. Total Tons	
<i>Non-Hazardous Non-Regulated Waste water</i>				<i>1</i>	<i>WT</i>	<i>0.200</i>	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title <i>Shane R. Ford, Jr. Director of EPA</i>				Signature Required <i>[Signature]</i>		Month Day Year <i>04/05/05</i>	
8. Transporter #1 Name and Address <i>WASTE LOGISTICS</i> <i>133 WALKER PARK RD.</i> <i>GREENSBORO, NC 27403</i>				Transporter #1 Telephone # <i>888-231-2001</i>		Date of Pick-Up Month Day Year <i>04/05/05</i>	
Type/Print Name & Title <i>David C. Ford</i>				Signature Required <i>[Signature]</i>			
9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title				Signature Required			
10. Disposal Facility Name, Address & Telephone # <i>Cnyx Pecan Row Landfill, LLC</i> <i>2395 Wetherington Lane • Valdosta, GA 31601-1109</i> <i>032-019D (MSWL)</i> <i>GA DER Permit #</i> <i>(229) 241-8440</i>				Special Instructions			
Type/Print Name				Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin Warr / GA	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date Loaded 04/05/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-999	Total Tare Weight	Manifest # 01 - 001 - 77590			
1. Work Site Name & Address Seven Out 901 Francis St. Waycross, GA. 31593				Work Site Telephone # 912/338-0102		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials				4. Containers Number	Type	5. Total Tons
Non-Hazardous Non-Regulated Waste water				1	DT	5,000 GAL.
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Same			Signature Required 		Month Day Year 04/05/05	
8. Transporter #1 Name and Address US WHITE LOGISTICS 132 HILL PARK RD VALDOSTA, GA 31601-1109			Transporter #1 Telephone # 229-241-2441		Date of Pick-Up Month Day Year 04/05/05	
Type/Print Name & Title Russell Perry			Signature Required 			
9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title			Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions			
Type/Print Name			Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

County & State of Origin WAL / GA		Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Non-Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Date Loaded 04/05/05		Date Delivered			
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-949		Total Tare Weight				Manifest # <b>01 - 001 - 77589</b>							
1. Work Site Name & Address Seven Oak 901 Francis St. Waycross, GA. 31503								Work Site Telephone # 912/338-0402							
2. Generator Name & Address SINIC								Generator Telephone # SINIC							
3. Description of Materials Non-Hazardous Non-Regulated Waste water								4. Containers Number 1		Type DT		5. Total Tons 3,300 GAL.			
6. Special Handling Instructions/Additional Information															
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.															
Type/Print Name & Title Steve R. Ford, B. Environmental								Signature Required <i>[Signature]</i>				Month Day Year 04/05/05			
8. Transporter #1 Name and Address ECONOMY TRANSPORT 14001 DIXIEVILLE RD. JACKSONVILLE, FL 32226								Transporter #1 Telephone # 904-693-8800				Date of Pick-Up Month Day Year 04/05/05			
Type/Print Name & Title ✓ Steve R. Ford								Signature Required <i>[Signature]</i>							
9. Transporter #2 Name and Address								Transporter #2 Telephone #				Date of Pick-Up Month Day Year			
Type/Print Name & Title								Signature Required							
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440								Special Instructions							
Type/Print Name								Signature Required				Disposal Date Month Day Year			

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

County & State of Origin Waycross, GA		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/05/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-999	Total Tare Weight		Manifest # 01 - 001 - 77588		
1. Work Site Name & Address Seven Out 901 Francis St. Waycross, GA 31503					Work Site Telephone # 912/338-0102		
2. Generator Name & Address Same					Generator Telephone # Same		
3. Description of Materials			4. Containers Number Type		5. Total Tons		
Non-Hazardous Non-Regulated Waste water			1 DT		5.500 CWT		
6. Special Handling Instructions/Additional Information							
7. Generator's Certification:			Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.				
Type/Print Name & Title Keith D. P.			Signature Required			Month Day Year 04/05/05	
8. Transporter #1 Name and Address BAGLEY TRANSPORT 11001 PINEHURST RD. JACKSONVILLE, FL 32220			Transporter #1 Telephone # 904-493-5200			Date of Pick-Up Month Day Year 04/05/05	
Type/Print Name & Title Jerrrell B Sugar			Signature Required Jerrrell B Sugar				
9. Transporter #2 Name and Address			Transporter #2 Telephone #			Date of Pick-Up Month Day Year	
Type/Print Name & Title			Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-0190 (MSWL) GA DER Permit # (229) 241-8440			Special Instructions				
Type/Print Name			Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/05/05	Date Delivered
Vehicle Lic # 32 or Cort ID # 1126	Waste Acceptance Form # 05-01-969	Total Tare Weight	Manifest # <b>01 - 001 - 77587</b>			
1. Work Site Name & Address Seven Out 901 Francis St. Waycross, GA. 31503				Work Site Telephone # 912/338-0102		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials		4. Containers Number	Type	5. Total Tons		
Non-Hazardous Non-Regulated Waste water		1	DI	5.500		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title		Signature Required			Month Day Year	
8. Transporter #1 Name and Address BIZWET TRANSPORT 11001 FIVEHILL RD. TALMADGEVILLE, GA 32220		Transporter #1 Telephone # 904.643.3600		Date of Pick-Up Month Day Year 04/05/05		
Type/Print Name & Title RICK ST. RICHARD		Signature Required				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required			Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC

# ONYX

## WASTE MANIFEST

County & State of Origin Ga. <u>GA</u>		Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/05/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-009	Total Tare Weight		Manifest # 01 - 001 - 77586		
1. Work Site Name & Address Seven Oak 901 Francis St. Waycross, GA 31503					Work Site Telephone # 912/338-0402		
2. Generator Name & Address Same					Generator Telephone # Same		
3. Description of Materials				4. Containers Number	Type	5. Total Tons	
Non-Hazardous Non-Regulated Waste water				1	DT	5500 GAL	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Shane Rayford, Jr. Director of Env.				Signature Required 		Month Day Year 04/05/05	
8. Transporter #1 Name and Address ECHO TRANSPORT 2150 TOWNSEND GREEN VALDOSTA, GA 31601				Transporter #1 Telephone # 229-513-4803		Date of Pick-Up Month Day Year 04/05/05	
Type/Print Name & Title				Signature Required			
9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title				Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit #				Special Instructions			
Type/Print Name				Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST



County & State of Origin Waycross, GA		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Date Loaded 04/05/05		Date Delivered			
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-009		Total Tare Weight				Manifest # <b>01 - 001 - 77585</b>							
1. Work Site Name & Address Seven Oak 901 Francis St. Waycross, GA, 31503								Work Site Telephone # 912/338-0402							
2. Generator Name & Address Shane								Generator Telephone # Shane							
3. Description of Materials Non-hazardous Non-regulated Waste water								4. Containers Number 1		Type DT		5. Total Tons 5,000 GAL			
6. Special Handling Instructions/Additional Information															
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.															
Type/Print Name & Title Shane Barford, By Directional EPA								Signature Required <i>[Signature]</i>				Month Day Year 04/05/05			
8. Transporter #1 Name and Address FRESH WINDS REAL ESTATE SERVICES 765 TALLEYBAND AVE TALLASSEE, FL 32202								Transporter #1 Telephone # 904-771-9992				Date of Pick-Up Month Day Year 04/05/05			
Type/Print Name & Title Nicholas A. Barford								Signature Required <i>[Signature]</i>							
9. Transporter #2 Name and Address								Transporter #2 Telephone #				Date of Pick-Up Month Day Year			
Type/Print Name & Title								Signature Required							
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440								Special Instructions							
Type/Print Name								Signature Required				Disposal Date Month Day Year			

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.





## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin Ware, GA	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 01/05/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 02-01-999	Total Tare Weight	Manifest # 01 - 001 - 77584			
1. Work Site Name & Address Seven Oak 901 Francis St. Wadsworth, GA 31503				Work Site Telephone # 912/338-0102		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials			4. Containers Number	Type	5. Total Tons	
Non-Hazardous Non-Regulated Waste water			1	DT	3.200	
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane RAIFORD, By Direction of EPA			Signature Required 		Month Day Year 01/05/05	
8. Transporter #1 Name and Address WASTE LOGISTICS 1000 Peachtree St NE Atlanta, GA 30309			Transporter #1 Telephone # 888-281-2001		Date of Pick-Up Month Day Year 01/05/05	
Type/Print Name & Title Dance Cook			Signature Required 			
9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title			Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440			Special Instructions			
Type/Print Name			Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

**ONYX PECAN ROW LANDFILL, LLC**

## WASTE MANIFEST

Generator	County & State of Origin <u>Ware / GA</u>		Municipal Solid Waste (MSW) <u>Yes</u> <u>No</u>	Non-MSW <u>X</u> Yes <u>No</u>	Non-Friable Asbestos <u>Yes</u> <u>No</u>	Friable Asbestos <u>Yes</u> <u>X</u> No	Date Loaded <u>04/01/05</u>	Date Delivered	
	Vehicle Lic # or Cont ID #		Waste Acceptance Form # <u>02-01-009</u>		Total Tare Weight		Manifest # <b><u>01 - 001 - 77583</u></b>		
	1. Work Site Name & Address <u>Seymour Out</u> <u>901 Francis St. Waycross, GA. 31503</u>						Work Site Telephone # <u>912/338-0402</u>		
	2. Generator Name & Address <u>Same</u>						Generator Telephone # <u>Same</u>		
	3. Description of Materials <u>Non-Hazardous Non-Regulated Waste water</u>				4. Containers Number Type <u>1</u> <u>WT</u>		5. Total Tons <u>3600 GAL.</u>		
	6. Special Handling Instructions/Additional Information								
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.									
Type/Print Name & Title <u>Shane Ford, Environmental Eng</u>									
Signature Required <u>[Signature]</u>									
Month Day Year <u>04/01/05</u>									
8. Transporter #1 Name and Address <u>Midwest Logistics</u> <u>934 Main Park Rd.</u> <u>Greenwood Springs, IL 62443</u>									
Transporter #1 Telephone # <u>888-281-2001</u>									
Date of Pick-Up Month Day Year <u>04/01/05</u>									
Transporters	Type/Print Name & Title <u>Russell Perry</u>								
	Signature Required <u>[Signature]</u>								
	9. Transporter #2 Name and Address						Transporter #2 Telephone #		Date of Pick-Up Month Day Year
Disposal Facility	Type/Print Name & Title						Signature Required		
	10. Disposal Facility Name, Address & Telephone # <u>Oryx Pecan Row Landfill, LLC</u> <u>2995 Wetherington Lane • Valdosta, GA 31601-1109</u> <u>092-019D (MSWL)</u> <u>GA DER Permit #</u> <u>(229) 241-8440</u>						Special Instructions		
	Type/Print Name						Signature Required		
							Disposal Date Month Day Year		

**ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.**

# ONYX PECAN ROW LANDFILL, LLC



## WASTE MANIFEST

County & State of Origin GEO / GA		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 01/01/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-909	Total Tare Weight		Manifest # <b>01 - 001 - 77582</b>		
1. Work Site Name & Address Seven Out 901 Francis St. Waycross, GA, 31583					Work Site Telephone # 912-338-0102		
2. Generator Name & Address State					Generator Telephone # State		
3. Description of Materials				4. Containers Number	Type	5. Total Tons	
Non-Hazardous Non-Regulated Waste water				1	DR	5,000 GAL.	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Shawn P. ...				Signature Required 		Month Day Year 01/01/05	
8. Transporter #1 Name and Address ENVIRONMENTAL ... SERVICES				Transporter #1 Telephone # (904) 741-1992		Date of Pick-Up Month Day Year 01/01/05	
Type/Print Name & Title Nicholas A. Pugliese				Signature Required 			
9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title				Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440				Special Instructions			
Type/Print Name				Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin None /		Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Friable Asbestos Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Date Loaded 04/04/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-009	Total Tare Weight		Manifest # <b>01 - 001 - 77581</b>		
1. Work Site Name & Address Seven Oaks 901 Francis St. Waycross, GA 31503					Work Site Telephone # 912-338-0102		
2. Generator Name & Address Same					Generator Telephone # Same		
Generator	3. Description of Materials			4. Containers Number	Type	5. Total Tons	
	Non-Hazardous Non-Regulated Waste water			1	DT	5,000 Gall	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title John P. Baker, Owner				Signature Required 		Month Day Year 04/04/05	
8. Transporter #1 Name and Address Eaton Transport				Transporter #1 Telephone # 229-561-4803		Date of Pick-Up Month Day Year 04/01/05	
Transporters	Type/Print Name & Title Raymond L. Ferguson				Signature Required 		
	9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title				Signature Required			
Disposal Facility	10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit #			Special Instructions			
	Type/Print Name			Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST



County & State of Origin		Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 4/4/05	Date Delivered
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-002	Total Tare Weight		Manifest # 01 - 001 - 77580		
1. Work Site Name & Address Seven Oaks 901 Francis St. Waycross, GA 31503					Work Site Telephone # 912/338-0402		
2. Generator Name & Address Name					Generator Telephone # Name		
3. Description of Materials				4. Containers Number	Type	5. Total Tons	
Non-Hazardous Non-Regulated Waste water				1	DT	3,200 Gals	
6. Special Handling Instructions/Additional Information							
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.							
Type/Print Name & Title Shane R. Ford, BigDigger.com				Signature Required 		Month/Day/Year 04/01/05	
8. Transporter #1 Name and Address US MAIL & LOGISTICS 138 HALL PARK RD GREENHOLE SPAINLS, FL 32043				Transporter #1 Telephone # 888-271-7001		Date of Pick-Up Month Day Year 04/01/05	
Type/Print Name & Title DANIEL CRILE				Signature Required 			
9. Transporter #2 Name and Address				Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
Type/Print Name & Title				Signature Required			
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit # (229) 241-8440				Special Instructions			
Type/Print Name				Signature Required		Disposal Date Month Day Year	

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.



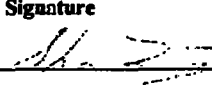
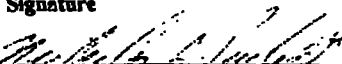
## ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

County & State of Origin West / GA	Municipal Solid Waste (MSW) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-MSW Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/04/05	Date Delivered
Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01-909	Total Tare Weight	Manifest # <b>01 - 001 - 77579</b>			
1. Work Site Name & Address Seven Out 901 Francis St. Waycross, GA 31503				Work Site Telephone # 912/338-0402		
2. Generator Name & Address Same				Generator Telephone # Same		
3. Description of Materials		4. Containers Number	Type	5. Total Tons		
Non-Hazardous Non-Regulated Waste wider		1	DT	3,200 Gal		
6. Special Handling Instructions/Additional Information						
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
Type/Print Name & Title Shane RAIFORD, Director		Signature Required <i>Shane Raiford</i>		Month Day Year 04 04 05		
8. Transporter #1 Name and Address W.S. 100-71 Box 157103 178 HALL PARK RD. GREEN CREEK SPRINGS, FL 32043		Transporter #1 Telephone # 688-251-7001		Date of Pick-Up Month Day Year 04/04/05		
Type/Print Name & Title Dance Galt		Signature Required <i>T/Galt</i>				
9. Transporter #2 Name and Address		Transporter #2 Telephone #		Date of Pick-Up Month Day Year		
Type/Print Name & Title		Signature Required				
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 <u>092-019D (MSWL)</u> GA DER Permit # (229) 241-8440		Special Instructions				
Type/Print Name		Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 36-014	2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083			
3. Generator's Name and Mailing Address SHENON OUT 101 FRANCIS WAY LUDWIGSBURG, GA 31553				4. Generator's Phone (415) 532-0402				
5. Transporter 1 Company Name ENVIRONMENTAL REMEDIATION SERVICES				6. US EPA ID Number				
7. Transporter 2 Company Name				8. US EPA ID Number		A. Transporter's Phone 404-791-4462		
9. Designated Facility Name and Description WASTE RECOVERY & RECYCLING 1501 AUGUST ST. JAMESVILLE, FL 32202				10. US EPA ID Number		B. Transporter's Phone		
11. Waste Shipping Name and Description NON-HAZARDOUS INDUSTRIAL WASTEWATER				12. Containers		13. Total Quantity	14. Unit Wt/Vol	
				No.	Type			
D. Additional Descriptions for Materials Listed Above				E. Handling Codes for Wastes Listed Above				
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE AT 904-241-2200 BILL TO: ENVIRONMENTAL OUTSOURCE LLC P.O. Box 715 Round O, SC 29474 FAX 843-542-9083								
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Shene Outsource				Signature 		Mo. 01	Day 01	Yr. 02
17. Transporter 1 Acknowledgement of Receipt of Materials								
Printed/Typed Name Michele A. Poshie				Signature 		Mo. 01	Day 01	Yr. 05
18. Transporter 2 Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Mo.	Day	Yr.
19. Discrepancy Indication Space								
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19								
Printed/Typed Name				Signature		Mo.	Day	Yr.

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 36-013		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083					
3. Generator's Name and Mailing Address SANDY COX 101 FAIRMONT ST. ROUND O, SC 29474											
4. Generator's Phone ( ) 843-542-9081											
5. Transporter 1 Company Name LAWSON TRANSPORT				6. US EPA ID Number		A. Transporter's Phone 227-541-4103					
7. Transporter 2 Company Name				8. US EPA ID Number		B. Transporter's Phone					
9. Designated Facility Name and Description LAWSON TRANSPORT INDUSTRIAL WASTE TREATMENT 101 FAIRMONT ST. ROUND O, SC 29474				10. US EPA ID Number		C. Facility's Phone 227-541-4103					
11. Waste Shipping Name and Description NON-HAZARDOUS INDUSTRIAL WASTE						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a.						1		5.500		L	
b.											
c.											
d.											
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information ENCL. 101-241-2700 BILL TO: INDUSTRIAL WASTE TREATMENT LLC P.O. Box 715 Round O, SC 29474 Phone: 843-542-9081 Fax: 843-542-9083											
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name X Shane Ruffin by Shane Ruffin						Signature 		Mo. 05		Day Yr. 05	
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature 		Mo. 01		Day Yr. 05	
18. Transporter 2 Acknowledgement of Receipt of Materials						Signature		Mo.		Day Yr.	
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19											
Printed/Typed Name						Signature		Mo.		Day Yr.	



# ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST



County & State of Origin Ga. <u>GA</u>		Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Non-MSW Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Date Loaded 04/02/05		Date Delivered			
Vehicle Lic # or Cont ID #		Waste Acceptance Form # 05-01-909		Total Tare Weight				Manifest # <b>01 - 001 - 77578</b>							
1. Work Site Name & Address Seven One 901 Francis St. Waycross, GA. 31503								Work Site Telephone # 912-338-0402							
2. Generator Name & Address Same								Generator Telephone # Same							
3. Description of Materials								4. Containers Number		Type		5. Total Tons			
Non-Hazardous Non-Regulated Waste water								1		DT		5.750 Gal.			
6. Special Handling Instructions/Additional Information															
7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.															
Type/Print Name & Title Shane Harford, by owner						Signature Required <i>[Signature]</i>				Month Day Year 04/02/05					
8. Transporter #1 Name and Address Eaton Transport 6101 Southside Circle W Valdosta, GA 31601								Transporter #1 Telephone # 229-661-4203				Date of Pick-Up Month Day Year 04/02/05			
Type/Print Name & Title Raymond K. Gammie								Signature Required <i>[Signature]</i>							
9. Transporter #2 Name and Address								Transporter #2 Telephone #				Date of Pick-Up Month Day Year			
Type/Print Name & Title								Signature Required							
10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 <b>092-019D (MSWL)</b> GA DER Permit # (229) 241-8440								Special Instructions							
Type/Print Name						Signature Required				Disposal Date Month Day Year					

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

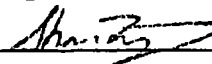
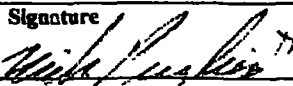
# ONYX PECAN ROW LANDFILL, LLC

## WASTE MANIFEST

Generator	County & State of Origin Ga	Municipal Solid Waste (MSW) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Non-MSW Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Non-Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Friable Asbestos Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date Loaded 04/11/2005	Date Delivered
	Vehicle Lic # or Cont ID #	Waste Acceptance Form # 05-01 909	Total Tare Weight		Manifest # <b>01 - 001 - 77577</b>		
	1. Work Site Name & Address Seven Oaks 901 Francis St. Waycross, GA 31503					Work Site Telephone # 912/338-0402	
	2. Generator Name & Address Same					Generator Telephone # Same	
Transporters	3. Description of Materials Non-Hazardous Non-Regulated Waste water			4. Containers Number Type 1 DT		5. Total Tons 5.000 Cuft.	
	6. Special Handling Instructions/Additional Information						
	7. Generator's Certification: Generator hereby certifies that the waste material loaded and transported: (a) does not contain regulated quantities of Hazardous Waste; and (b) is Municipal Solid Waste or Non-MSW Waste, as defined on the reverse side.						
	Type/Print Name & Title Shane Arnold, President of LLC		Signature Required <i>[Signature]</i>			Month Day Year 04/10/05	
Disposal Facility	8. Transporter #1 Name and Address LAWY TRANSPORT 6154 SUMMIT CIRCLE VALDESA, CA 31601			Transporter #1 Telephone # 229-261-1103		Date of Pick-Up Month Day Year 04/11/05	
	Type/Print Name & Title			Signature Required			
	9. Transporter #2 Name and Address			Transporter #2 Telephone #		Date of Pick-Up Month Day Year	
	Type/Print Name & Title			Signature Required			
Disposal Facility	10. Disposal Facility Name, Address & Telephone # Onyx Pecan Row Landfill, LLC 2995 Wetherington Lane • Valdosta, GA 31601-1109 092-019D (MSWL) GA DER Permit #			Special Instructions (229) 241-8440			
	Type/Print Name		Signature Required		Disposal Date Month Day Year		

ALL NON-MSW TRANSPORTED FOR DISPOSAL MUST BE ACCOMPANIED BY: (a) this manifest; (b) a non-MSW Waste Acceptance Form; and (c) a Certification thereof. No waste will be accepted for disposal if it contains regulated quantities of Hazardous Waste.

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. J6011		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083							
3. Generator's Name and Mailing Address SEVEN CNT 101 FRANCIS STR. WATERLOO, GA 31503													
4. Generator's Phone (912) 336-0402													
5. Transporter 1 Company Name ENVIRONMENTAL REMEDIATION SERVICES			6. US EPA ID Number			A. Transporter's Phone 804-791-9992							
7. Transporter 2 Company Name			8. US EPA ID Number			B. Transporter's Phone							
9. Designated Facility Name and Description COLUMBIA RIVER ROAD LANDFILL, INC. P.O. BOX 176 TUCKERSON, GA 37537			10. US EPA ID Number			C. Facility's Phone 912-496-7918							
11. Waste Shipping Name and Description						12. Containers		13. Total Quantity		14. Unit Wt/Vol			
						No.	Type						
a. NON-HAZARDOUS, NON-DEMENTED WASTE (LIQUID)						501	71	5,000		G			
b.													
c.													
d.													
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE # (912) 241-2200 BILL TO: ENVIRONMENTAL OUTSOURCE, LLC P.O. BOX 715 ROUND O, SC 29474 PHONE 843-535-8535 FAX 843-535-1075													
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name SHANE KASPER						Signature 		Mo. 12		Day 01		Yr. 05	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name Nicholas A. Pusliser						Signature 		Mo. 01		Day 01		Yr. 05	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature		Mo.		Day		Yr.	

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 76-010		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083							
3. Generator's Name and Mailing Address SOUTHERN 101 FARMERS WAREHOUSES, GA 31003													
4. Generator's Phone (404) 338-0402													
5. Transporter 1 Company Name BARNETT TRANSPORT			6. US EPA ID Number			A. Transporter's Phone 404-695-5200							
7. Transporter 2 Company Name			8. US EPA ID Number			B. Transporter's Phone							
9. Designated Facility Name and Description CHESTER BRICK & BLOCK LANDFILL, INC. 174 WILKES SW TOLSON RD TOLSON, GA 37587			10. US EPA ID Number			C. Facility's Phone 712-496-7418							
11. Waste Shipping Name and Description						12. Containers		13. Total Quantity		14. Unit Wt/Vol			
						No.	Type						
a. NON HAZARDOUS NON REGULATED WASTE (LIQUID)						251	55	5,500		G			
b.													
c.													
d.													
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE # (404) 241-2200 BILL TO: ENVIRONMENTAL OUTSOURCE LLC P.O. Box 715                      PHONE 843-538-6485 ROUND O, SC 29474              FAX 843-538-1028													
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Shane R. Soper						Signature <i>Shane R. Soper</i>		Mo. 07		Day 01		Yr. 05	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name Terrell B Soper						Signature <i>Terrell B Soper</i>		Mo. 4		Day 1		Yr. 05	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature		Mo.		Day		Yr.	

# **NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3/28/2005

3. Generator's Name and Mailing Address

901 BRANCH ST.  
WAYNESBORO, GA 31804

4. Generator's Phone ( )

336-0402

5. Transporter 1 Company Name

DARTMOUTH TRANSPORTATION, INC.

6. US EPA ID Number

AL0505100012

A. Transporter's Phone

104/000 5800

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

FLR0000059062

C. Facility's Phone

904-476-3320

11. Waste Shipping Name and Description

a. non-hazardous industrial wastewater

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

1. 1.0

5.5

G

D. Additional Descriptions for Materials Listed Above

Time In Time out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-6585  
Round O, SC 29474 Fax 843-538-1028

WRI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Shane Ralston

Signature

Shane Ralston

Month Day Year

3.28.05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Terrell B Sugar

Signature

Terrell B Sugar

Month Day Year

3.28.05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

## 2/28/2005

904-476-9320

5

WRI Approval #

1 . 1 . 1 .

GENERATOR'S COPY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 30-012		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083							
3. Generator's Name and Mailing Address 3600 S. 101st Ave. Round O, SC 29474													
4. Generator's Phone (112) 338-0402													
5. Transporter 1 Company Name Florida Environmental Compliance Corporation			6. US EPA ID Number			A. Transporter's Phone 704-731-2754							
7. Transporter 2 Company Name			8. US EPA ID Number			B. Transporter's Phone							
9. Designated Facility Name and Description			10. US EPA ID Number			C. Facility's Phone							
11. Waste Shipping Name and Description  a. <u>Waste Shipment Industrial Intermediate</u> b. c. d.						12. Containers		13. Total		14. Unit			
						No.		Type		Quantity		Wt/Vol	
						001		11		5.000		G	
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information 201 Major Contact: 201-24-01 104-741-2200 Bill To: Environmental Outsource P.O. Box 715 Round O, SC 29474 Phone: 843-538-6585 Fax: 843-538-1028													
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name <u>Shane Ralston, by Director of EPA</u>						Signature <u>[Signature]</u>		Mo. 04		Day 01		Yr. 05	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name <u>[Signature]</u>						Signature <u>[Signature]</u>		Mo.		Day		Yr.	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature		Mo.		Day		Yr.	

# **NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

3/29/2005

3. Generator's Name and Mailing Address

901 MONROE ST.  
WATSON, GA 31506

4. Generator's Phone ( 914 ) 288-0400

5. Transporter 1 Company Name

BARRELL TRANSPORTATION, INC.

6. US EPA ID Number

A L D 9 0 3 1 8 5 4 1 2

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F L R 0 0 0 0 4 9 0 3 2

C. Facility's Phone

904-475-0320

11. Waste Shipping Name and Description

NON-FLAMMABLE INDUSTRIAL WASTEWATER

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a.

T T

5.5.0.0

G

b.

c.

d.

D. Additional Descriptions for Materials Listed Above

PH 501133

Time In Time out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200

Bill to: Environmental Outsource LLC

P.O. Box 715

Ph 843-538-6585

Round O, SC 29474 Fax 843-538-1028

SKI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Sharon R. Smith, Jr.

Signature

Sharon R. Smith, Jr.

Month Day Year

04 03 05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

ERNEST R. SMITH

Signature

Ernest R. Smith

Month Day Year

04 03 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

.

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

.

GENERATOR'S COPY



# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

3/28/2005

3. Generator's Name and Mailing Address

901 FRANKS ST.  
WAYCROSS, GA 31503

4. Generator's Phone ( 912 ) 359-0402

5. Transporter 1 Company Name  
BARNETT TRANSPORTATION, INC.

6. US EPA ID Number

FL 0 2 9 2 1 0 0 4 1 2

A. Transporter's Phone

( 912 ) 359-0402

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32207

10. US EPA ID Number

FL 0 0 0 0 0 0 5 2 0 3 2

C. Facility's Phone

504-475-9320

11. Waste Shipping Name and Description

a. non hazardous industrial wastewater

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

1 T 6.9 c.o. G

D. Additional Descriptions for Materials Listed Above

Time in \_\_\_\_\_ Time out \_\_\_\_\_

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-6485  
Round O, SC 29474 Fax 843-538-1028

WRI Approval # \_\_\_\_\_

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

SHANE KATZEL, Sr. Director of EPA

Signature

[Signature]

Month Day Year

04 01 05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Shane Katzdel, Sr. Director of EPA

Signature

[Signature]

Month Day Year

04 01 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

04 01 05

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

04 01 05

GENERATOR'S COPY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 36-009		2. Page 1 of 1		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083							
3. Generator's Name and Mailing Address SEVEN OAK 701 FIDELITY ST. LAMARCA, GA 31503													
4. Generator's Phone (912) 332-0402													
5. Transporter 1 Company Name EADON TRANSPORT													
6. US EPA ID Number				A. Transporter's Phone 229-561-4803									
7. Transporter 2 Company Name				B. Transporter's Phone									
9. Designated Facility Name and Description UNITED RECOVERY, INC. 1549 ALBERT CIR. JACKSONVILLE, FL 32207				10. US EPA ID Number		C. Facility's Phone 904-475-9320							
11. Waste Shipping Name and Description						12. Containers No.      Type		13. Total Quantity		14. Unit Wt/Vol			
a. NON-HAZARDOUS INDUSTRIAL WASTEWATER						001		TT		5,500		G	
b.													
c.													
d.													
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information 24-HOUR CONTACT PHONE (904) 241-2200 BILL TO: ENVIRONMENTAL OUTSOURCE P.O. Box 715      PL 543-538-6585 ROUND O, SC 29474      FAX 513-538-1028													
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
SEVEN OAK						Shane R...		03		31		05	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
K... ..						A...		04		01		05	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature		Mo.		Day		Yr.	

**NON-HAZARDOUS  
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest  
Document No.2. Page 1  
of

2/20/2005

3. Generator's Name and Mailing Address

301 FRANCIS ST.  
WAYNESBORO, GA 31595

4. Generator's Phone ( ) 904-6402

5. Transporter 1 Company Name

BARTLEY TRANSPORTATION, INC.

6. US EPA ID Number

A.T.D. 9.0.0.0.6.3.0.5.2

A. Transporter's Phone

(904) 475-9320

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1219 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F.L.R. 9.0.0.0.6.3.0.5.2

C. Facility's Phone

904-475-9320

11. Waste Shipping Name and Description

a. non hazardous industrial wastewater

12. Containers  
No. Type13. Total  
Quantity14. Unit  
Wt/Vol

I.T.

55.000

G

D. Additional Descriptions for Materials Listed Above

PS Solids Oil

Time In Time Out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-539-6595  
Round O, SC 29414 FAX 843-539-1028

WRI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

John Smith, Environmental Services

Signature

[Signature]

Month Day Year

2 20 05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JEAN GERARDIN

Signature

[Signature]

Month Day Year

2 20 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

. . .

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

. . .

GENERATOR'S COPY



# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

3/22/2005

3. Generator's Name and Mailing Address

901 FRANCIS ST.  
DAYTON, OH 45403

4. Generator's Phone ( 912 ) 336-0000

5. Transporter 1 Company Name  
BAGGETT TRANSPORTATION, INC.

6. US EPA ID Number  
F.L.R.O.G.O.O.S.R.O.G.2

A. Transporter's Phone

(414) 618-7400

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F.L.R.O.G.O.O.S.R.O.G.2

C. Facility's Phone

904-475-0320

11. Waste Shipping Name and Description

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a. Non-Hazardous Industrial Waste

...	...	...	...
...	...	...	...
...	...	...	...
...	...	...	...

b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

Time In \_\_\_\_\_ Time Out \_\_\_\_\_

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-6585  
Round O, SC 29474 Fax 843-538-1028

WRI Approval # \_\_\_\_\_

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name  
State Record, by Carolyn E. EIA

Signature  
Carolyn E. EIA

Month Day Year  
03 21 05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name  
Carolyn E. EIA

Signature  
Carolyn E. EIA

Month Day Year  
03 21 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

# **NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest  
Document No. ( )

2. Page 1  
of

4/28/2005

3. Generator's Name and Mailing Address

901 FRANCIS ST.  
WALCROSS, GA 31503

4. Generator's Phone ( 912 ) 338-0402

5. Transporter 1 Company Name  
BARNETT TRANSPORTATION, INC.

6. US EPA ID Number  
A L D 9 8 3 1 8 6 1 1 2

A. Transporter's Phone  
1 9 0 7 6 7 7 1 3 0 0

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F L R 0 0 0 0 6 9 0 6 2

C. Facility's Phone

904-475-9320

11. Waste Shipping Name and Description

a. ~~NON-HAZARDOUS INDUSTRIAL WASTEWATER~~

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

GENERATOR

D. Additional Descriptions for Materials Listed Above

Time In Time Out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2100  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-8585  
Round O, SC 29474 Fax 843-538-1028

WRI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Shane Carter

Signature

[Signature]

Month Day Year

04/27/05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Buddy Horton

Signature

[Signature]

Month Day Year

04/27/05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

3/28/2005

3. Generator's Name and Mailing Address

901 FRANCIS ST.  
WAYCROSS, GA 31503

4. Generator's Phone ( 912 ) 438-4404

5. Transporter 1 Company Name

BURNETT TRANSPORTATION, INC.

6. US EPA ID Number

210 98 71 5 4 1 2

A. Transporter's Phone

(912) 638-7800

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F.L.R.0.0.0.0.0.0.0.6.2

C. Facility's Phone

904-478-9320

11. Waste Shipping Name and Description

Non-Hazardous Industrial Waste-Water

12. Containers

No.

Type

13. Total  
Quantity

14. Unit  
Wt/Vol

a.		P 1	1,000.00	9
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

Time In \_\_\_\_\_ Time Out \_\_\_\_\_

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph: 843-538-6585  
Round O, SC 29474 Fax 843-538-1020

WRI Approval # \_\_\_\_\_

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Shane Harrod, by \_\_\_\_\_ of EPA

Signature

Shane Harrod

Month Day Year

3 27 05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Shane Harrod

Signature

Shane Harrod

Month Day Year

3 27 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3/20/2005

3. Generator's Name and Mailing Address

901 FRANCIS ST.  
WAYCROSS, GA 31503  
912 339-0400

4. Generator's Phone ( )

5. Transporter 1 Company Name

6. A L D US EPA ID Number 111

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

FL R 0 0 0 0 6 9 0 8 2

C. Facility's Phone

904-475-9320

11. Waste Shipping Name and Description

non hazardous industrial waste

a.

b.

c.

d.

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

5,500 G

D. Additional Descriptions for Materials Listed Above

Time In Time out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-6505  
Round O, DC 29474 Fax 843-538-1028

WHS Approved

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year  
3 21 05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year  
3 21 05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY



# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

3/20/2005

3. Generator's Name and Mailing Address

901 FRANCIS ST.  
NAYCE, GA 31503

4. Generator's Phone ( 912 ) 338-0400

5. Transporter 1 Company Name  
SARWELL TRANSPORTATION INC.

6. US EPA ID Number  
A 0 0 0 0 3 1 1 6 4 1 4

A. Transporter's Phone

1-800-657-7600

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F L R 0 0 0 0 0 0 0 0 0 0 2

C. Facility's Phone

904-475-9320

11. Waste Shipping Name and Description

12. Containers

No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

11. Waste Shipping Name and Description		12. Containers		13. Total Quantity	14. Unit Wt/Vol
No.	Type	No.	Type		
a.					
b.					
c.					
d.					

D. Additional Descriptions for Materials Listed Above

Time In Time out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 241-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-5586  
Round O, SC 29474 Fax 843-538-1028

WRI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR'S COPY

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

3/25/2005

3. Generator's Name and Mailing Address

501 FRANCIS ST.  
WAYCROSS, GA 31501  
4. Generator's Phone ( 912 ) 330-0402

5. Transporter 1 Company Name  
BARNETT TRANSPORTATION, INC.

6. US EPA ID Number  
A L D 9 8 3 1 0 6 4 1 2

A. Transporter's Phone  
( 904 ) 475-3600

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

WATER RECOVERY INCORPORATED  
1819 ALBERT ST.  
JACKSONVILLE, FL 32202

10. US EPA ID Number

F L R 0 0 0 0 6 9 0 6 2

C. Facility's Phone

904-475-9320

11. Waste Shipping Name and Description

a. non hazardous industrial wastewater

12. Containers  
No. Type

13. Total  
Quantity

14. Unit  
Wt/Vol

1 5 5 0 0 G

D. Additional Descriptions for Materials Listed Above

Time In Time out

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

24 Hour Contact Phone # (904) 441-2200  
Bill to: Environmental Outsource LLC  
P.O. Box 715 Ph 843-538-5585  
Round O, SC 29474 Fax 843-538-1025

WRI Approval #

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name

Shane Burkard, by Direction of EPA

Signature

Shane Burkard

Month Day Year

0 3 3 1 0 5

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JEAN GERMAIN

Signature

JEAN GERMAIN

Month Day Year

3 3 0 5

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

.

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

.

GENERATOR'S COPY

## 3/28/2005

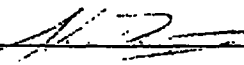

C. Facility's Phone  
604-475-9320

**GENERATOR'S COPY**

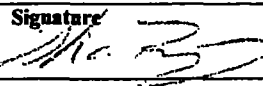
# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 36-008		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083					
3. Generator's Name and Mailing Address SCUMM CUT 101 FRANKS ST LAMAR, SC 29503											
4. Generator's Phone (412) 333-0402											
5. Transporter 1 Company Name ENVIRONMENTAL REMEDIATION SERVICES			6. US EPA ID Number			A. Transporter's Phone (904) 791-9992					
7. Transporter 2 Company Name			8. US EPA ID Number			B. Transporter's Phone					
9. Designated Facility Name and Description WATER RECOVERY TANK 1507 ALBERTA ST JACKSONVILLE, FL 32252			10. US EPA ID Number			C. Facility's Phone					
11. Waste Shipping Name and Description						12. Containers		13. Total Quantity		14. Unit Wt/Vol	
						No.	Type				
a. NON-HAZARDOUS INDUSTRIAL WASTEWATER						501	71	5,000		G	
b.											
c.											
d.											
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE # (904) 241-2200 BILL TO: ENVIRONMENTAL OUTSOURCE LLC P.O. Box 715 PH 843-538-0485 ROUND O, SC 29474 FAX 843-538-1026											
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name					Signature		Mo.	Day	Yr.		
SHANE RAIFORD BY DIRECTOR OF EPA							03	31	05		
17. Transporter 1 Acknowledgement of Receipt of Materials											
Printed/Typed Name					Signature		Mo.	Day	Yr.		
Nicholas P. Ruffolo							03	31	05		
18. Transporter 2 Acknowledgement of Receipt of Materials											
Printed/Typed Name					Signature		Mo.	Day	Yr.		
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19											
Printed/Typed Name					Signature		Mo.	Day	Yr.		

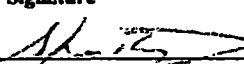
# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 36-007		2. Page 1 of 1		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083					
3. Generator's Name and Mailing Address SIVON CORP. 151 E. KANAWHA STR. JAYCE, FL 31523											
4. Generator's Phone (312) 332-1112											
5. Transporter 1 Company Name US COASTAL LOGISTICS, INC.				6. US EPA ID Number FL000001011		A. Transporter's Phone 408-251-2201					
7. Transporter 2 Company Name				8. US EPA ID Number		B. Transporter's Phone					
9. Designated Facility Name and Description WATER RECOVERY INC. 1417 ALBERTA STR. JACKSONVILLE, FL 32202				10. US EPA ID Number FL000001012		C. Facility's Phone 904-476-9320					
11. Waste Shipping Name and Description						12. Containers		13. Total Quantity		14. Unit Wt/Vol	
a. NON-HAZARDOUS INDUSTRIAL WASTEWATER						No. Type 001 1/T		3200		G	
b.											
c.											
d.											
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information 24-Hour Contact Phone # (404) 741-2200 FAX TO: ENVIRONMENTAL OUTSOURCE LLC P.O. Box 715 Round O, SC 29474 Phone 843-542-9081 Fax 843-542-9083											
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name Sharon E. Kirkland, A. Director						Signature 		Mo. 08		Day Yr. 31 95	
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature 		Mo. 03		Day Yr. 31 95	
18. Transporter 2 Acknowledgement of Receipt of Materials						Signature		Mo.		Day Yr.	
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19											
Printed/Typed Name						Signature		Mo.		Day Yr.	

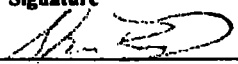
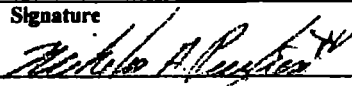
# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. JG-0006		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083							
3. Generator's Name and Mailing Address SEVEN EIGHT 901 FRANK'S ST. LAWRENCE, GA 31503 4. Generator's Phone (712) 333-0112													
5. Transporter 1 Company Name KAYON TRANSPORT													
6. US EPA ID Number						A. Transporter's Phone 229-561-4563							
7. Transporter 2 Company Name						B. Transporter's Phone							
8. US EPA ID Number						C. Facility's Phone 704-475-9320							
9. Designated Facility Name and Description RECOVERY INC. 1817 ALBERT ST. JACKSONVILLE, FL 32202						10. US EPA ID Number							
11. Waste Shipping Name and Description						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol			
a. NON-HAZARDOUS INDUSTRIAL WASTEWATER						201 11		5,500		G			
b.													
c.													
d.													
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information													
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name SHANE KINFORD, BY DIRECTOR OF EPA						Signature 		Mo. 03		Day 31		Yr. 05	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature		Mo.		Day		Yr.	

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. TG-005		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083					
3. Generator's Name and Mailing Address SEVEN OAK 701 FRANKLIN ST. JACKSONVILLE, FL 32202											
4. Generator's Phone (912) 333-0102											
5. Transporter 1 Company Name EASEN TRANSPORT			6. US EPA ID Number			A. Transporter's Phone 229-561-4603					
7. Transporter 2 Company Name			8. US EPA ID Number			B. Transporter's Phone					
9. Designated Facility Name and Description 1514 ALBERT ST. JACKSONVILLE, FL 32202			10. US EPA ID Number			C. Facility's Phone 904-475-9320					
11. Waste Shipping Name and Description						12. Containers		13. Total Quantity		14. Unit Wt/Vol	
						No. Type					
						a.		501 TS		5,500 G	
						b.					
						c.					
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE 843-241-2200 CALL TO: ENVIRONMENTAL OUTSOURCE LLC PO BOX 715 ROUND O, SC 29474 PH 843-576-6585 FAX 843-576-1028											
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name Sharon E. Ford, Jr. Director of EPA						Signature 		Mo. 03		Day Yr. 31 05	
17. Transporter 1 Acknowledgement of Receipt of Materials											
Printed/Typed Name						Signature		Mo.		Day Yr.	
18. Transporter 2 Acknowledgement of Receipt of Materials											
Printed/Typed Name						Signature		Mo.		Day Yr.	
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19											
Printed/Typed Name						Signature		Mo.		Day Yr.	

# NON-HAZARDOUS WASTE MANIFEST



1. Generator's US EPA ID No.		Manifest Doc. No. 16-004		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083							
3. Generator's Name and Mailing Address SEVEN CUT 901 FRANCIS ST. LAWRENCE, GA 31503													
4. Generator's Phone (912) 358-0042													
5. Transporter 1 Company Name ENVIRONMENTAL REMEDIATION SERVICES			6. US EPA ID Number			A. Transporter's Phone 804-744-4442							
7. Transporter 2 Company Name			8. US EPA ID Number			B. Transporter's Phone							
9. Designated Facility Name and Description			10. US EPA ID Number			C. Facility's Phone							
11. Waste Shipping Name and Description  a. NON HAZARDOUS INDUSTRIAL WASTEWATER  b.  c.  d.						12. Containers		13. Total Quantity		14. Unit Wt/Vol			
						No. Type							
						201 TT		5,000		G			
15. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE (904) 244-2200 BILL TO: ENVIRONMENTAL OUTSOURCE LLC P.O. BOX 715 ROUND O, SC 29474 FAX 843-542-9083													
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name SHANE R. FORD, Environmental Engineer						Signature 		Mo. 03		Day 31		Yr. 05	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name Nicholas A. Pugh						Signature 		Mo. 3		Day 31		Yr. 05	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature		Mo.		Day		Yr.	



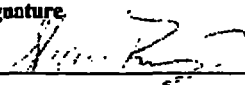
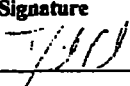
# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 36-003		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083					
3. Generator's Name and Mailing Address Green Corp 401 E. 3rd St. Lumberton, GA 31503											
4. Generator's Phone (912) 336-0402											
5. Transporter 1 Company Name U.S. Waste Logistics Inc			6. US EPA ID Number T12-003		A. Transporter's Phone 252-231-2001						
7. Transporter 2 Company Name			8. US EPA ID Number		B. Transporter's Phone						
9. Designated Facility Name and Description WATER RECOVERY INCORPORATED 1314 ALBERT ST. JACKSONVILLE FL 32222			10. US EPA ID Number T12-003		C. Facility's Phone 904-476-9720						
11. Waste Shipping Name and Description						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a. NON HAZARDOUS INDUSTRIAL WASTEWATER						1		3200		G	
b.											
c.											
d.											
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above					
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE # (904) 241-2200 BILL TO: ENVIRONMENTAL OUTSOURCE P.O. BOX 715 PH 252-231-2001 ROUND O, SC 29474											
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name Shirley E. Smith by Director, EPA						Signature <i>[Signature]</i>		Mo. 02		Day Yr. 21 05	
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature <i>[Signature]</i>		Mo. 05		Day Yr. 21 05	
18. Transporter 2 Acknowledgement of Receipt of Materials						Signature		Mo.		Day Yr.	
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19											
Printed/Typed Name						Signature		Mo.		Day Yr.	

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		Manifest Doc. No. 36-002		2. Page 1 of		<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083							
3. Generator's Name and Mailing Address SPUN OUT 101 PALMERS STR. UNHICROSS, GA 31503													
4. Generator's Phone (913) 538-5402													
5. Transporter 1 Company Name ENVIRONMENTAL REMEDIATION SERVICES			6. US EPA ID Number			A. Transporter's Phone (913) 791-4092							
7. Transporter 2 Company Name			8. US EPA ID Number			B. Transporter's Phone							
9. Designated Facility Name and Description			10. US EPA ID Number			C. Facility's Phone							
11. Waste Shipping Name and Description  a. NON HAZARDOUS INDUSTRIAL WASTE-WATER  b.  c.  d.						12. Containers		13. Total Quantity		14. Unit Wt/Vol			
						No. Type							
D. Additional Descriptions for Materials Listed Above						E. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONER (913) 241-2200 BILL TO: ENVIRONMENTAL OUTSOURCE LLC P.O. Box 715      Phone 843-538-6585 ROUND O, SC 29474      Fax 843-538-1020													
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Shane Pauline Spun-out LLC						Signature 		Mo. 03		Day 30		Yr. 05	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name Nicholas H. Rylee						Signature 		Mo. 03		Day 30		Yr. 05	
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature		Mo.		Day		Yr.	
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature		Mo.		Day		Yr.	

# NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No. 76-001	2. Page 1 of	<b>Environmental Outsource</b> Post Office Box 715 Round O, SC 29474 Office 843-542-9081 Fax 843-542-9083			
3. Generator's Name and Mailing Address SLOAN CO 701 FRANCIS ST. LAWRENCE, GA.						
4. Generator's Phone ( )						
5. Transporter 1 Company Name U.S. INDUSTRIAL LOGISTICS, INC.	6. US EPA ID Number FL0000023943	A. Transporter's Phone 480-251-7001				
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone				
9. Designated Facility Name and Description WASTE RECOVERY INC. 1614 ALBERT ST. TUCKERVILLE, FL 32202	10. US EPA ID Number FL0000010062	C. Facility's Phone 904-475-4320				
11. Waste Shipping Name and Description a. NON-HAZARDOUS INDUSTRIAL WASTE/SLUDGE b. c. d.		12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol		
		001 71	3200	G		
D. Additional Descriptions for Materials Listed Above		E. Handling Codes for Wastes Listed Above				
15. Special Handling Instructions and Additional Information 24 HOUR CONTACT PHONE # 704-241-2200 BULK TO ENVIRONMENTAL OUTSOURCE LLC P.O. Box 715 Round O, SC 29474 Phone 843-542-9081 Fax 843-542-9083						
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Printed/Typed Name Shane R. ...		Signature 		Mo. 03	Day 30	Yr. 05
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name Trace Cook		Signature 		Mo. 03	Day 30	Yr. 05
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Mo.	Day	Yr.
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19						
Printed/Typed Name		Signature		Mo.	Day	Yr.

[illegible]



[illegible]

	A	B	C	D	E	F	G	I	J	K	L
1	<b>Waste Generation Report</b> <b>7 Out Site</b> <b>U.S. EPA Region IV</b> <b>ERRS Contract No. 68-S4-02-06</b> <b>Task Order No. F4-0032</b>										
2											
3											
4											
5											
6	<b>Contractor:</b> <b>Environmental Outsource</b>										
7	<b>Totals</b>			<b>196500.00</b>							<b>\$</b>
8	<b>Manifest Number</b>	<b># of Lds</b>	<b>Date Shipped</b>	<b>Volume</b>	<b>Units</b>	<b>Chemical</b>	<b>Method of Disposal</b>	<b>Disposal Facility</b>	<b>Disposal Cost /</b>	<b>Trans. Cost / Load</b>	<b>Total Amount</b>
9	77577	1	4/01/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
10	77578	1	4/02/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
11	77579	1	4/04/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
12	77580	1	4/04/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
13	77581	1	4/04/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
14	77582	1	4/04/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
15	77583	1	4/05/05	3600.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
16	77584	1	4/05/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
17	77485	1	4/05/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
18	77586	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
19	77587	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
20	77588	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
21	77589	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
22	77590	1	4/05/05	3600.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
23	77591	1	4/05/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
24	77592	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
25	77593	1	4/05/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
26	77594	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
27	77595	1	4/05/05	3600.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
28	77596	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
29	77597	1	4/05/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
30	77598	1	4/05/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
31	77599	1	4/06/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
32	77600	1	4/06/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
33	77601	1	4/06/05	3600.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
34	77602	1	4/06/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
35	77603	1	4/06/05	5500.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
36	77604	1	4/06/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
37	77605	1	4/06/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
38	77606	1	4/06/05	5000.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
39	77607	1	4/06/05	3600.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			
40	77608	1	4/06/05	3200.00	Gallons	Non RCRA Regulated Liquids	Landfill / Solidification	Pecan Row, Valdosta, GA			

[illegible]



# Summary Page for Seven Out Trans & Disposal

	Total Loads	Total Volume/Gallons	Total Cost
Chesser	2	10500	\$
Onyx	44	191500	\$
RWI	27	134600	\$
Clean Harbors HAZ-WASTE	1	1650	\$
Totals	74 Loads	338250 Gallons	\$

## REFERENCE 35



**Shaw**™ Shaw Environmental & Infrastructure, Inc.

**Shaw Environmental & Infrastructure, Inc.**

11560 Great Oaks Way, Suite 500

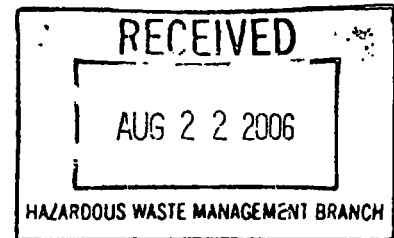
Alpharetta, Georgia 30022

770-475-8994

FAX: 770-777-9545

August 17, 2006

Eddie Williams  
Georgia Environmental Protection Division  
Hazardous Waste Branch  
Floyd Towers East, Suite 1154  
2 Martin Luther King Jr. Drive, S.E.  
Atlanta, GA 30334



Re: Copy of Final Report for BCX Leased Property Site Restoration

Mr. Williams

Enclosed is a copy of the summary report for the CSXT BCX Leased Property Site Restoration that Matt Adkins directed me to forward to you. If you have any question concerning the report please feel free to give me a call.

Sincerely;

Terence A. Whitt  
Project manager  
Shaw Environmental, Inc.

FROM : SECURITY DISPOSAL INC.

D MC PHONE NO. : 912 283 9111

Oct. 19 2005 09:01AM P3



**WASTE MANAGEMENT  
CHESSER ISLAND ROAD LANDFILL, INC.**

P.O. Box 128  
Folkston, GA 31537  
(912) 496-7918

k26

Date: 10/11/2005 (M/W/FL) 2:03 PM

TIME IN: 14:43 TIME OUT: 16:12 Ticket: 869031

054-358

FECO C&D

2410 SILVER STAR RD  
ORLANDO FL 32804-3312

Driver: GENE

Truck: 28

Description	Quantity
CONSTRUCTION & DEMO	15.03 TON
Source: 858E Type: C&D District: 70	
GM 63660 TR 33620	
COST REIMBURSEMENT	
HOST FEE	
SUPERFILL	
FUEL SURCHARGE	

Signature 

**WASTE MANAGEMENT  
CHESSER ISLAND ROAD LANDFILL, INC.**

P.O. Box 128  
Folkston, GA 31537  
(912) 496-7918

K2G

Date: 10/12/2005 (MAY25L) 9:53 AM

TIME IN: 0:52 TIME OUT: 8:52 Ticket: J09070

054-390

FECC C&amp;D

2418 SILVER STAR RD

ORLANDO FL 32804-3312

Driver: GENE

Truck: 23

Description	Quantity
CONSTRUCTION & DEMO	13.44 TON
Source: WARE Type: C&D District: 1K	
GVW: 60500 TN 33420	
COST REIMBURSEMENT	
HOST FEE	
SUPERFUND	
FUEL SURCHARGE	

Signature 

**WASTE MANAGEMENT  
CHESSER ISLAND ROAD LANDFILL, INC.**

P.O. Box 128  
Folkston, GA 31537  
(912) 496-7918

K26

Dates: 10/14/2005 (MS&amp;SL) 7:17 PM

TIME IN: 7:17 TIME OUT: 7:17 Hours: 00:00:00

BS-350

FECC C80

2418 SILVER STAR RD

DELINDO FL 32804-3312

Driver: GENE

Truck: 24

Description	Quantity
CONSTRUCTION & DEMO	14.91 TON
Source: WARE Type: C80 District: IN	
BVN 63443 TU 32620	
COST REIMBURSEMENT	
HOST FEE	
SUPERFUND	
FUEL SURCHARGE	

Signature 

**WASTE MANAGEMENT  
CHESSEY ISLAND ROAD LANDFILL, INC.**

P.O. Box 128  
Folkston, GA 31537  
(912) 496-7918

1126

Date: 10/11/2005 (MORNING)

12:20 PM

TIME IN: 11:59 TIME OUT: 12:20

Ticket: 260030

ISA-390

FEDC C&amp;D

2410 SILVER STAR RD

ORLANDO FL 32804-3312

Driver: GENE

Truck: 28

Description

Quantity

CONSTRUCTION &amp; DEMO

12.36 TON

Source: WARE Type: C&amp;D District: 2H

GVW 58340 TW 33620.

COST REIMBURSEMENT

HOST FEE

SUPERFILL

FUEL SURCHARGE

Signature 



**Shaw**™ Shaw Environmental, Inc.

**Shaw Environmental, Inc.**  
11560 Great Oaks Way, Suite 500  
Alpharetta, Georgia 30022  
Telephone: (770) 475 - 8994  
Fax: (770) 777 - 9545

January 4, 2006

Mr. Matt Adkins  
CSX Transportation Inc.  
351 Thornton Rd. Suite 125  
Lithia Springs, GA 30122

**SUBJECT: Summary Report**  
BCX Leased Property Site Restoration  
Francis & Folk Streets  
Waycross, Ware County, GA

Dear Mr. Adkins:

This report describes and discusses work activities performed by Shaw Environmental, Inc. (Shaw) to restore the subject property. Activities performed included the following:

- Removal of trash and debris from the site
- Cleaning and decommissioning of storage tanks
- Recycling of salvaged metals
- Containment and disposal of tank cleaning fluids and generated sludge materials

Shaw completed the restoration of the BCX Leased property summarized above during October, 2005. All tanks and debris have been removed from the site. The following paragraphs summarize the project background and restoration work activities.

#### **Background**

The subject property consists of the parcel of land adjacent to the BCX wastewater treatment facility in Waycross, Georgia. CSX Transportation (CSXT) leased the property to BCX, Inc. (BCX). BCX used the property as a lay down yard for the staging of miscellaneous storage tanks and hardware. Various storage tanks including two Baker tanks were left by BCX on the property. Shaw was contracted by CSXT to clean and remove the storage tanks and other trash and debris from the property. **Photographs 1, 2 and 3** show some of the site conditions prior to restoration.



In May 2005, Shaw sampled residual sludge materials in three tanks (two Baker tanks and a small steel tank). The purpose of the sampling was to characterize hazards associated with the sludge to determine the appropriate cleaning method of the tanks and disposal of the generated cleaning fluids and sludge materials. After it was sampled by Shaw, Baker tank #G107D was removed from the site, presumably by Baker. The May 2005 sampling results also showed that no chemicals of concern were detected above the laboratory reporting limit in the sludge sample obtained from Baker tank #G300D.

Preliminary analysis performed on the residual sludge sample obtained from the steel tank revealed the presence of elevated metal concentrations in the sludge. Subsequently, an additional sample was obtained for TCLP metal analysis in addition to reactivity, corrosivity, and ignitability (RCI) parameters. This additional analysis was performed to determine appropriate disposal options. The TCLP and RCI analytical data showed that the steel tank contents were characteristically non-hazardous.

Additionally, in June 2005, Shaw collected three soil samples from the site. One surfacial soil sample was obtained in the immediate vicinity of Baker tank #G300D (Photograph 4). The other two samples were obtained from low areas of the site, which have been assumed to be most likely impacted if a release of storage tank contents occurred (Photographs 5 and 6). Previously, soil samples were also taken by Georgia's Environmental Protection Division (EPD) and Tetra Tech EM, Inc., a contractor for U.S. EPA. Based on the tank and site soil analytical data, it was determined that site soils have not been impacted above the Appendix I Regulated Substances and Soil Concentrations that Trigger Notification of Georgia's rules of Hazardous Site Response Chapter 391-3-19 as a result of BCX operations at the leased property.

Accutest Laboratories analytical data packages for samples collected by Shaw are included in Attachment A.

#### **Work Performed On-Site**

This report documents work activities performed by Shaw and its subcontractors in October 2005 to restore the site. Shaw prepared a site restoration work plan and a site-specific health and safety plan. These plans were submitted to the USEPA Region 4 on August 29, 2005 for review and comment. Shaw also responded on August 18, 2005 to the EPA report regarding the observed leaking from Baker Tank #G300D. The investigation revealed that rain water had accumulated in the tank and was leaking from a valve. All valves were sealed and the top of the tank caulked to prevent rain water from entering.

Tasks performed during the October 2005 site restoration are summarized below.

#### **Tank Cleaning**

A total of nine tanks were cleaned. Tank cleaning was performed by Environmental Remediation Services, Inc. (ERS) of Jacksonville, Florida under the direct supervision of Shaw. Of the nine tanks, only Baker tank #G300D and the small steel tank contained appreciable amounts of residual sludge. In addition to providing field supervision, the Shaw field representative moved the tanks using a track hoe into a position where they could be easily cleaned. All generated cleaning fluids and solids were contained in a vacuum tanker. Based on the sludge analytical

data, it was determined that the tank cleaning process would not lead to the generation of hazardous materials. Some of the storage tanks required cutting access points to adequately clean the inside of these tanks (**Photograph 7 & 8**). Prior to cutting these tanks, the atmosphere inside the tank was monitored using the appropriate safety equipment ( $O_2$ /LEL meter for oxygen and flammable vapors). The monitoring revealed that the tanks did not require inerting before cutting. After eight of the tanks were cleaned, they were cut into manageable pieces for recycling. Problems were encountered with the cleaning on the last remaining Baker tank. Those problems and measures taken are discussed below. The Baker tank was released to Baker after cleaning and was removed from the site by Baker. A total of 6,350 gallons of non-hazardous sludge, waste water, and cleaning fluids were disposed as a result of tank cleaning activities.

### **Debris Removal and Property Restoration**

Shaw personnel consolidate miscellaneous debris and trash piles that existed at the site into roll-off boxes utilizing a track hoe. Approximately 55.73 tons of material was loaded into the roll-off boxes and disposed at the Waste Management Chesser Island Road Landfill, Inc. in Folkston, GA (**Photograph 9**). Recyclable material was segregated and sent to Waycross Recycling Company in Waycross, GA (**Photograph 10**). As tanks were moved, Shaw inspected the areas under the tanks. The visual inspection did not reveal the presence of any noticeable staining in these areas.

### **Baker Tank #G300D**

The initial attempt to clean Baker tank #G300D was delayed due to the presence of high ammonia concentrations in the sludge. At that time it was decided to postpone tank cleaning activities until a solution that allows safe handling and disposal of the material was devised. Sludge samples were collected from the tank and forwarded to the Shaw E&I Technology Application Laboratories (TAL) in Knoxville, Tennessee for characterization and evaluation of the ammonia problem. The characterization process revealed that ammonia nitrogen was present in the sludge at a concentration of 845 mg/kg and that the pH of 8.8 standard units (SU) allows the release of excessive amounts of ammonia vapors into the surrounding atmosphere.

Based on these findings, TAL performed a treatability study on the sludge. The purpose of the study was to determine an optimum chemical formulation that would stabilize the sludge and impede the release of ammonia vapors. Four different formulations were tested. These formulations were ferrous sulfate, magnesium sulfate, clinoptilite, and Class F fly ash. Each of these four formulations was added to the sludge at three different mix ratios. Upon conclusion of the study, it was determined that ferrous sulfate at a 2% mix ratio successfully controlled the emission of ammonia fumes and lowered the pH of the sludge by more than 2.5 SUs (8.8 to 6.1). At this pH most of the ammonia exists in the form of ammonium sulfate, which is a more stable, non-volatile, form of ammonia. Results of the treatability study, study approach, and the various formulations used are summarized in the report included in **Attachment B**.

Based on the quantity of the ammonia-containing sludge present in the tank and the measured ammonia concentration, it was estimated that about 300 pounds of ferrous sulfate powder would be required to stabilize the sludge in the tank to allow safe removal and handling of the sludge with minimal exposure to ammonia fumes. The ferrous sulfate was provided by Bell Chem Corporation of Longwood, Florida. The Ferrous sulfate was added to the sludge on October 26,

2005. Ammonia emissions were monitored before and after the ferrous sulfate addition. The distinguishing odor of ammonia disappeared almost immediately.

The tank contents were mixed using a pressurized power washer and allowed to sit for approximately 2 hours prior to pumping to allow enough time for a complete reaction between the ammonia and the ferrous sulfate. Ammonia emissions were monitored continuously using ammonia-specific Dragger Tubes and photoionization detector (PID).

Once the environment inside the tank was determined to be within acceptable levels, tank cleaning and sludge removal activities started. The cleaning was performed using Level B safety equipment (Photograph 11). Due to the solidified nature of the sludge, a power washer was used to liquefy the sludge and a vacuum truck was used to remove it. Cleaning activities were completed on October 27, 2005. Site conditions after restoration are documented in Photographs 12, 13 and 14.

**Project Photographs**

Photograph taken during the different phases of work are provided in Attachment C.

The site is now free of trash, debris and storage tanks. Also, soil samples have been taken that show the storage tanks did not contaminate site soils from any releases. If you have any questions or comments concerning this report, please feel free to contact me.

Sincerely;



Terence A. Whitt  
Shaw Environmental Inc.  
Project Manager

Attachments  
A Laboratory Data  
B Treatability Study  
C Site Photographs

**ATTACHMENT A**  
**LABORATORY DATA**



Southeast

07/20/05

## Technical Report for

### CSX Transportation

ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Accutest Job Number: F32189

Sampling Date: 05/27/05

### Report to:

Shaw Environmental

ATTN: Terry Whitt

Total number of pages in report: 65



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

*Harry Behzadi*  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

CSX Transportation

Job No: F32189

ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F32189-1	05/27/05	11:00 CB	05/28/05	SO Soil	G300D
F32189-2	05/27/05	11:40 CB	05/28/05	SO Soil	G107D
F32189-3	05/27/05	12:15 CB	05/28/05	SO Soil	STEEL TANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Report of Analysis

Page 1 of 2

<b>Client Sample ID:</b> G300D							
<b>Lab Sample ID:</b> F32189-1				<b>Date Sampled:</b> 05/27/05			
<b>Matrix:</b> SO - Soil				<b>Date Received:</b> 05/28/05			
<b>Method:</b> SW846 8260B SW846 5030A				<b>Percent Solids:</b> 7.8			
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	K021376.D	1	06/02/05	NAF	05/28/05 10:37	n/a	VK975
Run #2 <sup>b</sup>	H031127.D	1	06/03/05	NAF	05/28/05 10:37	n/a	VH1176

	Initial Weight
Run #1	5.02 g
Run #2	5.06 g

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	600	640	320	ug/kg	J
71-43-2	Benzene	ND	64	26	ug/kg	
75-27-4	Bromodichloromethane	ND	64	26	ug/kg	
75-25-2	Bromoform	ND	64	26	ug/kg	
108-90-7	Chlorobenzene	ND	64	26	ug/kg	
75-00-3	Chloroethane	ND	64	26	ug/kg	
67-66-3	Chloroform	ND	64	26	ug/kg	
75-15-0	Carbon disulfide	ND	64	26	ug/kg	
56-23-5	Carbon tetrachloride	ND	64	26	ug/kg	
75-34-3	1,1-Dichloroethane	ND	64	26	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	64	38	ug/kg	
107-06-2	1,2-Dichloroethane	ND	64	26	ug/kg	
78-87-5	1,2-Dichloropropane	ND	64	26	ug/kg	
124-48-1	Dibromochloromethane	ND	64	26	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	64	26	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	64	26	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	64	26	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	64	26	ug/kg	
100-41-4	Ethylbenzene	ND	64	26	ug/kg	
591-78-6	2-Hexanone	ND	320	130	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	320	130	ug/kg	
74-83-9	Methyl bromide	ND	64	26	ug/kg	
74-87-3	Methyl chloride	ND	64	26	ug/kg	
75-09-2	Methylene chloride	ND	130	130	ug/kg	
78-93-3	Methyl ethyl ketone	ND	320	130	ug/kg	
100-42-5	Styrene	ND	64	26	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	64	26	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	64	26	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	64	26	ug/kg	
127-18-4	Tetrachloroethylene	ND	64	26	ug/kg	
108-88-3	Toluene	ND	64	26	ug/kg	
79-01-6	Trichloroethylene	ND	64	26	ug/kg	

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

Client Sample ID: G300D  
Lab Sample ID: F32189-1  
Matrix: SO - Soil  
Method: SW846 8260B SW846 5030A  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 05/27/05  
Date Received: 05/28/05  
Percent Solids: 7.8

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	64	32	ug/kg	
1330-20-7	Xylene (total)	ND	190	57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	93%	78-123%
2037-26-5	Toluene-D8	145% <sup>c</sup>	169%	71-137%
460-00-4	4-Bromofluorobenzene	132%	132%	61-157%
17060-07-0	1,2-Dichloroethane-D4	90%	70%	74-125%

- (a) Sample was received in a bulk container and preserved within 48 hours of sampling.  
(b) Sample was received in a bulk container and preserved within 48 hours of sampling. Confirmation run.  
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	G300D	<b>Date Sampled:</b>	05/27/05
<b>Lab Sample ID:</b>	F32189-1	<b>Date Received:</b>	05/28/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	7.8
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F009893.D	1	06/07/05	ME	06/01/05	OP13462	SF562
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	10000	4200	ug/kg	
95-57-8	2-Chlorophenol	ND	2100	420	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2100	420	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2100	420	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2100	420	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	10000	4200	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	4200	840	ug/kg	
95-48-7	2-Methylphenol	ND	2100	420	ug/kg	
	3&4-Methylphenol	ND	2100	420	ug/kg	
38-75-5	2-Nitrophenol	ND	2100	420	ug/kg	
100-02-7	4-Nitrophenol	ND	10000	4200	ug/kg	
37-86-5	Pentachlorophenol	ND	10000	4200	ug/kg	
108-95-2	Phenol	ND	2100	420	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2100	420	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2100	420	ug/kg	
83-32-9	Acenaphthene	ND	2100	420	ug/kg	
208-96-8	Acenaphthylene	ND	2100	420	ug/kg	
120-12-7	Anthracene	ND	2100	420	ug/kg	
56-55-3	Benzo(a)anthracene	ND	2100	420	ug/kg	
50-32-8	Benzo(a)pyrene	ND	2100	420	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	2100	420	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	2100	840	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	2100	420	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	2100	420	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	4200	1000	ug/kg	
100-51-6	Benzyl Alcohol	ND	2100	420	ug/kg	
91-58-7	2-Chloronaphthalene	ND	2100	420	ug/kg	
106-47-8	4-Chloroaniline	ND	4200	1700	ug/kg	
86-74-8	Carbazole	ND	2100	420	ug/kg	
218-01-9	Chrysene	ND	2100	420	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	2100	420	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	2100	840	ug/kg	

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	G300D		
<b>Lab Sample ID:</b>	F32189-1	<b>Date Sampled:</b>	05/27/05
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	05/28/05
<b>Method:</b>	SW846 8270C SW846 3550B	<b>Percent Solids:</b>	7.8
<b>Project:</b>	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	2100	420	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2100	420	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2100	420	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2100	420	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2100	420	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2100	840	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2100	840	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	4200	2100	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	2100	840	ug/kg	
132-64-9	Dibenzofuran	ND	2100	420	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	4200	1000	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	4200	2100	ug/kg	
84-66-2	Diethyl phthalate	ND	4200	1000	ug/kg	
131-11-3	Dimethyl phthalate	ND	4200	1000	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4200	2100	ug/kg	
206-44-0	Fluoranthene	ND	2100	420	ug/kg	
86-73-7	Fluorene	ND	2100	420	ug/kg	
118-74-1	Hexachlorobenzene	ND	2100	420	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2100	840	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	2100	840	ug/kg	
67-72-1	Hexachloroethane	ND	2100	840	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2100	840	ug/kg	
78-59-1	Isophorone	ND	2100	420	ug/kg	
91-57-6	2-Methylnaphthalene	907	2100	420	ug/kg	J
88-74-4	2-Nitroaniline	ND	4200	1000	ug/kg	
99-09-2	3-Nitroaniline	ND	4200	1000	ug/kg	
100-01-6	4-Nitroaniline	ND	4200	1500	ug/kg	
91-20-3	Naphthalene	ND	2100	420	ug/kg	
98-95-3	Nitrobenzene	ND	2100	420	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	2100	840	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	2100	420	ug/kg	
85-01-8	Phenanthrene	488	2100	420	ug/kg	J
129-00-0	Pyrene	ND	2100	840	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2100	420	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		45-114%
4165-62-2	Phenol-d5	57%		44-124%
118-79-6	2,4,6-Tribromophenol	62%		50-128%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	G300D	<b>Date Sampled:</b>	05/27/05
<b>Lab Sample ID:</b>	F32189-1	<b>Date Received:</b>	05/28/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	7.8
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA		

## ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	45%		41-123%
321-60-8	2-Fluorobiphenyl	55%		46-122%
1718-51-0	Terphenyl-d14	59%		45-135%

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: G300D  
 Lab Sample ID: F32189-1  
 Matrix: SO - Soil  
 Method: SW846 8082 SW846 3550B  
 Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 05/27/05  
 Date Received: 05/28/05  
 Percent Solids: 7.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST36493.D	1	06/02/05	AG	06/01/05	OP13464	GST1123
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	210	110	ug/kg	
11104-28-2	Aroclor 1221	ND	210	170	ug/kg	
11141-16-5	Aroclor 1232	ND	210	170	ug/kg	
53469-21-9	Aroclor 1242	ND	210	110	ug/kg	
12672-29-6	Aroclor 1248	ND	210	110	ug/kg	
11097-69-1	Aroclor 1254	ND	210	110	ug/kg	
11096-82-5	Aroclor 1260	ND	210	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	102%		52-136%
2051-24-3	Decachlorobiphenyl	105%		49-148%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> G300D	<b>Date Sampled:</b> 05/27/05
<b>Lab Sample ID:</b> F32189-1	<b>Date Received:</b> 05/28/05
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 7.8
<b>Project:</b> ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA	

## Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.8 U	6.3	3.8	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Barium	1.5 J	250	0.63	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Cadmium	0.38 U	5.0	0.38	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Chromium	1.8 J	13	1.0	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Lead	3.9 J	130	1.8	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Mercury	0.026 U	0.99	0.026	mg/kg	1	06/03/05	06/06/05 JM	SW846 7471A <sup>1</sup>	SW846 7471A <sup>3</sup>
Selenium	4.4 U	130	4.4	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Silver	0.88 U	13	0.88	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>

(1) Instrument QC Batch: MA4373

(2) Instrument QC Batch: MA4377

(3) Prep QC Batch: MP8103

(4) Prep QC Batch: MP8109

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

## Report of Analysis

Client Sample ID:	G107D	Date Sampled:	05/27/05
Lab Sample ID:	F32189-2	Date Received:	05/28/05
Matrix:	SO - Soil	Percent Solids:	66.2
Method:	SW846 8260B SW846 5030A		
Project:	ITGAALPH:R12102, ENV5734MLA, Leased Property (BCX), Waycross, GA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	H031128.D	1	06/03/05	NAF	05/28/05 10:37	n/a	VH1176
Run #2 <sup>a</sup>	K021380.D	1	06/02/05	NAF	05/28/05 10:37	n/a	VK975

	Initial Weight
Run #1	5.41 g
Run #2	5.00 g

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	36.2	70	35	ug/kg	J
71-43-2	Benzene	ND	7.0	2.8	ug/kg	
75-27-4	Bromodichloromethane	ND	7.0	2.8	ug/kg	
75-25-2	Bromoform	ND	7.0	2.8	ug/kg	
108-90-7	Chlorobenzene	ND	7.0	2.8	ug/kg	
75-00-3	Chloroethane	ND	7.0	2.8	ug/kg	
67-66-3	Chloroform	ND	7.0	2.8	ug/kg	
75-15-0	Carbon disulfide	12.6	7.0	2.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.0	2.8	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.0	2.8	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.0	4.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.0	2.8	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.0	2.8	ug/kg	
124-48-1	Dibromochloromethane	ND	7.0	2.8	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.0	2.8	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.0	2.8	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.0	2.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.0	2.8	ug/kg	
100-41-4	Ethylbenzene	ND	7.0	2.8	ug/kg	
591-78-6	2-Hexanone	ND	35	14	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	35	14	ug/kg	
74-83-9	Methyl bromide	ND	7.0	2.8	ug/kg	
74-87-3	Methyl chloride	ND	7.0	2.8	ug/kg	
75-09-2	Methylene chloride	ND	14	7.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	35	14	ug/kg	
100-42-5	Styrene	ND	7.0	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.0	2.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.0	2.8	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.0	2.8	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.0	2.8	ug/kg	
108-88-3	Toluene	ND	7.0	2.8	ug/kg	
79-01-6	Trichloroethylene	ND	7.0	2.8	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 2 of 2

<b>Client Sample ID:</b> G107D	
<b>Lab Sample ID:</b> F32189-2	<b>Date Sampled:</b> 05/27/05
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 05/28/05
<b>Method:</b> SW846 8260B SW846 5030A	<b>Percent Solids:</b> 66.2
<b>Project:</b> ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA	

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	7.0	3.5	ug/kg	
1330-20-7	Xylene (total)	ND	21	6.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	118%	78-123%
2037-26-5	Toluene-D8	108%	112%	71-137%
460-00-4	4-Bromofluorobenzene	169% <sup>b</sup>	184%	61-157%
17060-07-0	1,2-Dichloroethane-D4	101%	131%	74-125%

(a) Sample was received in a bulk container and preserved within 48 hours of sampling.

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	G107D	<b>Date Sampled:</b>	05/27/05
<b>Lab Sample ID:</b>	F32189-2	<b>Date Received:</b>	05/28/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	66.2
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F009894.D	10	06/07/05	ME	06/01/05	OP13462	SF562
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	5.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	63000	25000	ug/kg	
95-57-8	2-Chlorophenol	ND	13000	2500	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	13000	2500	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	13000	2500	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	13000	2500	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	63000	25000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	25000	5000	ug/kg	
95-48-7	2-Methylphenol	ND	13000	2500	ug/kg	
	3&4-Methylphenol	ND	13000	2500	ug/kg	
88-75-5	2-Nitrophenol	ND	13000	2500	ug/kg	
100-02-7	4-Nitrophenol	ND	63000	25000	ug/kg	
87-86-5	Pentachlorophenol	ND	63000	25000	ug/kg	
108-95-2	Phenol	4630	13000	2500	ug/kg	J
95-95-4	2,4,5-Trichlorophenol	ND	13000	2500	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	13000	2500	ug/kg	
83-32-9	Acenaphthene	ND	13000	2500	ug/kg	
208-96-8	Acenaphthylene	ND	13000	2500	ug/kg	
120-12-7	Anthracene	ND	13000	2500	ug/kg	
56-55-3	Benzo(a)anthracene	ND	13000	2500	ug/kg	
50-32-8	Benzo(a)pyrene	ND	13000	2500	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	13000	2500	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	13000	5000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	13000	2500	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	13000	2500	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	25000	6300	ug/kg	
100-51-6	Benzyl Alcohol	3750	13000	2500	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	13000	2500	ug/kg	
106-47-8	4-Chloroaniline	ND	25000	10000	ug/kg	
86-74-8	Carbazole	ND	13000	2500	ug/kg	
218-01-9	Chrysene	ND	13000	2500	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	13000	2500	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	13000	5000	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	G107D	<b>Date Sampled:</b>	05/27/05
<b>Lab Sample ID:</b>	F32189-2	<b>Date Received:</b>	05/28/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	66.2
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	13000	2500	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	13000	2500	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	13000	2500	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	13000	2500	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	13000	2500	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	13000	5000	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	13000	5000	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	25000	13000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	13000	5000	ug/kg	
132-64-9	Dibenzofuran	ND	13000	2500	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	25000	6300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	25000	13000	ug/kg	
84-66-2	Diethyl phthalate	ND	25000	6300	ug/kg	
131-11-3	Dimethyl phthalate	ND	25000	6300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	25000	13000	ug/kg	
206-44-0	Fluoranthene	ND	13000	2500	ug/kg	
86-73-7	Fluorene	ND	13000	2500	ug/kg	
118-74-1	Hexachlorobenzene	ND	13000	2500	ug/kg	
87-68-3	Hexachlorobutadiene	ND	13000	5000	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	13000	5000	ug/kg	
67-72-1	Hexachloroethane	ND	13000	5000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	13000	5000	ug/kg	
78-59-1	Isophorone	ND	13000	2500	ug/kg	
91-57-6	2-Methylnaphthalene	ND	13000	2500	ug/kg	
88-74-4	2-Nitroaniline	ND	25000	6300	ug/kg	
99-09-2	3-Nitroaniline	ND	25000	6300	ug/kg	
100-01-6	4-Nitroaniline	ND	25000	8800	ug/kg	
91-20-3	Naphthalene	ND	13000	2500	ug/kg	
98-95-3	Nitrobenzene	ND	13000	2500	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	13000	5000	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	13000	2500	ug/kg	
85-01-8	Phenanthrene	ND	13000	2500	ug/kg	
129-00-0	Pyrene	ND	13000	5000	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	13000	2500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	0% <sup>b</sup>		45-114%
4165-62-2	Phenol-d5	0% <sup>b</sup>		44-124%
118-79-6	2,4,6-Tribromophenol	0% <sup>b</sup>		50-128%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: G107D  
Lab Sample ID: F32189-2  
Matrix: SO - Soil  
Method: SW846 8270C SW846 3550B  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 05/27/05  
Date Received: 05/28/05  
Percent Solids: 66.2

## ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	0% <sup>b</sup>		41-123%
321-60-8	2-Fluorobiphenyl	0% <sup>b</sup>		46-122%
1718-51-0	Terphenyl-d14	0% <sup>b</sup>		45-135%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

Client Sample ID:	G107D	Date Sampled:	05/27/05
Lab Sample ID:	F32189-2	Date Received:	05/28/05
Matrix:	SO - Soil	Percent Solids:	66.2
Method:	SW846 8082 SW846 3550B		
Project:	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	ST36513.D	25	06/03/05	AG	06/01/05	OP13464	GST1124
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	630	310	ug/kg	
11104-28-2	Aroclor 1221	ND	630	500	ug/kg	
11141-16-5	Aroclor 1232	ND	630	500	ug/kg	
53469-21-9	Aroclor 1242	ND	630	310	ug/kg	
12672-29-6	Aroclor 1248	ND	630	310	ug/kg	
11097-69-1	Aroclor 1254	ND	630	310	ug/kg	
11096-82-5	Aroclor 1260	ND	630	310	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	0% <sup>b</sup>		52-136%
2051-24-3	Decachlorobiphenyl	0% <sup>b</sup>		49-148%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: G107D  
Lab Sample ID: F32189-2  
Matrix: SO - Soil  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 05/27/05  
Date Received: 05/28/05  
Percent Solids: 66.2

## Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.4	0.76	0.45	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Barium	179	30	0.076	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Cadmium	0.045 U	0.60	0.045	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Chromium	8.2	1.5	0.12	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Lead	0.21 U	15	0.21	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Mercury	0.029 U	1.1	0.029	mg/kg	10	06/03/05	06/06/05 JM	SW846 7471A <sup>1</sup>	SW846 7471A <sup>3</sup>
Selenium	4.3 J	15	0.53	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Silver	1.7	1.5	0.11	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>

(1) Instrument QC Batch: MA4373

(2) Instrument QC Batch: MA4377

(3) Prep QC Batch: MP8103

(4) Prep QC Batch: MP8109

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

## Report of Analysis

Page 1 of 2

<b>Client Sample ID:</b> STEEL TANK							
<b>Lab Sample ID:</b> F32189-3				<b>Date Sampled:</b> 05/27/05			
<b>Matrix:</b> SO - Soil				<b>Date Received:</b> 05/28/05			
<b>Method:</b> SW846 8260B SW846 5030A				<b>Percent Solids:</b> 61.9			
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA							
	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1 <sup>a</sup>	K021373.D	1	06/02/05	NAF	05/28/05 10:37	n/a	VK975
Run #2							
	<b>Initial Weight</b>	<b>Final Volume</b>	<b>Methanol Aliquot</b>				
Run #1	5.01 g	5.0 ml	25.0 ul				
Run #2							

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	22000	11000	ug/kg	
71-43-2	Benzene	2090	2200	890	ug/kg	J
75-27-4	Bromodichloromethane	ND	2200	890	ug/kg	
75-25-2	Bromoform	ND	2200	890	ug/kg	
108-90-7	Chlorobenzene	ND	2200	890	ug/kg	
75-00-3	Chloroethane	ND	2200	890	ug/kg	
67-66-3	Chloroform	ND	2200	890	ug/kg	
75-15-0	Carbon disulfide	ND	2200	890	ug/kg	
56-23-5	Carbon tetrachloride	ND	2200	890	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2200	890	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2200	1300	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2200	890	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2200	890	ug/kg	
124-48-1	Dibromochloromethane	ND	2200	890	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2200	890	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2200	890	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2200	890	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2200	890	ug/kg	
100-41-4	Ethylbenzene	26000	2200	890	ug/kg	
591-78-6	2-Hexanone	ND	11000	4500	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11000	4500	ug/kg	
74-83-9	Methyl bromide	ND	2200	890	ug/kg	
74-87-3	Methyl chloride	ND	2200	890	ug/kg	
75-09-2	Methylene chloride	3620	4500	2200	ug/kg	J
78-93-3	Methyl ethyl ketone	ND	11000	4500	ug/kg	
100-42-5	Styrene	ND	2200	890	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2200	890	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2200	890	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2200	890	ug/kg	
127-18-4	Tetrachloroethylene	2660	2200	890	ug/kg	
108-88-3	Toluene	49300	2200	890	ug/kg	
79-01-6	Trichloroethylene	ND	2200	890	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: STEEL TANK  
Lab Sample ID: F32189-3  
Matrix: SO - Soil  
Method: SW846 8260B SW846 5030A  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 05/27/05  
Date Received: 05/28/05  
Percent Solids: 61.9

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	2200	1100	ug/kg	
1330-20-7	Xylene (total)	137000	6700	2000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		78-123%
2037-26-5	Toluene-D8	97%		71-137%
460-00-4	4-Bromofluorobenzene	104%		61-157%
17060-07-0	1,2-Dichloroethane-D4	95%		74-125%

(a) Sample was received in a bulk container and preserved within 48 hours of sampling.

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	STEEL TANK	<b>Date Sampled:</b>	05/27/05
<b>Lab Sample ID:</b>	F32189-3	<b>Date Received:</b>	05/28/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.9
<b>Method:</b>	SW846 8270C SW846 3550B	<b>Project:</b>	ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	F009895.D	10	06/07/05	ME	06/01/05	OP13462	SF562
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	5.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	200000	81000	ug/kg	
95-57-8	2-Chlorophenol	ND	40000	8100	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	40000	8100	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	40000	8100	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	40000	8100	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200000	81000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	81000	16000	ug/kg	
95-48-7	2-Methylphenol	ND	40000	8100	ug/kg	
	3&4-Methylphenol	ND	40000	8100	ug/kg	
38-75-5	2-Nitrophenol	ND	40000	8100	ug/kg	
100-02-7	4-Nitrophenol	ND	200000	81000	ug/kg	
37-86-5	Pentachlorophenol	ND	200000	81000	ug/kg	
108-95-2	Phenol	ND	40000	8100	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	40000	8100	ug/kg	
38-06-2	2,4,6-Trichlorophenol	ND	40000	8100	ug/kg	
83-32-9	Acenaphthene	24200	40000	8100	ug/kg	J
208-96-8	Acenaphthylene	ND	40000	40000	ug/kg	
120-12-7	Anthracene	32600	40000	8100	ug/kg	J
56-55-3	Benzo(a)anthracene	10100	40000	8100	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	40000	8100	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	40000	8100	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	40000	16000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	40000	8100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	40000	8100	ug/kg	
85-68-7	Butyl benzyl phthalate	27600	81000	20000	ug/kg	J
100-51-6	Benzyl Alcohol	ND	40000	8100	ug/kg	
91-58-7	2-Chloronaphthalene	ND	40000	8100	ug/kg	
106-47-8	4-Chloroaniline	ND	81000	32000	ug/kg	
86-74-8	Carbazole	ND	40000	8100	ug/kg	
218-01-9	Chrysene	13700	40000	8100	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	40000	8100	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	40000	16000	ug/kg	

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

**Client Sample ID:** STEEL TANK  
**Lab Sample ID:** F32189-3  
**Matrix:** SO - Soil  
**Method:** SW846 8270C SW846 3550B  
**Project:** ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA  
**Date Sampled:** 05/27/05  
**Date Received:** 05/28/05  
**Percent Solids:** 61.9

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	40000	8100	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	40000	8100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	40000	8100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	40000	8100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	40000	8100	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	40000	16000	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40000	16000	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	81000	40000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40000	16000	ug/kg	
132-64-9	Dibenzofuran	20900	40000	8100	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	81000	20000	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	81000	40000	ug/kg	
84-66-2	Diethyl phthalate	ND	81000	20000	ug/kg	
131-11-3	Dimethyl phthalate	ND	81000	20000	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	137000	81000	40000	ug/kg	
206-44-0	Fluoranthene	12000	40000	8100	ug/kg	J
86-73-7	Fluorene	54700	40000	8100	ug/kg	
118-74-1	Hexachlorobenzene	ND	40000	8100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40000	16000	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	40000	16000	ug/kg	
67-72-1	Hexachloroethane	ND	40000	16000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	40000	16000	ug/kg	
78-59-1	Isophorone	ND	40000	8100	ug/kg	
91-57-6	2-Methylnaphthalene	358000	40000	8100	ug/kg	
88-74-4	2-Nitroaniline	ND	81000	20000	ug/kg	
99-09-2	3-Nitroaniline	ND	81000	20000	ug/kg	
100-01-6	4-Nitroaniline	ND	81000	28000	ug/kg	
91-20-3	Naphthalene	105000	40000	8100	ug/kg	
98-95-3	Nitrobenzene	ND	40000	8100	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	40000	16000	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	40000	8100	ug/kg	
85-01-8	Phenanthrene	106000	40000	8100	ug/kg	
129-00-0	Pyrene	36100	40000	16000	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	40000	8100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	0% <sup>b</sup>		45-114%
4165-62-2	Phenol-d5	0% <sup>b</sup>		44-124%
118-79-6	2,4,6-Tribromophenol	0% <sup>b</sup>		50-128%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> STEEL TANK	
<b>Lab Sample ID:</b> F32189-3	<b>Date Sampled:</b> 05/27/05
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 05/28/05
<b>Method:</b> SW846 8270C SW846 3550B	<b>Percent Solids:</b> 61.9
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA	

## ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	0% <sup>b</sup>		41-123%
321-60-8	2-Fluorobiphenyl	0% <sup>b</sup>		46-122%
1718-51-0	Terphenyl-d14	0% <sup>b</sup>		45-135%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	STEEL TANK	<b>Date Sampled:</b>	05/27/05
<b>Lab Sample ID:</b>	F32189-3	<b>Date Received:</b>	05/28/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.9
<b>Method:</b>	SW846 8082 SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST36516.D	50	06/03/05	AG	06/01/05	OP13464	GST1124
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.20 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	7800	3900	ug/kg	
11104-28-2	Aroclor 1221	ND	7800	6200	ug/kg	
11141-16-5	Aroclor 1232	ND	7800	6200	ug/kg	
53469-21-9	Aroclor 1242	ND	7800	3900	ug/kg	
12672-29-6	Aroclor 1248	ND	7800	3900	ug/kg	
11097-69-1	Aroclor 1254	ND	7800	3900	ug/kg	
11096-82-5	Aroclor 1260	ND	7800	3900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	0% <sup>b</sup>		52-136%
2051-24-3	Decachlorobiphenyl	0% <sup>b</sup>		49-148%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: STEEL TANK

Lab Sample ID: F32189-3

Matrix: SO - Soil

Date Sampled: 05/27/05

Date Received: 05/28/05

Percent Solids: 61.9

Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

## Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	13.9	0.81	0.48	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Barium	451	32	0.081	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Cadmium	6.2	0.65	0.048	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Chromium	105	1.6	0.13	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Lead	970	16	0.23	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Mercury	0.034 U	1.3	0.034	mg/kg	10	06/03/05	06/06/05 JM	SW846 7471A <sup>1</sup>	SW846 7471A <sup>3</sup>
Selenium	4.3 J	16	0.57	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Silver	5.3	1.6	0.11	mg/kg	1	06/06/05	06/08/05 RS	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>

(1) Instrument QC Batch: MA4373

(2) Instrument QC Batch: MA4377

(3) Prep QC Batch: MP8103

(4) Prep QC Batch: MP8109

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

Misc. Forms

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Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



# ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F32189 CLIENT: SHAW ETI PROJECT: Leased Property (BKA)  
 DATE/TIME RECEIVED: 5/25/05 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 2.2  
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER  
 AIRBILL NUMBERS: 850 668 317800

## COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT/INTACT
- ☐ NO COC RECEIVED
- ☐ ANALYSES NOT MARKED ON COC
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

## TRIP BLANK INFORMATION

- ☒ TRIP BLANK NOT PROVIDED
- ☐ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

## SOIL INFORMATION

NUMBER OF ENCORES ? 0  
 NUMBER OF 5035 FIELD KITS ? 0

SUMMARY OF COMMENTS:

## SAMPLE INFORMATION

- ☐ SAMPLE LABELS PRESENT ON ALL BOTTLES
- ☐ CORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ SAMPLE RECEIVED PAST HOLD TIME
- ☐ TIMES ON COC DON'T MATCH LABEL
- ☐ ID'S ON COC DON'T MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING INSTRUCTIONS
- ☐ UNCLEAR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE(S) RECEIVED BROKEN
- ☐ % SOLIDS JAR NOT RECEIVED

TECHNICIAN SIGNATURE/DATE Cf 5/25/05

TECHNICIAN SIGNATURE/DATE Patricia Brown 5-29-05

ASBD02/04/05

F32189: Chain of Custody

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27 of 65  
 ACCUTEST  
 F32189 Laboratories

## GC/MS Volatiles

## QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

Page 1 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK975-MB	K021363.D	1	06/02/05	NAF	n/a	n/a	VK975

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	25	ug/kg	
71-43-2	Benzene	ND	5.0	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	2.0	ug/kg	
75-25-2	Bromoform	ND	5.0	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	2.0	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	3.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	2.0	ug/kg	
591-78-6	2-Hexanone	ND	25	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	10	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	10	ug/kg	
100-42-5	Styrene	ND	5.0	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	2.0	ug/kg	
108-88-3	Toluene	ND	5.0	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.5	ug/kg	
1330-20-7	Xylene (total)	ND	15	4.5	ug/kg	

## Method Blank Summary

Page 2 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK975-MB	K021363.D	1	06/02/05	NAF	n/a	n/a	VK975

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-1, F32189-2, F32189-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	78-123%
2037-26-5	Toluene-D8	102%	71-137%
460-00-4	4-Bromofluorobenzene	111%	61-157%
17060-07-0	1,2-Dichloroethane-D4	105%	74-125%

## Method Blank Summary

Page 1 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH1176-MB	H031126.D	1	06/03/05	NAF	n/a	n/a	VH1176

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	25	ug/kg	
71-43-2	Benzene	ND	5.0	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	2.0	ug/kg	
75-25-2	Bromoform	ND	5.0	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	2.0	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	3.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	2.0	ug/kg	
591-78-6	2-Hexanone	ND	25	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	10	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	25	10	ug/kg	
100-42-5	Styrene	ND	5.0	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	2.0	ug/kg	
108-88-3	Toluene	ND	5.0	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.5	ug/kg	
1330-20-7	Xylene (total)	ND	15	4.5	ug/kg	

## Method Blank Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH1176-MB	H031126.D	1	06/03/05	NAF	n/a	n/a	VH1176

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	91%	78-123%
2037-26-5	Toluene-D8	99%	71-137%
460-00-4	4-Bromofluorobenzene	99%	61-157%
17060-07-0	1,2-Dichloroethane-D4	94%	74-125%

# Blank Spike Summary

Page 1 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK975-BS	K021362.D	1	06/02/05	NAF	n/a	n/a	VK975

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	173	69	51-136
71-43-2	Benzene	50	48.5	97	74-124
75-27-4	Bromodichloromethane	50	51.6	103	74-124
75-25-2	Bromoform	50	52.4	105	79-127
108-90-7	Chlorobenzene	50	48.8	98	78-117
75-00-3	Chloroethane	50	59.0	118	63-147
67-66-3	Chloroform	50	50.9	102	75-121
75-15-0	Carbon disulfide	50	48.7	97	59-148
56-23-5	Carbon tetrachloride	50	54.2	108	67-131
75-34-3	1,1-Dichloroethane	50	52.1	104	71-118
75-35-4	1,1-Dichloroethylene	50	47.6	95	64-126
107-06-2	1,2-Dichloroethane	50	49.4	99	72-120
78-87-5	1,2-Dichloropropane	50	52.4	105	74-126
124-48-1	Dibromochloromethane	50	53.4	107	78-120
156-59-2	cis-1,2-Dichloroethylene	50	48.3	97	75-124
10061-01-5	cis-1,3-Dichloropropene	50	48.5	97	72-120
156-60-5	trans-1,2-Dichloroethylene	50	50.3	101	70-122
10061-02-6	trans-1,3-Dichloropropene	50	51.1	102	75-118
100-41-4	Ethylbenzene	50	50.3	101	77-120
591-78-6	2-Hexanone	250	236	94	68-136
108-10-1	4-Methyl-2-pentanone	250	249	100	69-136
74-83-9	Methyl bromide	50	61.9	124	52-156
74-87-3	Methyl chloride	50	50.8	102	63-142
75-09-2	Methylene chloride	50	48.7	97	51-142
78-93-3	Methyl ethyl ketone	250	204	82	63-138
100-42-5	Styrene	50	49.0	98	74-120
71-55-6	1,1,1-Trichloroethane	50	52.5	105	70-131
79-34-5	1,1,2,2-Tetrachloroethane	50	47.8	96	76-121
79-00-5	1,1,2-Trichloroethane	50	48.3	97	77-118
127-18-4	Tetrachloroethylene	50	50.7	101	68-127
108-88-3	Toluene	50	49.1	98	74-118
79-01-6	Trichloroethylene	50	50.3	101	72-122
75-01-4	Vinyl chloride	50	58.5	117	64-144
1330-20-7	Xylene (total)	150	150	100	78-122

## Blank Spike Summary

Page 2 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK975-BS	K021362.D	1	06/02/05	NAF	n/a	n/a	VK975

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-1, F32189-2, F32189-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	78-123%
2037-26-5	Toluene-D8	99%	71-137%
460-00-4	4-Bromofluorobenzene	97%	61-157%
17060-07-0	1,2-Dichloroethane-D4	103%	74-125%

## Blank Spike Summary

Page 1 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH1176-BS	H031125.D	1	06/03/05	NAF	n/a	n/a	VH1176

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	187	75	51-136
71-43-2	Benzene	50	46.7	93	74-124
75-27-4	Bromodichloromethane	50	50.3	101	74-124
75-25-2	Bromoform	50	48.1	96	79-127
108-90-7	Chlorobenzene	50	50.0	100	78-117
75-00-3	Chloroethane	50	70.2	140	63-147
67-66-3	Chloroform	50	45.9	92	75-121
75-15-0	Carbon disulfide	50	45.2	90	59-148
56-23-5	Carbon tetrachloride	50	45.1	90	67-131
75-34-3	1,1-Dichloroethane	50	44.2	88	71-118
75-35-4	1,1-Dichloroethylene	50	55.2	110	64-126
107-06-2	1,2-Dichloroethane	50	44.7	89	72-120
78-87-5	1,2-Dichloropropane	50	51.4	103	74-126
124-48-1	Dibromochloromethane	50	47.5	95	78-120
156-59-2	cis-1,2-Dichloroethylene	50	44.9	90	75-124
10061-01-5	cis-1,3-Dichloropropene	50	49.3	99	72-120
156-60-5	trans-1,2-Dichloroethylene	50	41.2	82	70-122
10061-02-6	trans-1,3-Dichloropropene	50	50.2	100	75-118
100-41-4	Ethylbenzene	50	51.6	103	77-120
591-78-6	2-Hexanone	250	231	92	68-136
108-10-1	4-Methyl-2-pentanone	250	234	94	69-136
74-83-9	Methyl bromide	50	51.7	103	52-156
74-87-3	Methyl chloride	50	66.9	134	63-142
75-09-2	Methylene chloride	50	54.1	108	51-142
78-93-3	Methyl ethyl ketone	250	190	76	63-138
100-42-5	Styrene	50	51.0	102	74-120
71-55-6	1,1,1-Trichloroethane	50	45.2	90	70-131
79-34-5	1,1,2,2-Tetrachloroethane	50	50.8	102	76-121
79-00-5	1,1,2-Trichloroethane	50	49.5	99	77-118
127-18-4	Tetrachloroethylene	50	48.2	96	68-127
108-88-3	Toluene	50	48.8	98	74-118
79-01-6	Trichloroethylene	50	49.2	98	72-122
75-01-4	Vinyl chloride	50	58.2	116	64-144
1330-20-7	Xylene (total)	150	153	102	78-122

## Blank Spike Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH1176-BS	H031125.D	1	06/03/05	NAF	n/a	n/a	VH1176

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	78-123%
2037-26-5	Toluene-D8	98%	71-137%
460-00-4	4-Bromofluorobenzene	100%	61-157%
17060-07-0	1,2-Dichloroethane-D4	94%	74-125%



# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32047-5MS	K021369.D	1	06/02/05	NAF	n/a	n/a	VK975
F32047-5MSD	K021370.D	1	06/02/05	NAF	n/a	n/a	VK975
F32047-5	K021367.D	1	06/02/05	NAF	n/a	n/a	VK975

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-1, F32189-2, F32189-3

CAS No.	Compound	F32047-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		226	82.4	37	119	35	36*	14-140/33
71-43-2	Benzene	ND		45.1	41.9	93	62.7	92	40*	63-135/23
75-27-4	Bromodichloromethane	ND		45.1	41.4	92	61.5	90	39*	63-126/23
75-25-2	Bromoform	ND		45.1	32.6	72	48.7	71	40*	54-109/24
108-90-7	Chlorobenzene	ND		45.1	41.6	92	63.1	92	41*	64-130/24
75-00-3	Chloroethane	ND		45.1	47.6	105	69.4	101	37*	53-172/28
67-66-3	Chloroform	ND		45.1	41.9	93	63.8	93	41*	68-131/24
75-15-0	Carbon disulfide	ND		45.1	37.1	82	52.4	77	34*	47-165/29
56-23-5	Carbon tetrachloride	ND		45.1	41.3	91	60.7	89	38*	64-148/24
75-34-3	1,1-Dichloroethane	ND		45.1	41.8	93	64.6	94	43*	64-130/25
75-35-4	1,1-Dichloroethylene	ND		45.1	36.8	82	55.2	81	40*	55-149/28
107-06-2	1,2-Dichloroethane	ND		45.1	37.4	83	55.4	81	39*	60-114/22
78-87-5	1,2-Dichloropropane	ND		45.1	42.5	94	64.7	94	41*	65-128/23
124-48-1	Dibromochloromethane	ND		45.1	40.8	90	61.9	90	41*	60-119/23
156-59-2	cis-1,2-Dichloroethylene	ND		45.1	42.3	94	62.3	91	38*	66-132/24
10061-01-5	cis-1,3-Dichloropropene	ND		45.1	39.0	86	58.7	86	40*	57-118/25
156-60-5	trans-1,2-Dichloroethylene	ND		45.1	39.7	88	58.2	85	38*	63-137/27
10061-02-6	trans-1,3-Dichloropropene	ND		45.1	39.9	88	64.6	94	47*	58-115/25
100-41-4	Ethylbenzene	ND		45.1	43.8	97	67.2	98	42*	63-142/25
591-78-6	2-Hexanone	ND		226	137	61	225	66	49*	35-109/34
108-10-1	4-Methyl-2-pentanone	ND		226	141	62	219	64	43*	44-99/32
74-83-9	Methyl bromide	ND		45.1	49.8	110	73.7	108	39*	38-188/27
74-87-3	Methyl chloride	ND		45.1	39.0	86	58.6	86	40*	57-160/29
75-09-2	Methylene chloride	ND		45.1	41.2	91	65.2	95	45*	40-183/34
78-93-3	Methyl ethyl ketone	ND		226	104	46	159	46	42*	27-112/32
100-42-5	Styrene	ND		45.1	43.8	97	67.4	98	42*	54-130/26
71-55-6	1,1,1-Trichloroethane	ND		45.1	43.1	95	62.8	92	37*	70-149/25
79-34-5	1,1,2,2-Tetrachloroethane	ND		45.1	49.5	110	87.4	128*	55*	45-121/33
79-00-5	1,1,2-Trichloroethane	ND		45.1	41.1	91	65.7	96	46*	60-114/25
127-18-4	Tetrachloroethylene	ND		45.1	38.0	84	55.3	81	37*	54-154/27
108-88-3	Toluene	ND		45.1	45.5	101	72.5	106	46*	62-142/29
79-01-6	Trichloroethylene	ND		45.1	41.5	92	61.9	90	39*	59-143/25
75-01-4	Vinyl chloride	ND		45.1	45.4	101	65.1	95	36*	64-165/27
1330-20-7	Xylene (total)	ND		135	129	95	196	95	41*	64-142/24

# Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32047-5MS	K021369.D	1	06/02/05	NAF	n/a	n/a	VK975
F32047-5MSD	K021370.D	1	06/02/05	NAF	n/a	n/a	VK975
F32047-5	K021367.D	1	06/02/05	NAF	n/a	n/a	VK975

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-1, F32189-2, F32189-3

CAS No.	Surrogate Recoveries	MS	MSD	F32047-5	Limits
1868-53-7	Dibromofluoromethane	97%	96%	97%	78-123%
2037-26-5	Toluene-D8	105%	110%	100%	71-137%
460-00-4	4-Bromofluorobenzene	131%	140%	107%	61-157%
17060-07-0	1,2-Dichloroethane-D4	86%	82%	92%	74-125%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32252-3MS	H031134.D	1	06/03/05	NAF	n/a	n/a	VH1176
F32252-3MSD	H031135.D	1	06/03/05	NAF	n/a	n/a	VH1176
F32252-3 <sup>a</sup>	H031130.D	1	06/03/05	NAF	n/a	n/a	VH1176

The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-2

CAS No.	Compound	F32252-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	3100 U		15600	6210	40	6610	42	6	14-140/33
71-43-2	Benzene	310 U		3130	2940	94	2760	88	6	63-135/23
75-27-4	Bromodichloromethane	310 U		3130	3040	97	2870	92	6	63-126/23
75-25-2	Bromoform	310 U		3130	2550	82	2660	85	4	54-109/24
108-90-7	Chlorobenzene	310 U		3130	3190	102	3050	98	4	64-130/24
75-00-3	Chloroethane	310 U		3130	2190	70	2000	64	9	53-172/28
67-66-3	Chloroform	310 U		3130	2910	93	2730	87	6	68-131/24
75-15-0	Carbon disulfide	310 U		3130	2390	76	2230	71	7	47-165/29
56-23-5	Carbon tetrachloride	310 U		3130	2920	93	2690	86	8	64-148/24
75-34-3	1,1-Dichloroethane	310 U		3130	2800	90	2610	83	7	64-130/25
75-35-4	1,1-Dichloroethylene	310 U		3130	2920	93	2740	88	6	55-149/28
107-06-2	1,2-Dichloroethane	310 U		3130	2640	84	2570	82	3	60-114/22
78-87-5	1,2-Dichloropropane	310 U		3130	3140	100	2960	95	6	65-128/23
124-48-1	Dibromochloromethane	310 U		3130	2790	89	2730	87	2	60-119/23
156-59-2	cis-1,2-Dichloroethylene	310 U		3130	2870	92	2710	87	6	66-132/24
10061-01-5	cis-1,3-Dichloropropene	310 U		3130	2890	92	2770	89	4	57-118/25
156-60-5	trans-1,2-Dichloroethylene	310 U		3130	2620	84	2430	78	8	63-137/27
10061-02-6	trans-1,3-Dichloropropene	310 U		3130	2890	92	2830	91	2	58-115/25
100-41-4	Ethylbenzene	310 U		3130	3300	106	3130	100	5	63-142/25
591-78-6	2-Hexanone	1600 U		15600	10700	68	11000	70	3	35-109/34
108-10-1	4-Methyl-2-pentanone	1600 U		15600	11100	71	11100	71	0	44-99/32
74-83-9	Methyl bromide	310 U		3130	1110	36*	1020	33*	8	38-188/27
74-87-3	Methyl chloride	310 U		3130	3770	121	3510	112	7	57-160/29
75-09-2	Methylene chloride	630 U		3130	3090	99	2950	94	5	40-183/34
78-93-3	Methyl ethyl ketone	1600 U		15600	8130	52	8480	54	4	27-112/32
100-42-5	Styrene	310 U		3130	3210	103	3140	100	2	54-130/26
71-55-6	1,1,1-Trichloroethane	310 U		3130	2930	94	2660	85	10	70-149/25
79-34-5	1,1,2,2-Tetrachloroethane	310 U		3130	2660	85	2670	85	0	45-121/33
79-00-5	1,1,2-Trichloroethane	310 U		3130	2800	90	2790	89	0	60-114/25
127-18-4	Tetrachloroethylene	310 U		3130	3210	103	2920	93	9	54-154/27
108-88-3	Toluene	310 U		3130	3110	99	2910	93	7	62-142/29
79-01-6	Trichloroethylene	310 U		3130	3190	102	2910	93	9	59-143/25
75-01-4	Vinyl chloride	310 U		3130	3300	106	3100	99	6	64-165/27
1330-20-7	Xylene (total)	940 U		9380	9790	104	9300	99	5	64-142/24

# Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32252-3MS	H031134.D	1	06/03/05	NAF	n/a	n/a	VH1176
F32252-3MSD	H031135.D	1	06/03/05	NAF	n/a	n/a	VH1176
F32252-3 <sup>a</sup>	H031130.D	1	06/03/05	NAF	n/a	n/a	VH1176

4.3



The QC reported here applies to the following samples:

Method: SW846 8260B

F32189-2

CAS No.	Surrogate Recoveries	MS	MSD	F32252-3	Limits
1868-53-7	Dibromofluoromethane	92%	91%	93%	78-123%
2037-26-5	Toluene-D8	99%	99%	100%	71-137%
460-00-4	4-Bromofluorobenzene	96%	96%	96%	61-157%
17060-07-0	1,2-Dichloroethane-D4	85%	88%	94%	74-125%

(a) Sample was received in a bulk container and preserved within 48 hours of sampling.

## GC/MS Semi-volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-MB	F009892.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	830	330	ug/kg	
95-57-8	2-Chlorophenol	ND	170	33	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	33	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	33	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	330	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	33	ug/kg	
	3&4-Methylphenol	ND	170	33	ug/kg	
88-75-5	2-Nitrophenol	ND	170	33	ug/kg	
100-02-7	4-Nitrophenol	ND	830	330	ug/kg	
87-86-5	Pentachlorophenol	ND	830	330	ug/kg	
108-95-2	Phenol	ND	170	33	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	33	ug/kg	
38-06-2	2,4,6-Trichlorophenol	ND	170	33	ug/kg	
33-32-9	Acenaphthene	ND	170	33	ug/kg	
208-96-8	Acenaphthylene	ND	170	33	ug/kg	
120-12-7	Anthracene	ND	170	33	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	67	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	33	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	83	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	33	ug/kg	
106-47-8	4-Chloroaniline	ND	330	130	ug/kg	
86-74-8	Carbazole	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	33	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	33	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	33	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	33	ug/kg	

## Method Blank Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-MB	F009892.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	170	33	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	67	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	67	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	67	ug/kg	
132-64-9	Dibenzofuran	ND	170	33	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	83	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	170	ug/kg	
84-66-2	Diethyl phthalate	ND	330	83	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	83	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	170	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	33	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	33	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	67	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	67	ug/kg	
67-72-1	Hexachloroethane	ND	170	67	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	67	ug/kg	
78-59-1	Isophorone	ND	170	33	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	33	ug/kg	
88-74-4	2-Nitroaniline	ND	330	83	ug/kg	
99-09-2	3-Nitroaniline	ND	330	83	ug/kg	
100-01-6	4-Nitroaniline	ND	330	120	ug/kg	
91-20-3	Naphthalene	ND	170	33	ug/kg	
98-95-3	Nitrobenzene	ND	170	33	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	67	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	33	ug/kg	
129-00-0	Pyrene	ND	170	67	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	75% 45-114%
4165-62-2	Phenol-d5	74% 44-124%

## Method Blank Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-MB	F009892.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Surrogate Recoveries		Limits
118-79-6	2,4,6-Tribromophenol	72%	50-128%
4165-60-0	Nitrobenzene-d5	77%	41-123%
321-60-8	2-Fluorobiphenyl	77%	46-122%
1718-51-0	Terphenyl-d14	81%	45-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	3.50	29000	ug/kg	JN
	Total TIC, Semi-Volatile		29000	ug/kg	J



## Blank Spike Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-BS	F009891.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	3330	2770	83	55-110
95-57-8	2-Chlorophenol	1670	1270	76	61-97
59-50-7	4-Chloro-3-methyl phenol	1670	1360	82	60-105
120-83-2	2,4-Dichlorophenol	1670	1380	83	64-102
105-67-9	2,4-Dimethylphenol	1670	1130	68	50-102
51-28-5	2,4-Dinitrophenol	3330	2570	77	41-120
534-52-1	4,6-Dinitro-o-cresol	3330	2870	86	59-123
95-48-7	2-Methylphenol	1670	1250	75	57-97
	3&4-Methylphenol	3330	2580	77	56-98
88-75-5	2-Nitrophenol	1670	1340	80	62-100
100-02-7	4-Nitrophenol	3330	2780	83	52-116
87-86-5	Pentachlorophenol	3330	3080	92	54-111
108-95-2	Phenol	1670	1280	77	59-96
95-95-4	2,4,5-Trichlorophenol	1670	1410	85	65-104
88-06-2	2,4,6-Trichlorophenol	1670	1440	86	64-102
83-32-9	Acenaphthene	1670	1330	80	66-104
208-96-8	Acenaphthylene	1670	1330	80	66-106
120-12-7	Anthracene	1670	1340	80	66-109
56-55-3	Benzo(a)anthracene	1670	1360	82	66-111
50-32-8	Benzo(a)pyrene	1670	1330	80	65-115
205-99-2	Benzo(b)fluoranthene	1670	1430	86	64-115
191-24-2	Benzo(g,h,i)perylene	1670	1350	81	62-113
207-08-9	Benzo(k)fluoranthene	1670	1430	86	67-116
101-55-3	4-Bromophenyl phenyl ether	1670	1420	85	68-106
85-68-7	Butyl benzyl phthalate	1670	1430	86	62-114
100-51-6	Benzyl Alcohol	1670	1400	84	58-103
91-58-7	2-Chloronaphthalene	1670	1320	79	66-97
106-47-8	4-Chloroaniline	1670	796	48	29-80
86-74-8	Carbazole	1670	1390	83	63-107
218-01-9	Chrysene	1670	1400	84	67-112
111-91-1	bis(2-Chloroethoxy)methane	1670	1170	70	57-89
111-44-4	bis(2-Chloroethyl)ether	1670	1260	76	61-95
108-60-1	bis(2-Chloroisopropyl)ether	1670	1130	68	56-100
7005-72-3	4-Chlorophenyl phenyl ether	1670	1360	82	68-103
95-50-1	1,2-Dichlorobenzene	1670	1210	73	61-91
541-73-1	1,3-Dichlorobenzene	1670	1180	71	59-88

# Blank Spike Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-BS	F009891.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
106-46-7	1,4-Dichlorobenzene	1670	1180	71	59-90
121-14-2	2,4-Dinitrotoluene	1670	1380	83	60-108
506-20-2	2,6-Dinitrotoluene	1670	1330	80	63-106
53-70-3	Dibenzo(a,h)anthracene	1670	1330	80	63-110
132-64-9	Dibenzofuran	1670	1370	82	65-99
34-74-2	Di-n-butyl phthalate	1670	1390	83	62-110
117-84-0	Di-n-octyl phthalate	1670	1540	92	59-132
34-66-2	Diethyl phthalate	1670	1380	83	64-109
131-11-3	Dimethyl phthalate	1670	1340	80	66-105
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1450	87	60-118
206-44-0	Fluoranthene	1670	1370	82	63-108
86-73-7	Fluorene	1670	1330	80	65-109
118-74-1	Hexachlorobenzene	1670	1380	83	65-106
87-68-3	Hexachlorobutadiene	1670	1230	74	55-93
77-47-4	Hexachlorocyclopentadiene	1670	1080	65	34-95
67-72-1	Hexachloroethane	1670	1190	71	58-91
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1330	80	59-115
78-59-1	Isophorone	1670	1290	77	60-102
91-57-6	2-Methylnaphthalene	1670	1310	79	63-93
88-74-4	2-Nitroaniline	1670	1350	81	60-110
99-09-2	3-Nitroaniline	1670	911	55	41-90
100-01-6	4-Nitroaniline	1670	1140	68	53-103
91-20-3	Naphthalene	1670	1240	74	64-94
98-95-3	Nitrobenzene	1670	1230	74	60-96
621-64-7	N-Nitroso-di-n-propylamine	1670	1220	73	54-99
86-30-6	N-Nitrosodiphenylamine	1670	1430	86	68-108
85-01-8	Phenanthrene	1670	1370	82	77-110
129-00-0	Pyrene	1670	1410	85	65-115
120-82-1	1,2,4-Trichlorobenzene	1670	1240	74	64-94

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	78%	45-114%
4165-62-2	Phenol-d5	76%	44-124%
118-79-6	2,4,6-Tribromophenol	83%	50-128%

## Blank Spike Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-BS	F009891.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	75%	41-123%
321-60-8	2-Fluorobiphenyl	79%	46-122%
1718-51-0	Terphenyl-d14	82%	45-135%

# Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-MS	F009905.D	1	06/07/05	ME	06/01/05	OP13462	SF562
OP13462-MSD	F009906.D	1	06/07/05	ME	06/01/05	OP13462	SF562
F32177-8	F009904.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Compound	F32177-8 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		3560	3010	85	2990	82	1	13-117/32
95-57-8	2-Chlorophenol	ND		1780	1340	75	1340	74	0	31-113/23
59-50-7	4-Chloro-3-methyl phenol	ND		1780	1550	87	1550	85	0	33-123/38
120-83-2	2,4-Dichlorophenol	ND		1780	1470	83	1470	81	0	54-105/20
105-67-9	2,4-Dimethylphenol	ND		1780	1450	82	1420	78	2	46-104/22
51-28-5	2,4-Dinitrophenol	ND		3560	2100	59	2100	58	0	5-110/46
534-52-1	4,6-Dinitro-o-cresol	ND		3560	2320	65	2380	65	3	27-119/35
95-48-7	2-Methylphenol	ND		1780	1360	76	1350	74	1	44-101/28
	3&4-Methylphenol	ND		3560	2780	78	2760	76	1	38-107/31
88-75-5	2-Nitrophenol	ND		1780	1350	76	1340	74	1	38-111/21
100-02-7	4-Nitrophenol	ND		3560	3300	93	3330	92	1	44-111/22
87-86-5	Pentachlorophenol	ND		3560	3910	110	3840	106	2	42-110/25
108-95-2	Phenol	ND		1780	1310	74	1280	70	2	32-111/29
95-95-4	2,4,5-Trichlorophenol	ND		1780	1570	88	1570	86	0	53-108/19
38-06-2	2,4,6-Trichlorophenol	ND		1780	1540	87	1570	86	2	53-107/20
33-32-9	Acenaphthene	ND		1780	1390	78	1430	79	3	57-106/19
208-96-8	Acenaphthylene	ND		1780	1410	79	1440	79	2	55-110/18
120-12-7	Anthracene	ND		1780	1450	82	1470	81	1	59-109/21
56-55-3	Benzo(a)anthracene	ND		1780	1510	85	1500	82	1	52-120/20
50-32-8	Benzo(a)pyrene	ND		1780	1450	82	1460	80	1	48-124/21
205-99-2	Benzo(b)fluoranthene	40.6	J	1780	1540	84	1590	85	3	50-122/21
191-24-2	Benzo(g,h,i)perylene	ND		1780	1620	91	1630	90	1	50-118/23
207-08-9	Benzo(k)fluoranthene	ND		1780	1470	83	1460	80	1	54-117/21
101-55-3	4-Bromophenyl phenyl ether	ND		1780	1580	89	1610	88	2	59-107/20
35-68-7	Butyl benzyl phthalate	ND		1780	1600	90	1630	90	2	57-118/20
100-51-6	Benzyl Alcohol	ND		1780	1520	85	1500	82	1	46-106/23
91-58-7	2-Chloronaphthalene	ND		1780	1390	78	1400	77	1	53-102/19
106-47-8	4-Chloroaniline	ND		1780	870	49	827	45	5	25-78/30
36-74-8	Carbazole	ND		1780	1550	87	1580	87	2	58-105/20
218-01-9	Chrysene	ND		1780	1510	85	1550	85	3	48-124/20
111-91-1	bis(2-Chloroethoxy)methane	ND		1780	1190	67	1180	65	1	45-94/19
111-44-4	bis(2-Chloroethyl)ether	ND		1780	1270	71	1270	70	0	47-99/24
108-60-1	bis(2-Chloroisopropyl)ether	ND		1780	1120	63	1140	63	2	44-100/23
7005-72-3	4-Chlorophenyl phenyl ether	ND		1780	1460	82	1480	81	1	59-105/18
95-50-1	1,2-Dichlorobenzene	ND		1780	1170	66	1230	68	5	44-95/26
541-73-1	1,3-Dichlorobenzene	ND		1780	1060	60	1130	62	6	41-91/28

# Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-MS	F009905.D	1	06/07/05	ME	06/01/05	OP13462	SF562
OP13462-MSD	F009906.D	1	06/07/05	ME	06/01/05	OP13462	SF562
F32177-8	F009904.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Compound	F32177-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
106-46-7	1,4-Dichlorobenzene	ND		1780	1110	62	1170	64	5	42-93/27
121-14-2	2,4-Dinitrotoluene	ND		1780	1420	80	1450	80	2	44-118/26
606-20-2	2,6-Dinitrotoluene	ND		1780	1400	79	1410	77	1	48-115/20
53-70-3	Dibenzo(a,h)anthracene	ND		1780	1680	94	1640	90	2	45-121/23
132-64-9	Dibenzofuran	ND		1780	1460	82	1500	82	3	57-101/19
84-74-2	Di-n-butyl phthalate	ND		1780	1560	88	1600	88	3	55-112/20
117-84-0	Di-n-octyl phthalate	ND		1780	1650	93	1650	91	0	58-134/23
84-66-2	Diethyl phthalate	ND		1780	1490	84	1530	84	3	59-107/19
131-11-3	Dimethyl phthalate	ND		1780	1400	79	1440	79	3	56-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1780	1670	94	1700	93	2	55-125/21
206-44-0	Fluoranthene	ND		1780	1500	84	1520	84	1	47-119/25
86-73-7	Fluorene	ND		1780	1410	79	1440	79	2	59-108/18
118-74-1	Hexachlorobenzene	ND		1780	1510	85	1520	84	1	56-107/21
87-68-3	Hexachlorobutadiene	ND		1780	1280	72	1300	71	2	42-94/25
77-47-4	Hexachlorocyclopentadiene	ND		1780	877	49	872	48	1	13-91/25
67-72-1	Hexachloroethane	ND		1780	1140	64	1200	66	5	40-93/32
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1780	1640	92	1670	92	2	50-118/26
78-59-1	Isophorone	ND		1780	1320	74	1320	73	0	52-101/19
91-57-6	2-Methylnaphthalene	ND		1780	1360	76	1370	75	1	42-103/22
88-74-4	2-Nitroaniline	ND		1780	1500	84	1550	85	3	55-108/20
99-09-2	3-Nitroaniline	ND		1780	1060	60	1090	60	3	38-92/20
100-01-6	4-Nitroaniline	ND		1780	1180	66	1250	69	6	42-101/23
91-20-3	Naphthalene	ND		1780	1270	71	1280	70	1	42-105/24
98-95-3	Nitrobenzene	ND		1780	1280	72	1300	71	2	42-105/21
621-64-7	N-Nitroso-di-n-propylamine	ND		1780	1290	73	1310	72	2	41-107/23
86-30-6	N-Nitrosodiphenylamine	ND		1780	1550	87	1570	86	1	59-111/21
85-01-8	Phenanthrene	ND		1780	1480	83	1510	83	2	60-110/21
129-00-0	Pyrene	ND		1780	1460	82	1480	81	1	50-126/25
120-82-1	1,2,4-Trichlorobenzene	ND		1780	1270	71	1270	70	0	49-98/23

CAS No.	Surrogate Recoveries	MS	MSD	F32177-8	Limits
367-12-4	2-Fluorophenol	77%	75%	78%	45-114%
4165-62-2	Phenol-d5	78%	74%	76%	44-124%
118-79-6	2,4,6-Tribromophenol	92%	91%	97%	50-128%

## Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13462-MS	F009905.D	1	06/07/05	ME	06/01/05	OP13462	SF562
OP13462-MSD	F009906.D	1	06/07/05	ME	06/01/05	OP13462	SF562
F32177-8	F009904.D	1	06/07/05	ME	06/01/05	OP13462	SF562

The QC reported here applies to the following samples:

Method: SW846 8270C

F32189-1, F32189-2, F32189-3

CAS No.	Surrogate Recoveries	MS	MSD	F32177-8	Limits
4165-60-0	Nitrobenzene-d5	73%	72%	74%	41-123%
321-60-8	2-Fluorobiphenyl	78%	76%	80%	46-122%
1718-51-0	Terphenyl-d14	84%	81%	89%	45-135%

## GC Semi-volatiles

## QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13464-MB	ST36492.D	1	06/02/05	AG	06/01/05	OP13464	GST1123

The QC reported here applies to the following samples:

Method: SW846 8082

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	17	8.3	ug/kg	
11104-28-2	Aroclor 1221	ND	17	13	ug/kg	
11141-16-5	Aroclor 1232	ND	17	13	ug/kg	
53469-21-9	Aroclor 1242	ND	17	8.3	ug/kg	
12672-29-6	Aroclor 1248	ND	17	8.3	ug/kg	
11097-69-1	Aroclor 1254	ND	17	8.3	ug/kg	
11096-82-5	Aroclor 1260	ND	17	8.3	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	129%	52-136%
2051-24-3	Decachlorobiphenyl	119%	49-148%



## Method Blank Summary

Page 1 of 1

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13464-MB	ST36512.D	1	06/03/05	AG	06/01/05	OP13464	GST1124

The QC reported here applies to the following samples:

Method: SW846 8082

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	96	48	ug/kg	
11104-28-2	Aroclor 1221	ND	96	77	ug/kg	
11141-16-5	Aroclor 1232	ND	96	77	ug/kg	
53469-21-9	Aroclor 1242	ND	96	48	ug/kg	
12672-29-6	Aroclor 1248	ND	96	48	ug/kg	
11097-69-1	Aroclor 1254	ND	96	48	ug/kg	
11096-82-5	Aroclor 1260	ND	96	48	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	124%	52-136%
2051-24-3	Decachlorobiphenyl	127%	49-148%

## Blank Spike Summary

Page 1 of 1

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13464-BS	ST36491.D	1	06/02/05	AG	06/01/05	OP13464	GST1123

The QC reported here applies to the following samples:

Method: SW846 8082

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	140	105	75-123
11096-82-5	Aroclor 1260	133	126	95	72-124

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	126%	52-136%
2051-24-3	Decachlorobiphenyl	106%	49-148%

## Blank Spike Summary

Page 1 of 1

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13464-BS	ST36511.D	1	06/03/05	AG	06/01/05	OP13464	GST1124

The QC reported here applies to the following samples:

Method: SW846 8082

F32189-1, F32189-2, F32189-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	769	926	120	75-123
11096-82-5	Aroclor 1260	769	835	109	72-124

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	130%	52-136%
2051-24-3	Decachlorobiphenyl	122%	49-148%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F32189

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13464-MS	ST36494.D	1	06/02/05	AG	06/01/05	OP13464	GST1123
OP13464-MSD	ST36495.D	1	06/02/05	AG	06/01/05	OP13464	GST1123
F32189-1	ST36493.D	1	06/02/05	AG	06/01/05	OP13464	GST1123

The QC reported here applies to the following samples:

Method: SW846 8082

F32189-1, F32189-2, F32189-3

CAS No.	Compound	F32189-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		1700	1070	63	1370	81	25*	54-138/22
11096-82-5	Aroclor 1260	ND		1700	1270	75	1550	91	20	46-138/21

CAS No.	Surrogate Recoveries	MS	MSD	F32189-1	Limits
877-09-8	Tetrachloro-m-xylene	99%	101%	102%	52-136%
2051-24-3	Decachlorobiphenyl	108%	107%	105%	49-148%

## Metals Analysis

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## QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: F32189  
Account: CSXT - CSX Transportation  
Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8103  
Matrix Type: SOLID

Methods: SW846 7471A  
Units: mg/kg

Prep Date: 06/03/05

Metal	RL	IDL	MB	
			raw	final
Mercury	0.083	.0018	-0.0045	<0.083

Associated samples MP8103: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

7.1.1

7

# MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32189  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8103  
 Matrix Type: SOLID

Methods: SW846 7471A  
 Units: mg/kg

Prep Date: 06/03/05 06/03/05

Metal	F32189-1 Original	DUP	RPD	QC Limits	F32189-1 Original MS	SpikeLot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-68	0.0	3.2	99.8	47-157

Associated samples MP8103: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

7.1.2

7

# SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F32189  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8103  
 Matrix Type: SOLID

Methods: SW846 7471A  
 Units: mg/kg

Prep Date: 06/03/05

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.25	0.25	100.0	80-120

Associated samples MP8103: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.3

7



BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: F32189  
Account: CSXT - CSX Transportation  
Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8109  
Matrix Type: SOLID

Methods: SW846 6010B  
Units: mg/kg

Prep Date: 06/06/05

Metal	RL	IDL	MB raw	final
Aluminum	20	.66	anr	
Antimony	6.0	.15	anr	
Arsenic	0.50	.28	-0.17	<0.50
Barium	20	.05	0.18	<20
Beryllium	0.50	.03	anr	
Cadmium	0.40	.03	-0.029	<0.40
Calcium	500	.38	anr	
Chromium	1.0	.04	0.017	<1.0
Cobalt	5.0	.05	anr	
Copper	2.5	.04	anr	
Iron	10	.71	anr	
Lead	10	.12	0.37	<10
Magnesium	500	.99	anr	
Manganese	1.5	.02	anr	
Molybdenum	5.0	.08		
Nickel	4.0	.11	anr	
Potassium	500	1.4	anr	
Selenium	10	.2	-0.0020	<10
Silver	1.0	.06	-0.0040	<1.0
Sodium	500	15	anr	
Thallium	1.0	.15	anr	
Tin	5.0	.15		
Vanadium	5.0	.05	anr	
Zinc	2.0	.06	anr	

Associated samples MP8109: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

# MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32189  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8109  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 06/06/05 06/06/05

Metal	F32189-1 Original	DUP	RPD	QC Limits	F32189-1 Original MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	0.0	0.0	NC	0-20	0.0	4720	5030	93.9 75-113
Barium	1.5	1.7	12.5	0-20	1.5	4900	5030	97.4 75-122
Beryllium	anr							
Cadmium	0.0	0.0	NC	0-20	0.0	125	126	99.5 75-116
Calcium	anr							
Chromium	1.8	0.85	71.7 (a)	0-20	1.8	519	503	102.9 75-125
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	3.9	2.8	32.8 (a)	0-20	3.9	1250	1260	99.1 75-121
Magnesium	anr							
Manganese	anr							
Molybdenum								
Nickel	anr							
Potassium	anr							
Selenium	0.0	0.0	NC	0-20	0.0	4710	5030	93.7 75-110
Silver	0.0	0.0	NC	0-20	0.0	118	126	93.9 75-120
Sodium	anr							
Thallium	anr							
Tin								
Vanadium	anr							
Zinc	anr							

Associated samples MP8109: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

7.2.2  
 7

# MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32189  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8109  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 06/06/05

Metal	F32189-1 Original	MSD	Spike lot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	0.0	4900	5130	95.6	3.7	30
Barium	1.5	5050	5130	98.4	3.0	30
Beryllium	anr					
Cadmium	0.0	129	128	100.6	3.1	30
Calcium	anr					
Chromium	1.8	538	513	104.6	3.6	30
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	3.9	1290	1280	100.3	3.1	30
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	0.0	4900	5130	95.6	4.0	30
Silver	0.0	123	128	95.9	4.1	30
Sodium	anr					
Thallium	anr					
Tin						
Vanadium	anr					
Zinc	anr					

Associated samples MP8109: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F32189  
Account: CSXT - CSX Transportation  
Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8109  
Matrix Type: SOLID

Methods: SW846 6010B  
Units: mg/kg

Prep Date: 06/06/05

Metal	BSP Result	Spike lot MPFLICP	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	368	377	97.5	80-120
Barium	381	377	101.0	80-120
Beryllium	anr			
Cadmium	9.8	9.4	103.9	80-120
Calcium	anr			
Chromium	40.5	37.7	107.3	80-120
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	97.8	94.3	103.7	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	363	377	96.2	80-120
Silver	9.1	9.4	96.5	80-120
Sodium	anr			
Thallium	anr			
Tin				
Vanadium	anr			
Zinc	anr			

Associated samples MP8109: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

# SERIAL DILUTION RESULTS SUMMARY

Login Number: F32189  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8109  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 06/06/05

Metal	F32189-1 Original	SDL 1:5	RPD	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	1.23	0.00	100.0(a)	0-10
Beryllium	anr			
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	1.45	0.00	100.0(a)	0-10
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	3.13	0.00	100.0(a)	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Thallium	anr			
Tin				
Vanadium	anr			
Zinc	anr			

Associated samples MP8109: F32189-1, F32189-2, F32189-3

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.2.4





Southeast

07/13/05

## Technical Report for

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### CSX Transportation

ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Accutest Job Number: F32850

Sampling Date: 06/28/05

---

### Report to:

Shaw Environmental


betsy.mcdaniel@shawgrp.com

ATTN: Terry Whitt

Total number of pages in report: 51



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

  
Harry Behzadi, Ph.D.  
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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Accutest Laboratories



## Sample Summary

CSX Transportation

Job No: F32850

ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F32850-1	06/28/05	11:45 RG	06/29/05	SO Soil	SS1
F32850-2	06/28/05	11:05 RG	06/29/05	SO Soil	SS2
F32850-3	06/28/05	11:35 RG	06/29/05	SO Soil	SS3

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



## Report of Analysis

Page 1 of 2

<b>Client Sample ID:</b> SS1		<b>Date Sampled:</b> 06/28/05	
<b>Lab Sample ID:</b> F32850-1		<b>Date Received:</b> 06/29/05	
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 86.7	
<b>Method:</b> SW846 8260B			
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0033351.D	1	06/30/05	NAF	n/a	n/a	VG1280
Run #2							

Run #	Initial Weight
Run #1	5.44 g
Run #2	

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	53	27	ug/kg	
71-43-2	Benzene	ND	5.3	2.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	2.1	ug/kg	
75-25-2	Bromoform	ND	5.3	2.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	2.1	ug/kg	
75-00-3	Chloroethane	ND	5.3	2.1	ug/kg	
67-66-3	Chloroform	ND	5.3	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	2.1	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	2.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	2.1	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.3	3.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.3	2.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	2.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	2.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.3	2.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	2.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.3	2.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	2.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.3	2.1	ug/kg	
591-78-6	2-Hexanone	ND	27	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	27	11	ug/kg	
74-83-9	Methyl bromide	ND	5.3	2.1	ug/kg	
74-87-3	Methyl chloride	ND	5.3	2.1	ug/kg	
75-09-2	Methylene chloride	ND	11	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	27	11	ug/kg	
100-42-5	Styrene	ND	5.3	2.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	2.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	2.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	2.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.3	2.1	ug/kg	
108-88-3	Toluene	ND	5.3	2.1	ug/kg	
79-01-6	Trichloroethylene	ND	5.3	2.1	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Blank Spike Summary

Page 1 of 3

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-BS	L026700.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	3330	2800	84	55-110
95-57-8	2-Chlorophenol	1670	1290	77	61-97
59-50-7	4-Chloro-3-methyl phenol	1670	1340	80	60-105
120-83-2	2,4-Dichlorophenol	1670	1430	86	64-102
105-67-9	2,4-Dimethylphenol	1670	1330	80	50-102
51-28-5	2,4-Dinitrophenol	3330	2680	80	41-120
534-52-1	4,6-Dinitro-o-cresol	3330	2900	87	59-123
95-48-7	2-Methylphenol	1670	1290	77	57-97
	3&4-Methylphenol	3330	2460	74	56-98
88-75-5	2-Nitrophenol	1670	1370	82	62-100
100-02-7	4-Nitrophenol	3330	2370	71	52-116
87-86-5	Pentachlorophenol	3330	2760	83	54-111
108-95-2	Phenol	1670	1290	77	59-96
95-95-4	2,4,5-Trichlorophenol	1670	1440	86	65-104
38-06-2	2,4,6-Trichlorophenol	1670	1440	86	64-102
83-32-9	Acenaphthene	1670	1380	83	66-104
208-96-8	Acenaphthylene	1670	1380	83	66-106
120-12-7	Anthracene	1670	1400	84	66-109
56-55-3	Benzo(a)anthracene	1670	1410	85	66-111
50-32-8	Benzo(a)pyrene	1670	1350	81	65-115
205-99-2	Benzo(b)fluoranthene	1670	1400	84	64-115
191-24-2	Benzo(g,h,i)perylene	1670	1370	82	62-113
207-08-9	Benzo(k)fluoranthene	1670	1490	89	67-116
101-55-3	4-Bromophenyl phenyl ether	1670	1500	90	68-106
85-68-7	Butyl benzyl phthalate	1670	1420	85	62-114
100-51-6	Benzyl Alcohol	1670	1340	80	58-103
91-58-7	2-Chloronaphthalene	1670	1380	83	66-97
106-47-8	4-Chloroaniline	1670	755	45	29-80
36-74-8	Carbazole	1670	1430	86	63-107
218-01-9	Chrysene	1670	1450	87	67-112
111-91-1	bis(2-Chloroethoxy)methane	1670	1340	80	57-89
111-44-4	bis(2-Chloroethyl)ether	1670	1320	79	61-95
108-60-1	bis(2-Chloroisopropyl)ether	1670	1240	74	56-100
7005-72-3	4-Chlorophenyl phenyl ether	1670	1400	84	68-103
95-50-1	1,2-Dichlorobenzene	1670	1090	65	61-91
541-73-1	1,3-Dichlorobenzene	1670	988	59	59-88

## Method Blank Summary

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Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-MB	L026701.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Surrogate Recoveries		Limits
118-79-6	2,4,6-Tribromophenol	79%	50-128%
4165-60-0	Nitrobenzene-d5	78%	41-123%
321-60-8	2-Fluorobiphenyl	85%	46-122%
1718-51-0	Terphenyl-d14	81%	45-135%

## Method Blank Summary

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Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-MB	L026701.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	170	33	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	67	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	67	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	67	ug/kg	
132-64-9	Dibenzofuran	ND	170	33	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	83	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	170	ug/kg	
84-66-2	Diethyl phthalate	ND	330	83	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	83	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	170	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	33	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	33	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	67	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	67	ug/kg	
67-72-1	Hexachloroethane	ND	170	67	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	67	ug/kg	
78-59-1	Isophorone	ND	170	33	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	33	ug/kg	
88-74-4	2-Nitroaniline	ND	330	83	ug/kg	
99-09-2	3-Nitroaniline	ND	330	83	ug/kg	
100-01-6	4-Nitroaniline	ND	330	120	ug/kg	
91-20-3	Naphthalene	ND	170	33	ug/kg	
98-95-3	Nitrobenzene	ND	170	33	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	67	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	33	ug/kg	
85-01-8	Phenanthrene	ND	170	33	ug/kg	
129-00-0	Pyrene	ND	170	67	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries		Limits
357-12-4	2-Fluorophenol	78%	45-114%
4165-62-2	Phenol-d5	77%	44-124%

## Method Blank Summary

Page 1 of 3

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-MB	L026701.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	830	330	ug/kg	
95-57-8	2-Chlorophenol	ND	170	33	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	33	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	33	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	33	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	330	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	67	ug/kg	
95-48-7	2-Methylphenol	ND	170	33	ug/kg	
	3&4-Methylphenol	ND	170	33	ug/kg	
88-75-5	2-Nitrophenol	ND	170	33	ug/kg	
100-02-7	4-Nitrophenol	ND	830	330	ug/kg	
87-86-5	Pentachlorophenol	ND	830	330	ug/kg	
108-95-2	Phenol	ND	170	33	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	33	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	33	ug/kg	
83-32-9	Acenaphthene	ND	170	33	ug/kg	
208-96-8	Acenaphthylene	ND	170	33	ug/kg	
120-12-7	Anthracene	ND	170	33	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	67	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	33	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	83	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	33	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	33	ug/kg	
106-47-8	4-Chloroaniline	ND	330	130	ug/kg	
86-74-8	Carbazole	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	33	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	33	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	33	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	33	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	33	ug/kg	

## GC/MS Semi-volatiles

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## QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32850-1MS	G0033354.D	1	06/30/05	NAF	n/a	n/a	VG1280
F32850-1MSD	G0033355.D	1	06/30/05	NAF	n/a	n/a	VG1280
F32850-1	G0033351.D	1	06/30/05	NAF	n/a	n/a	VG1280

The QC reported here applies to the following samples:

Method: SW846 8260B

F32850-1, F32850-2, F32850-3

CAS No.	Surrogate Recoveries	MS	MSD	F32850-1	Limits
1868-53-7	Dibromofluoromethane	103%	102%	96%	78-123%
2037-26-5	Toluene-D8	109%	104%	96%	71-137%
460-00-4	4-Bromofluorobenzene	130%	116%	110%	61-157%
17060-07-0	1,2-Dichloroethane-D4	99%	109%	98%	74-125%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32850-1MS	G0033354.D 1		06/30/05	NAF	n/a	n/a	VG1280
F32850-1MSD	G0033355.D 1		06/30/05	NAF	n/a	n/a	VG1280
F32850-1	G0033351.D 1		06/30/05	NAF	n/a	n/a	VG1280

The QC reported here applies to the following samples:

Method: SW846 8260B

F32850-1, F32850-2, F32850-3

CAS No.	Compound	F32850-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		291	292	100	270	93	8	14-140/33
71-43-2	Benzene	ND		58.3	63.6	109	55.4	95	14	63-135/23
75-27-4	Bromodichloromethane	ND		58.3	63.9	110	58.0	100	10	63-126/23
75-25-2	Bromoform	ND		58.3	56.8	98	51.3	88	10	54-109/24
108-90-7	Chlorobenzene	ND		58.3	57.4	99	50.3	87	13	64-130/24
75-00-3	Chloroethane	ND		58.3	70.4	121	56.0	97	23	53-172/28
67-66-3	Chloroform	ND		58.3	64.0	110	55.8	96	14	68-131/24
75-15-0	Carbon disulfide	ND		58.3	33.3	57	27.0	47	21	47-165/29
56-23-5	Carbon tetrachloride	ND		58.3	68.6	118	57.2	99	18	64-148/24
75-34-3	1,1-Dichloroethane	ND		58.3	66.6	114	57.5	99	15	64-130/25
75-35-4	1,1-Dichloroethylene	ND		58.3	62.7	108	50.8	88	21	55-149/28
107-06-2	1,2-Dichloroethane	ND		58.3	62.3	107	58.7	101	6	60-114/22
78-87-5	1,2-Dichloropropane	ND		58.3	64.1	110	57.9	100	10	65-128/23
124-48-1	Dibromochloromethane	ND		58.3	64.0	110	54.4	94	16	60-119/23
156-59-2	cis-1,2-Dichloroethylene	ND		58.3	61.0	105	54.0	93	12	66-132/24
10061-01-5	cis-1,3-Dichloropropene	ND		58.3	56.5	97	51.7	89	9	57-118/25
156-60-5	trans-1,2-Dichloroethylene	ND		58.3	60.4	104	50.3	87	18	63-137/27
10061-02-6	trans-1,3-Dichloropropene	ND		58.3	56.7	97	50.5	87	12	58-115/25
100-41-4	Ethylbenzene	ND		58.3	63.0	108	54.5	94	14	63-142/25
591-78-6	2-Hexanone	ND		291	302	104	274	94	10	35-109/34
108-10-1	4-Methyl-2-pentanone	ND		291	340	117*	305	105*	11	44-99/32
74-83-9	Methyl bromide	ND		58.3	58.9	101	46.1	79	24	38-188/27
74-87-3	Methyl chloride	ND		58.3	60.1	103	45.4	78	28	57-160/29
75-09-2	Methylene chloride	ND		58.3	73.7	127	62.4	108	17	40-183/34
78-93-3	Methyl ethyl ketone	ND		291	269	92	259	89	4	27-112/32
100-42-5	Styrene	ND		58.3	49.7	85	45.1	78	10	54-130/26
71-55-6	1,1,1-Trichloroethane	ND		58.3	67.8	116	56.9	98	17	70-149/25
79-34-5	1,1,2,2-Tetrachloroethane	ND		58.3	91.5	157*	69.7	120	27	45-121/33
79-00-5	1,1,2-Trichloroethane	ND		58.3	65.0	112	56.5	97	14	60-114/25
127-18-4	Tetrachloroethylene	ND		58.3	53.4	92	48.9	84	9	54-154/27
108-88-3	Toluene	ND		58.3	67.9	117	56.4	97	19	62-142/29
79-01-6	Trichloroethylene	ND		58.3	59.6	102	53.3	92	11	59-143/25
75-01-4	Vinyl chloride	ND		58.3	60.4	104	46.9	81	25	64-165/27
1330-20-7	Xylene (total)	ND		175	186	106	164	94	13	64-142/24



## Blank Spike Summary

Page 2 of 2

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1280-BS	G0033347.D	1	06/30/05	NAF	n/a	n/a	VG1280

The QC reported here applies to the following samples:

Method: SW846 8260B

F32850-1, F32850-2, F32850-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	78-123%
2037-26-5	Toluene-D8	95%	71-137%
460-00-4	4-Bromofluorobenzene	101%	61-157%
17060-07-0	1,2-Dichloroethane-D4	99%	74-125%

## Blank Spike Summary

Page 1 of 2

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1280-BS	G0033347.D	1	06/30/05	NAF	n/a	n/a	VG1280

The QC reported here applies to the following samples:

Method: SW846 8260B

F32850-1, F32850-2, F32850-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	360	144*	51-136
71-43-2	Benzene	50	55.1	110	74-124
75-27-4	Bromodichloromethane	50	56.4	113	74-124
75-25-2	Bromoform	50	52.9	106	79-127
108-90-7	Chlorobenzene	50	53.0	106	78-117
75-00-3	Chloroethane	50	63.3	127	63-147
67-66-3	Chloroform	50	52.7	105	75-121
75-15-0	Carbon disulfide	50	27.5	55*	59-148
56-23-5	Carbon tetrachloride	50	54.1	108	67-131
75-34-3	1,1-Dichloroethane	50	52.3	105	71-118
75-35-4	1,1-Dichloroethylene	50	49.3	99	64-126
107-06-2	1,2-Dichloroethane	50	55.1	110	72-120
78-87-5	1,2-Dichloropropane	50	57.1	114	74-126
124-48-1	Dibromochloromethane	50	51.9	104	78-120
156-59-2	cis-1,2-Dichloroethylene	50	53.4	107	75-124
10061-01-5	cis-1,3-Dichloropropene	50	56.8	114	72-120
156-60-5	trans-1,2-Dichloroethylene	50	45.5	91	70-122
10061-02-6	trans-1,3-Dichloropropene	50	52.8	106	75-118
100-41-4	Ethylbenzene	50	54.0	108	77-120
591-78-6	2-Hexanone	250	285	114	68-136
108-10-1	4-Methyl-2-pentanone	250	269	108	69-136
74-83-9	Methyl bromide	50	50.7	101	52-156
74-87-3	Methyl chloride	50	37.4	75	63-142
75-09-2	Methylene chloride	50	56.7	113	51-142
73-93-3	Methyl ethyl ketone	250	299	120	63-138
100-42-5	Styrene	50	55.0	110	74-120
71-55-6	1,1,1-Trichloroethane	50	53.7	107	70-131
79-34-5	1,1,2,2-Tetrachloroethane	50	50.8	102	76-121
79-00-5	1,1,2-Trichloroethane	50	50.1	100	77-118
127-18-4	Tetrachloroethylene	50	46.8	94	68-127
108-88-3	Toluene	50	54.6	109	74-118
79-01-6	Trichloroethylene	50	55.4	111	72-122
75-01-4	Vinyl chloride	50	42.8	86	64-144
1330-20-7	Xylene (total)	150	167	111	78-122

## Method Blank Summary

Page 2 of 2

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1280-MB	G0033349.D	1	06/30/05	NAF	n/a	n/a	VG1280

The QC reported here applies to the following samples:

Method: SW846 8260B

F32850-1, F32850-2, F32850-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 78-123%
2037-26-5	Toluene-D8	92% 71-137%
460-00-4	4-Bromofluorobenzene	102% 61-157%
17060-07-0	1,2-Dichloroethane-D4	102% 74-125%

## Method Blank Summary

Page 1 of 2

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1280-MB	G0033349.D	1	06/30/05	NAF	n/a	n/a	VG1280

The QC reported here applies to the following samples:

Method: SW846 8260B

F32850-1, F32850-2, F32850-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	25	ug/kg	
71-43-2	Benzene	ND	5.0	2.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	2.0	ug/kg	
75-25-2	Bromoform	ND	5.0	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	2.0	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	2.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	3.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	2.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	2.0	ug/kg	
591-78-6	2-Hexanone	ND	25	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	25	10	ug/kg	
74-83-9	Methyl bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene chloride	ND	10	5.0	ug/kg	
73-93-3	Methyl ethyl ketone	ND	25	10	ug/kg	
100-42-5	Styrene	ND	5.0	2.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	2.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	2.0	ug/kg	
108-88-3	Toluene	ND	5.0	2.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	2.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	2.5	ug/kg	
1330-20-7	Xylene (total)	ND	15	4.5	ug/kg	

## GC/MS Volatiles

## QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: **F32850** CLIENT: Shaw PROJECT: CSX waycross  
 DATE/TIME RECEIVED: 6-29-05 / 9:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 1.2  
 METHOD OF DELIVERY: ☒ FEDEX ☐ UPS ☐ ACCUTEST COURIER ☐ GREYHOUND ☐ DELIVERY ☐ OTHER  
 AIRBILL NUMBERS: 3343 4663 4175

## COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ NO COC RECEIVED
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

## TRIP BLANK INFORMATION

- ☐ TRIP BLANK NOT PROVIDED
- ☐ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

## SAMPLE INFORMATION

- ☐ SAMPLE LABELS PRESENT ON ALL BOTTLES
- ☐ CORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ TIMES ON COC DON'T MATCH LABEL
- ☐ ID'S ON COC DON'T MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING INSTRUCTIONS
- ☐ UNCLEAR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE(S) RECEIVED BROKEN
- ☐ % SOLIDS JAR NOT RECEIVED

## SOIL INFORMATION

NUMBER OF ENCORES ? 0  
 NUMBER OF 5035 FIELD KITS ? 3

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE Shawn Green / 6-29-05 TECHNICIAN SIGNATURE/DATE [Signature] ASBD06/22/05

F32850: Chain of Custody  
 Page 2 of 2



Misc. Forms

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Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



## Report of Analysis

Client Sample ID: SS3  
Lab Sample ID: F32850-3  
Matrix: SO - Soil  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property (BCX), Waycross, GA

Date Sampled: 06/28/05  
Date Received: 06/29/05  
Percent Solids: 82.5

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.58	0.58	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Barium	< 23	23	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Cadmium	< 0.47	0.47	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Chromium	2.1	1.2	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Lead	43.5	12	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Mercury	< 0.098	0.098	mg/kg	1	06/30/05	07/01/05 JM	SW846 7471A <sup>1</sup>	SW846 7471A <sup>3</sup>
Selenium	< 12	12	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Silver	< 1.2	1.2	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>

(1) Instrument QC Batch: MA4421

(2) Instrument QC Batch: MA4436

(3) Prep QC Batch: MP8220

(4) Prep QC Batch: MP8253

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> SS3	
<b>Lab Sample ID:</b> F32850-3	<b>Date Sampled:</b> 06/28/05
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 06/29/05
<b>Method:</b> SW846 8270C SW846 3550B	<b>Percent Solids:</b> 82.5
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA	

## ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		41-123%
321-60-8	2-Fluorobiphenyl	75%		46-122%
1718-51-0	Terphenyl-d14	77%		45-135%

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	SS3	<b>Date Sampled:</b>	06/28/05
<b>Lab Sample ID:</b>	F32850-3	<b>Date Received:</b>	06/29/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	82.5
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	200	40	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	40	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	200	40	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	200	40	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	200	40	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	80	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	400	200	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	124	200	80	ug/kg	J
132-64-9	Dibenzofuran	ND	200	40	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	400	100	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	400	200	ug/kg	
84-66-2	Diethyl phthalate	ND	400	100	ug/kg	
131-11-3	Dimethyl phthalate	ND	400	100	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	400	200	ug/kg	
206-44-0	Fluoranthene	1240	200	40	ug/kg	
86-73-7	Fluorene	ND	200	40	ug/kg	
118-74-1	Hexachlorobenzene	ND	200	40	ug/kg	
87-68-3	Hexachlorobutadiene	ND	200	80	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	200	80	ug/kg	
67-72-1	Hexachloroethane	ND	200	80	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	479	200	80	ug/kg	
78-59-1	Isophorone	ND	200	40	ug/kg	
91-57-6	2-Methylnaphthalene	ND	200	40	ug/kg	
88-74-4	2-Nitroaniline	ND	400	100	ug/kg	
99-09-2	3-Nitroaniline	ND	400	100	ug/kg	
100-01-6	4-Nitroaniline	ND	400	140	ug/kg	
91-20-3	Naphthalene	ND	200	40	ug/kg	
98-95-3	Nitrobenzene	ND	200	40	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	200	80	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	40	ug/kg	
85-01-8	Phenanthrene	479	200	40	ug/kg	
129-00-0	Pyrene	1350	200	80	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	200	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	73%		45-114%
4165-62-2	Phenol-d5	74%		44-124%
118-79-6	2,4,6-Tribromophenol	79%		50-128%

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SS3	<b>Date Sampled:</b> 06/28/05
<b>Lab Sample ID:</b> F32850-3	<b>Date Received:</b> 06/29/05
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 82.5
<b>Method:</b> SW846 8270C SW846 3550B	
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L026704.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1000	400	ug/kg	
95-57-8	2-Chlorophenol	ND	200	40	ug/kg	
99-50-7	4-Chloro-3-methyl phenol	ND	200	40	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	40	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	40	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	400	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	400	80	ug/kg	
95-48-7	2-Methylphenol	ND	200	40	ug/kg	
	3&4-Methylphenol	ND	200	40	ug/kg	
88-75-5	2-Nitrophenol	ND	200	40	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	400	ug/kg	
87-86-5	Pentachlorophenol	ND	1000	400	ug/kg	
108-95-2	Phenol	ND	200	40	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	40	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	40	ug/kg	
83-32-9	Acenaphthene	ND	200	40	ug/kg	
208-96-8	Acenaphthylene	117	200	40	ug/kg	J
120-12-7	Anthracene	113	200	40	ug/kg	J
56-55-3	Benzo(a)anthracene	667	200	40	ug/kg	
50-32-8	Benzo(a)pyrene	743	200	40	ug/kg	
205-99-2	Benzo(b)fluoranthene	619	200	40	ug/kg	
191-24-2	Benzo(g,h,i)perylene	494	200	80	ug/kg	
207-08-9	Benzo(k)fluoranthene	582	200	40	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	40	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	400	100	ug/kg	
100-51-6	Benzyl Alcohol	ND	200	40	ug/kg	
91-58-7	2-Chloronaphthalene	ND	200	40	ug/kg	
106-47-8	4-Chloroaniline	ND	400	160	ug/kg	
86-74-8	Carbazole	59.5	200	40	ug/kg	J
218-01-9	Chrysene	816	200	40	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	40	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	80	ug/kg	

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: SS3  
Lab Sample ID: F32850-3  
Matrix: SO - Soil  
Method: SW846 8260B  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 06/28/05  
Date Received: 06/29/05  
Percent Solids: 82.5

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	7.5	3.8	ug/kg	
1330-20-7	Xylene (total)	ND	23	6.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		78-123%
2037-26-5	Toluene-D8	97%		71-137%
460-00-4	4-Bromofluorobenzene	110%		61-157%
17060-07-0	1,2-Dichloroethane-D4	100%		74-125%

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b>	SS3	<b>Date Sampled:</b>	06/28/05
<b>Lab Sample ID:</b>	F32850-3	<b>Date Received:</b>	06/29/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	82.5
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0033353.D	1	06/30/05	NAF	n/a	n/a	VG1280
Run #2							

	Initial Weight
Run #1	4.04 g
Run #2	

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	114	75	38	ug/kg	J
71-43-2	Benzene	ND	7.5	3.0	ug/kg	
75-27-4	Bromodichloromethane	ND	7.5	3.0	ug/kg	
75-25-2	Bromoform	ND	7.5	3.0	ug/kg	
108-90-7	Chlorobenzene	ND	7.5	3.0	ug/kg	
75-00-3	Chloroethane	ND	7.5	3.0	ug/kg	
67-66-3	Chloroform	ND	7.5	3.0	ug/kg	
75-15-0	Carbon disulfide	ND	7.5	3.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	7.5	3.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	7.5	3.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	7.5	4.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	7.5	3.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	7.5	3.0	ug/kg	
124-48-1	Dibromochloromethane	ND	7.5	3.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	7.5	3.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	7.5	3.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	7.5	3.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	7.5	3.0	ug/kg	
100-41-4	Ethylbenzene	ND	7.5	3.0	ug/kg	
591-78-6	2-Hexanone	ND	38	15	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	38	15	ug/kg	
74-83-9	Methyl bromide	ND	7.5	3.0	ug/kg	
74-87-3	Methyl chloride	ND	7.5	3.0	ug/kg	
75-09-2	Methylene chloride	ND	15	7.5	ug/kg	
78-93-3	Methyl ethyl ketone	ND	38	15	ug/kg	
100-42-5	Styrene	ND	7.5	3.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	7.5	3.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.5	3.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	7.5	3.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	7.5	3.0	ug/kg	
108-88-3	Toluene	ND	7.5	3.0	ug/kg	
79-01-6	Trichloroethylene	ND	7.5	3.0	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: SS2  
Lab Sample ID: F32850-2  
Matrix: SO - Soil  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 06/28/05  
Date Received: 06/29/05  
Percent Solids: 85.7

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.3	0.55	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Barium	112	22	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Cadmium	< 0.44	0.44	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Chromium	4.4	1.1	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Lead	20.9	11	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Mercury	< 0.097	0.097	mg/kg	1	06/30/05	07/01/05 JM	SW846 7471A <sup>1</sup>	SW846 7471A <sup>3</sup>
Selenium	< 11	11	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Silver	< 1.1	1.1	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>

(1) Instrument QC Batch: MA4421

(2) Instrument QC Batch: MA4436

(3) Prep QC Batch: MP8220

(4) Prep QC Batch: MP8253

RL = Reporting Limit

## Report of Analysis

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2

<b>Client Sample ID:</b> SS2	<b>Date Sampled:</b> 06/28/05
<b>Lab Sample ID:</b> F32850-2	<b>Date Received:</b> 06/29/05
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 85.7
<b>Method:</b> SW846 8270C SW846 3550B	
<b>Project:</b> ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA	

## ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	60%		41-123%
321-60-8	2-Fluorobiphenyl	68%		46-122%
1718-51-0	Terphenyl-d14	69%		45-135%

ND = Not detected MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> SS2	
<b>Lab Sample ID:</b> F32850-2	<b>Date Sampled:</b> 06/28/05
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 06/29/05
<b>Method:</b> SW846 8270C SW846 3550B	<b>Percent Solids:</b> 85.7
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA	

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	39	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	39	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	39	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	39	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	39	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	77	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	390	190	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	190	77	ug/kg	
132-64-9	Dibenzofuran	ND	190	39	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	390	97	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	390	190	ug/kg	
84-66-2	Diethyl phthalate	ND	390	97	ug/kg	
131-11-3	Dimethyl phthalate	ND	390	97	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	390	190	ug/kg	
206-44-0	Fluoranthene	ND	190	39	ug/kg	
86-73-7	Fluorene	ND	190	39	ug/kg	
118-74-1	Hexachlorobenzene	ND	190	39	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	77	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	77	ug/kg	
67-72-1	Hexachloroethane	ND	190	77	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	190	77	ug/kg	
78-59-1	Isophorone	ND	190	39	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	39	ug/kg	
88-74-4	2-Nitroaniline	ND	390	97	ug/kg	
99-09-2	3-Nitroaniline	ND	390	97	ug/kg	
100-01-6	4-Nitroaniline	ND	390	140	ug/kg	
91-20-3	Naphthalene	ND	190	39	ug/kg	
98-95-3	Nitrobenzene	ND	190	39	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	77	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	39	ug/kg	
85-01-8	Phenanthrene	66.4	190	39	ug/kg	J
129-00-0	Pyrene	ND	190	77	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	39	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	63%		45-114%
4165-62-2	Phenol-d5	65%		44-124%
118-79-6	2,4,6-Tribromophenol	68%		50-128%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

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2.2

2

<b>Client Sample ID:</b> SS2	<b>Date Sampled:</b> 06/28/05
<b>Lab Sample ID:</b> F32850-2	<b>Date Received:</b> 06/29/05
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 85.7
<b>Method:</b> SW846 8270C SW846 3550B	
<b>Project:</b> ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L026703.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	970	390	ug/kg	
95-57-8	2-Chlorophenol	ND	190	39	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	39	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	39	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	39	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	970	390	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	390	77	ug/kg	
95-48-7	2-Methylphenol	ND	190	39	ug/kg	
	3&4-Methylphenol	ND	190	39	ug/kg	
88-75-5	2-Nitrophenol	ND	190	39	ug/kg	
100-02-7	4-Nitrophenol	ND	970	390	ug/kg	
87-86-5	Pentachlorophenol	ND	970	390	ug/kg	
108-95-2	Phenol	ND	190	39	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	39	ug/kg	
83-06-2	2,4,6-Trichlorophenol	ND	190	39	ug/kg	
83-32-9	Acenaphthene	ND	190	39	ug/kg	
208-96-8	Acenaphthylene	ND	190	39	ug/kg	
120-12-7	Anthracene	ND	190	39	ug/kg	
56-55-3	Benzo(a)anthracene	ND	190	39	ug/kg	
50-32-8	Benzo(a)pyrene	ND	190	39	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	190	39	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	190	77	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	190	39	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	190	39	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	390	97	ug/kg	
100-51-6	Benzyl Alcohol	ND	190	39	ug/kg	
91-58-7	2-Chloronaphthalene	ND	190	39	ug/kg	
106-47-8	4-Chloroaniline	ND	390	150	ug/kg	
86-74-8	Carbazole	ND	190	39	ug/kg	
218-01-9	Chrysene	54.2	190	39	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	190	39	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	77	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: SS2  
Lab Sample ID: F32850-2  
Matrix: SO - Soil  
Method: SW846 8260B  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA  
Date Sampled: 06/28/05  
Date Received: 06/29/05  
Percent Solids: 85.7

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	9.1	4.6	ug/kg	
1330-20-7	Xylene (total)	ND	27	8.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		78-123%
2037-26-5	Toluene-D8	114%		71-137%
460-00-4	4-Bromofluorobenzene	146%		61-157%
17060-07-0	1,2-Dichloroethane-D4	102%		74-125%

ND = Not detected MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	SS2	Date Sampled:	06/28/05
Lab Sample ID:	F32850-2	Date Received:	06/29/05
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8260B		
Project:	ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0033352.D	1	06/30/05	NAF	n/a	n/a	VG1280
Run #2							

	Initial Weight
Run #1	3.19 g
Run #2	

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	91	46	ug/kg	
71-43-2	Benzene	ND	9.1	3.7	ug/kg	
75-27-4	Bromodichloromethane	ND	9.1	3.7	ug/kg	
75-25-2	Bromoform	ND	9.1	3.7	ug/kg	
108-90-7	Chlorobenzene	ND	9.1	3.7	ug/kg	
75-00-3	Chloroethane	ND	9.1	3.7	ug/kg	
67-66-3	Chloroform	ND	9.1	3.7	ug/kg	
75-15-0	Carbon disulfide	ND	9.1	3.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	9.1	3.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	9.1	3.7	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	9.1	5.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	9.1	3.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	9.1	3.7	ug/kg	
124-48-1	Dibromochloromethane	ND	9.1	3.7	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	9.1	3.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	9.1	3.7	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	9.1	3.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	9.1	3.7	ug/kg	
100-41-4	Ethylbenzene	ND	9.1	3.7	ug/kg	
591-78-6	2-Hexanone	ND	46	18	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	46	18	ug/kg	
74-83-9	Methyl bromide	ND	9.1	3.7	ug/kg	
74-87-3	Methyl chloride	ND	9.1	3.7	ug/kg	
75-09-2	Methylene chloride	ND	18	9.1	ug/kg	
73-93-3	Methyl ethyl ketone	ND	46	18	ug/kg	
100-42-5	Styrene	ND	9.1	3.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	9.1	3.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.1	3.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	9.1	3.7	ug/kg	
127-18-4	Tetrachloroethylene	ND	9.1	3.7	ug/kg	
108-88-3	Toluene	ND	9.1	3.7	ug/kg	
79-01-6	Trichloroethylene	ND	9.1	3.7	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: SS1  
Lab Sample ID: F32850-1  
Matrix: SO - Soil  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 06/28/05  
Date Received: 06/29/05  
Percent Solids: 86.7

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.54	0.54	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Barium	25.1	22	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Cadmium	< 0.44	0.44	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Chromium	1.9	1.1	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Lead	18.3	11	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Mercury	< 0.095	0.095	mg/kg	1	06/30/05	07/01/05 JM	SW846 7471A <sup>1</sup>	SW846 7471A <sup>3</sup>
Selenium	< 11	11	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>
Silver	< 1.1	1.1	mg/kg	1	07/08/05	07/12/05 JM	SW846 6010B <sup>2</sup>	SW846 3050B <sup>4</sup>

(1) Instrument QC Batch: MA4421

(2) Instrument QC Batch: MA4436

(3) Prep QC Batch: MP8220

(4) Prep QC Batch: MP8253

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> SS1	
<b>Lab Sample ID:</b> F32850-1	<b>Date Sampled:</b> 06/28/05
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 06/29/05
<b>Method:</b> SW846 8270C SW846 3550B	<b>Percent Solids:</b> 86.7
<b>Project:</b> ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA	

## ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		41-123%
321-60-8	2-Fluorobiphenyl	80%		46-122%
1718-51-0	Terphenyl-d14	76%		45-135%

ND = Not detected MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	SS1	<b>Date Sampled:</b>	06/28/05
<b>Lab Sample ID:</b>	F32850-1	<b>Date Received:</b>	06/29/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	86.7
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	38	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	38	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	38	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	38	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	38	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	77	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	380	190	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	190	77	ug/kg	
132-64-9	Dibenzofuran	ND	190	38	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	380	96	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	380	190	ug/kg	
84-66-2	Diethyl phthalate	ND	380	96	ug/kg	
131-11-3	Dimethyl phthalate	ND	380	96	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	380	190	ug/kg	
206-44-0	Fluoranthene	64.4	190	38	ug/kg	J
86-73-7	Fluorene	ND	190	38	ug/kg	
118-74-1	Hexachlorobenzene	ND	190	38	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	77	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	77	ug/kg	
67-72-1	Hexachloroethane	ND	190	77	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	190	77	ug/kg	
78-59-1	Isophorone	ND	190	38	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	38	ug/kg	
88-74-4	2-Nitroaniline	ND	380	96	ug/kg	
99-09-2	3-Nitroaniline	ND	380	96	ug/kg	
100-01-6	4-Nitroaniline	ND	380	130	ug/kg	
91-20-3	Naphthalene	ND	190	38	ug/kg	
98-95-3	Nitrobenzene	ND	190	38	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	77	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	38	ug/kg	
85-01-8	Phenanthrene	42.1	190	38	ug/kg	J
129-00-0	Pyrene	ND	190	77	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	190	38	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		45-114%
4165-62-2	Phenol-d5	73%		44-124%
118-79-6	2,4,6-Tribromophenol	80%		50-128%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	SS1	<b>Date Sampled:</b>	06/28/05
<b>Lab Sample ID:</b>	F32850-1	<b>Date Received:</b>	06/29/05
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	86.7
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L026702.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

## ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	960	380	ug/kg	
95-57-8	2-Chlorophenol	ND	190	38	ug/kg	
99-50-7	4-Chloro-3-methyl phenol	ND	190	38	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	38	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	38	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	380	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	380	77	ug/kg	
95-48-7	2-Methylphenol	ND	190	38	ug/kg	
	3&4-Methylphenol	ND	190	38	ug/kg	
88-75-5	2-Nitrophenol	ND	190	38	ug/kg	
100-02-7	4-Nitrophenol	ND	960	380	ug/kg	
87-86-5	Pentachlorophenol	ND	960	380	ug/kg	
108-95-2	Phenol	ND	190	38	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	38	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	38	ug/kg	
83-32-9	Acenaphthene	ND	190	38	ug/kg	
208-96-8	Acenaphthylene	ND	190	38	ug/kg	
120-12-7	Anthracene	ND	190	38	ug/kg	
56-55-3	Benzo(a)anthracene	ND	190	38	ug/kg	
50-32-8	Benzo(a)pyrene	ND	190	38	ug/kg	
205-99-2	Benzo(b)fluoranthene	43.8	190	38	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	190	77	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	190	38	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	190	38	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	380	96	ug/kg	
100-51-6	Benzyl Alcohol	ND	190	38	ug/kg	
91-58-7	2-Chloronaphthalene	ND	190	38	ug/kg	
106-47-8	4-Chloroaniline	ND	380	150	ug/kg	
85-74-8	Carbazole	ND	190	38	ug/kg	
218-01-9	Chrysene	43.6	190	38	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	190	38	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	77	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

Client Sample ID: SS1  
Lab Sample ID: F32850-1  
Matrix: SO - Soil  
Method: SW846 8260B  
Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Date Sampled: 06/28/05  
Date Received: 06/29/05  
Percent Solids: 86.7

## VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	5.3	2.7	ug/kg	
1330-20-7	Xylene (total)	ND	16	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		78-123%
2037-26-5	Toluene-D8	96%		71-137%
460-00-4	4-Bromofluorobenzene	110%		61-157%
17060-07-0	1,2-Dichloroethane-D4	98%		74-125%

ND = Not detected      MDL - Method Detection Limit  
RL = Reporting Limit  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Blank Spike Summary

Page 2 of 3

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-BS	L026700.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
106-46-7	1,4-Dichlorobenzene	1670	1030	62	59-90
121-14-2	2,4-Dinitrotoluene	1670	1330	80	60-108
606-20-2	2,6-Dinitrotoluene	1670	1340	80	63-106
91-94-1	3,3'-Dichlorobenzidine	1670	991	59	30-90
53-70-3	Dibenzo(a,h)anthracene	1670	1390	83	63-110
132-64-9	Dibenzofuran	1670	1360	82	65-99
84-74-2	Di-n-butyl phthalate	1670	1380	83	62-110
117-84-0	Di-n-octyl phthalate	1670	1450	87	59-132
84-66-2	Diethyl phthalate	1670	1370	82	64-109
131-11-3	Dimethyl phthalate	1670	1420	85	66-105
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1390	83	60-118
206-44-0	Fluoranthene	1670	1400	84	63-108
36-73-7	Fluorene	1670	1370	82	65-109
118-74-1	Hexachlorobenzene	1670	1460	88	65-106
37-68-3	Hexachlorobutadiene	1670	1240	74	55-93
77-47-4	Hexachlorocyclopentadiene	1670	1120	67	34-95
67-72-1	Hexachloroethane	1670	1020	61	58-91
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1390	83	59-115
78-59-1	Isophorone	1670	1380	83	60-102
91-57-6	2-Methylnaphthalene	1670	1360	82	63-93
88-74-4	2-Nitroaniline	1670	1370	82	60-110
99-09-2	3-Nitroaniline	1670	822	49	41-90
100-01-6	4-Nitroaniline	1670	1260	76	53-103
91-20-3	Naphthalene	1670	1300	78	64-94
98-95-3	Nitrobenzene	1670	1330	80	60-96
621-64-7	N-Nitroso-di-n-propylamine	1670	1190	71	54-99
86-30-6	N-Nitrosodiphenylamine	1670	1460	88	68-108
85-01-8	Phenanthrene	1670	1430	86	67-110
129-00-0	Pyrene	1670	1480	89	65-115
120-82-1	1,2,4-Trichlorobenzene	1670	1290	77	64-94

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	82%	45-114%
4165-62-2	Phenol-d5	75%	44-124%

## Blank Spike Summary

Page 3 of 3

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-BS	L026700.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	83%	50-128%
4165-60-0	Nitrobenzene-d5	79%	41-123%
321-60-8	2-Fluorobiphenyl	84%	46-122%
1718-51-0	Terphenyl-d14	81%	45-135%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-MS	L026705.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
OP13728-MSD	L026706.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
F32850-3	L026704.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Compound	F32850-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		4010	3030	75	2290	58	28	13-117/32
95-57-8	2-Chlorophenol	ND		2010	1340	67	1140	57	16	31-113/23
59-50-7	4-Chloro-3-methyl phenol	ND		2010	1620	81	1280	64	23	33-123/38
120-83-2	2,4-Dichlorophenol	ND		2010	1650	82	1320	66	22*	54-105/20
105-67-9	2,4-Dimethylphenol	ND		2010	1550	77	1270	64	20	46-104/22
51-28-5	2,4-Dinitrophenol	ND		4010	1700	42	1060	27	46	5-110/46
534-52-1	4,6-Dinitro-o-cresol	ND		4010	2420	60	1570	40	43*	27-119/35
95-48-7	2-Methylphenol	ND		2010	1430	71	1210	61	17	44-101/28
	3&4-Methylphenol	ND		4010	2810	70	2360	59	17	38-107/31
88-75-5	2-Nitrophenol	ND		2010	1350	67	1170	59	14	38-111/21
100-02-7	4-Nitrophenol	ND		4010	2830	71	2240	56	23*	44-111/22
87-86-5	Pentachlorophenol	ND		4010	3090	77	2350	59	27*	42-110/25
108-95-2	Phenol	ND		2010	1420	71	1240	62	14	32-111/29
95-95-4	2,4,5-Trichlorophenol	ND		2010	1720	86	1340	67	25*	53-108/19
88-06-2	2,4,6-Trichlorophenol	ND		2010	1740	87	1350	68	25*	53-107/20
83-32-9	Acenaphthene	ND		2010	1680	84	1320	66	24*	57-106/19
208-96-8	Acenaphthylene	117	J	2010	1750	81	1440	67	19*	55-110/18
120-12-7	Anthracene	113	J	2010	1780	83	1490	69	18	59-109/21
56-55-3	Benzo(a)anthracene	667		2010	2380	85	2260	80	5	52-120/20
50-32-8	Benzo(a)pyrene	743		2010	2390	82	2330	80	3	48-124/21
205-99-2	Benzo(b)fluoranthene	619		2010	2350	86	2400	90	2	50-122/21
191-24-2	Benzo(g,h,i)perylene	494		2010	2380	94	2150	83	10	50-118/23
207-08-9	Benzo(k)fluoranthene	582		2010	2350	88	1980	70	17	54-117/21
101-55-3	4-Bromophenyl phenyl ether	ND		2010	1780	89	1440	72	21*	59-107/20
85-68-7	Butyl benzyl phthalate	ND		2010	1710	85	1380	69	21*	57-118/20
100-51-6	Benzyl Alcohol	ND		2010	1450	72	1270	64	13	46-106/23
91-58-7	2-Chloronaphthalene	ND		2010	1590	79	1260	63	23*	53-102/19
106-47-8	4-Chloroaniline	ND		2010	1220	61	1100	55	10	25-78/30
86-74-8	Carbazole	59.5	J	2010	1720	83	1370	66	23*	58-105/20
218-01-9	Chrysene	816		2010	2560	87	2520	86	2	48-124/20
111-91-1	bis(2-Chloroethoxy)methane	ND		2010	1360	68	1160	58	16	45-94/19
111-44-4	bis(2-Chloroethyl)ether	ND		2010	1220	61	1030	52	17	47-99/24
108-60-1	bis(2-Chloroisopropyl)ether	ND		2010	1150	57	964	49	18	44-100/23
7005-72-3	4-Chlorophenyl phenyl ether	ND		2010	1730	86	1370	69	23*	59-105/18
95-50-1	1,2-Dichlorobenzene	ND		2010	960	48	794	40*	19	44-95/26
541-73-1	1,3-Dichlorobenzene	ND		2010	852	42	691	35*	21	41-91/28

# Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-MS	L026705.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
OP13728-MSD	L026706.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
F32850-3	L026704.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Compound	F32850-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
106-46-7	1,4-Dichlorobenzene	ND		2010	871	43	712	36*	20	42-93/27
121-14-2	2,4-Dinitrotoluene	ND		2010	1580	79	1210	61	27*	44-118/26
606-20-2	2,6-Dinitrotoluene	ND		2010	1640	82	1260	63	26*	48-115/20
91-94-1	3,3'-Dichlorobenzidine	ND		2010	1210	60	1000	50	19	15-90/31
53-70-3	Dibenzo(a,h)anthracene	124	J	2010	1970	92	1700	79	15	45-121/23
132-64-9	Dibenzofuran	ND		2010	1570	78	1300	65	19	57-101/19
84-74-2	Di-n-butyl phthalate	ND		2010	1630	81	1330	67	20	55-112/20
117-84-0	Di-n-octyl phthalate	ND		2010	1740	87	1430	72	20	58-134/23
84-66-2	Diethyl phthalate	ND		2010	1690	84	1300	65	26*	59-107/19
131-11-3	Dimethyl phthalate	ND		2010	1690	84	1310	66	25*	56-108/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2010	1730	86	1390	70	22*	55-125/21
206-44-0	Fluoranthene	1240		2010	2870	81	2980	88	4	47-119/25
86-73-7	Fluorene	ND		2010	1660	83	1330	67	22*	59-108/18
118-74-1	Hexachlorobenzene	ND		2010	1740	87	1370	69	24*	56-107/21
87-68-3	Hexachlorobutadiene	ND		2010	1170	58	949	48	21	42-94/25
77-47-4	Hexachlorocyclopentadiene	ND		2010	567	28	286	14	66*	13-91/25
67-72-1	Hexachloroethane	ND		2010	863	43	664	33*	26	40-93/32
193-39-5	Indeno(1,2,3-cd)pyrene	479		2010	2330	92	2350	94	1	50-118/26
78-59-1	Isophorone	ND		2010	1450	72	1220	61	17	52-101/19
91-57-6	2-Methylnaphthalene	ND		2010	1370	68	1220	61	12	42-103/22
88-74-4	2-Nitroaniline	ND		2010	1640	82	1250	63	27*	55-108/20
99-09-2	3-Nitroaniline	ND		2010	1320	66	1120	56	16	38-92/20
100-01-6	4-Nitroaniline	ND		2010	1450	72	1150	58	23	42-101/23
91-20-3	Naphthalene	ND		2010	1300	65	1090	55	18	42-105/24
98-95-3	Nitrobenzene	ND		2010	1280	64	1100	55	15	42-105/21
621-64-7	N-Nitroso-di-n-propylamine	ND		2010	1210	60	1040	52	15	41-107/23
86-30-6	N-Nitrosodiphenylamine	ND		2010	1760	88	1410	71	22*	59-111/21
85-01-8	Phenanthrene	479		2010	2240	88	2000	77	11	60-110/21
129-00-0	Pyrene	1350		2010	3360	100	3460	106	3	50-126/25
120-82-1	1,2,4-Trichlorobenzene	ND		2010	1250	62	1030	52	19	49-98/23

CAS No.	Surrogate Recoveries	MS	MSD	F32850-3	Limits
367-12-4	2-Fluorophenol	68%	62%	73%	45-114%
4165-62-2	Phenol-d5	69%	60%	74%	44-124%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: F32850

Account: CSXT CSX Transportation

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13728-MS	L026705.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
OP13728-MSD	L026706.D	1	07/01/05	ME	06/30/05	OP13728	SL1405
F32850-3	L026704.D	1	07/01/05	ME	06/30/05	OP13728	SL1405

The QC reported here applies to the following samples:

Method: SW846 8270C

F32850-1, F32850-2, F32850-3

CAS No.	Surrogate Recoveries	MS	MSD	F32850-3	Limits
118-79-6	2,4,6-Tribromophenol	81%	66%	79%	50-128%
4165-60-0	Nitrobenzene-d5	64%	57%	68%	41-123%
321-60-8	2-Fluorobiphenyl	81%	65%	75%	46-122%
718-51-0	Terphenyl-d14	86%	67%	77%	45-135%

## Metals Analysis

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## QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: F32850  
Account: CSXT - CSX Transportation  
Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8220  
Matrix Type: SOLID

Methods: SW846 7471A  
Units: mg/kg

Prep Date: 06/30/05

Metal	RL	IDL	MB raw	final
Mercury	0.083	.0018	0.0	<0.083

Associated samples MP8220: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

6.1.1





# MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32850  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

QC Batch ID: MP8220  
 Matrix Type: SOLID

Methods: SW846 7471A  
 Units: mg/kg

Prep Date: 06/30/05 06/30/05

Metal	F32850-1 Original	DUP	RPD	QC Limits	F32850-1 Original	MS	Spikelet HGFLWS1	% Rec	QC Limits
Mercury	0.071	0.081	13.2	0-68	0.071	0.41	0.29	117.6	47-157

Associated samples MP8220: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.1.2

6

# MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32850  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8220  
 Matrix Type: SOLID

Methods: SW846 7471A  
 Units: mg/kg

Prep Date: 06/30/05

Metal	F32850-1		Spike lot		MSD	QC
	Original	MSD	HGFLWS1	% Rec		
Mercury	0.071	0.41	0.28	119.5	0.0	30

Associated samples MP8220: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

6.1.2



**SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY**

Login Number: F32850  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102, ENV5734MLA, Leased Property(BCX), Waycross, GA

QC Batch ID: MP8220  
 Matrix Type: SOLID

Methods: SW846 7471A  
 Units: mg/kg

Prep Date: 06/30/05

Metal	BSP Result	SpikeLot HGFLWS1	% Rec	QC Limits
Mercury	0.25	0.25	100.0	80-120

Associated samples MP8220: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

6.1.3

6

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: F32850  
Account: CSXT - CSX Transportation  
Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8253  
Matrix Type: SOLID

Methods: SW846 6010B  
Units: mg/kg

Prep Date: 07/08/05

Metal	RL	IDL	MB raw	final
Aluminum	20	.65		
Antimony	5.9	.15	anr	
Arsenic	0.49	.27	-0.23	<0.49
Barium	20	.049	0.28	<20
Beryllium	0.49	.029	anr	
Cadmium	0.39	.029	-0.0039	<0.39
Calcium	490	.37		
Chromium	0.98	.039	-0.059	<0.98
Cobalt	4.9	.049	anr	
Copper	2.5	.039	anr	
Iron	9.8	.7		
Lead	9.8	.12	0.28	<9.8
Magnesium	490	.97		
Manganese	1.5	.02		
Molybdenum	4.9	.078		
Nickel	3.9	.11	anr	
Potassium	490	1.4		
Selenium	9.8	.2	0.13	<9.8
Silver	0.98	.059	-0.050	<0.98
Sodium	490	14		
Thallium	0.98	.15	anr	
Tin	4.9	.15		
Vanadium	4.9	.049	anr	
Zinc	2.0	.059	anr	

Associated samples MP8253: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

6.2.1



# MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32850  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8253  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date:

07/08/05

07/08/05

Metal	T10793-5 Original	DUP	RPD	QC Limits	T10793-5 Original MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum								
Antimony	anr							
Arsenic	6.0	9.6	46.2*(a)	0-20	6.0	524	634	81.8 75-113
Barium	112	162	36.5*(a)	0-20	112	699	634	92.6 75-122
Beryllium	anr							
Cadmium	0.0	0.0 (a)	NC	0-20	0.0	12.7	15.8	80.2 75-116
Calcium								
Chromium	15.3	22.0	35.9*(a)	0-20	15.3	79.6	63.4	101.5 75-125
Cobalt	anr							
Copper	anr							
Iron								
Lead	11.5	16.7	36.9 (b)	0-20	11.5	152	158	88.7 75-121
Magnesium								
Manganese								
Molybdenum								
Nickel	anr							
Potassium								
Selenium	3.3	4.6	32.9 (b)	0-20	3.3	520	634	81.5 75-110
Silver	0.0	0.0	NC	0-20	0.0	14.7	15.8	92.8 75-120
Sodium								
Thallium	anr							
Tin								
Vanadium	anr							
Zinc	anr							

Associated samples MP8253: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) High RPD due to possible sample nonhomogeneity.

(b) RPD acceptable due to low duplicate and sample concentrations.

# MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32850  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8253  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 07/08/05

Metal	T10793-5 Original	MSD	SpikeLot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	6.0	502	610	81.3	4.3	30
Barium	112	682	610	93.4	2.5	30
Beryllium	anr					
Cadmium	0.0	12.4	15.3	81.3	2.4	30
Calcium						
Chromium	15.3	76.8	61	100.8	3.6	30
Cobalt	anr					
Copper	anr					
Iron						
Lead	11.5	149	153	90.1	2.0	30
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium	3.3	496	610	80.7	4.7	30
Silver	0.0	14.4	15.3	94.4	2.1	30
Sodium						
Thallium	anr					
Tin						
Vanadium	anr					
Zinc	anr					

Associated samples MP8253: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

6.2.2



# SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F32850  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8253  
 Matrix Type: SOLID

Methods: SW846 60108  
 Units: mg/kg

Prep Date: 07/08/05

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	345	392	88.0	80-120
Barium	367	392	93.6	80-120
Beryllium	anr			
Cadmium	9.0	9.8	91.8	80-120
Calcium				
Chromium	38.0	39.2	96.9	80-120
Cobalt	anr			
Copper	anr			
Iron				
Lead	90.7	98	92.5	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium	335	392	85.4	80-120
Silver	9.7	9.8	98.9	80-120
Sodium				
Thallium	anr			
Tin				
Vanadium	anr			
Zinc	anr			

Associated samples MP8253: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

# SERIAL DILUTION RESULTS SUMMARY

Login Number: F32850  
 Account: CSXT - CSX Transportation  
 Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

QC Batch ID: MP8253  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 07/08/05

Metal	T10793-5 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony	anr			
Arsenic	37.4	68.0	81.6 (a)	0-10
Barium	691	730	5.7	0-10
Beryllium	anr			
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	94.5	98.3	4.0	0-10
Cobalt	anr			
Copper	anr			
Iron				
Lead	71.1	82.0	15.4*(b)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium	20.4	56.1	175.4(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Thallium	anr			
Tin				
Vanadium	anr			
Zinc	anr			

Associated samples MP8253: F32850-1, F32850-2, F32850-3

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

6.2.4







**Southeast**

**ACCUTEST.**  
Laboratories

08/12/05

### Technical Report for

**CSX Transportation**

**ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA  
116220**

**Accutest Job Number: F33646**

**Sampling Date: 07/29/05**

### **Report to:**

**Shaw Environmental**


**terence.whitt@shawgrp.com**

**ATTN: Terry Whitt**

**Total number of pages in report: 8**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Conference  
and/or state specific certification programs as applicable.

  
**Harry Behzadi, Ph.D.**  
**Laboratory Director**

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK  
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## Sample Summary

CSX Transportation

Job No: F33646

ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross, GA  
Project No: 116220

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F33646-1	07/29/05	10:50 WE	07/30/05	SO Sludge	STEEL TANK-02

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Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Report of Analysis

Page 1 of 1

Client Sample ID: STEEL TANK-02  
Lab Sample ID: F33646-1  
Matrix: SO - Sludge  
Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

Date Sampled: 07/29/05  
Date Received: 07/30/05  
Percent Solids: 70.9

## Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0094 J	D004	5.0	0.010	0.0029	mg/l	1	08/03/05	08/03/05 JM	SW846 6010B <sup>2</sup>
Barium	0.29 J	D005	100	1.0	0.20	mg/l	1	08/03/05	08/03/05 JM	SW846 6010B <sup>2</sup>
Cadmium	0.0017 J	D006	1.0	0.0050	0.00060	mg/l	1	08/03/05	08/03/05 JM	SW846 6010B <sup>2</sup>
Chromium	0.0058 J	D007	5.0	0.010	0.00050	mg/l	1	08/03/05	08/03/05 JM	SW846 6010B <sup>2</sup>
Lead	0.026 J	D008	5.0	0.050	0.0012	mg/l	1	08/03/05	08/03/05 JM	SW846 6010B <sup>2</sup>
Mercury	0.00080 U	D009	0.20	0.010	0.00080	mg/l	1	08/02/05	08/02/05 JM	SW846 7470A <sup>1</sup>
Selenium	0.020 U	D010	1.0	0.050	0.020	mg/l	1	08/03/05	08/03/05 JM	SW846 6010B <sup>2</sup>
Silver	0.00090 U	D011	5.0	0.010	0.00090	mg/l	1	08/03/05	08/03/05 JM	SW846 6010B <sup>2</sup>

(1) Instrument QC Batch: MA4476

(2) Instrument QC Batch: MA4477

(3) Prep QC Batch: MP8378

(4) Prep QC Batch: MP8380

RL = Reporting Limit MDL = Method Detection Limit  
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL

## Report of Analysis

Page 1 of 1

Client Sample ID: STEEL TANK-02

Lab Sample ID: F33646-1

Matrix: SO - Sludge

Date Sampled: 07/29/05

Date Received: 07/30/05

Percent Solids: 70.9

Project: ITGAALPH:R12102,ENV5734MLA, Leased Property(BCX), Waycross,GA

## General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.1				1	08/02/05 14:35	LE	SW846 CHAP7
Cyanide Reactivity	2.1 U	2.1	2.1	mg/kg	1	08/12/05	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200			Deg. F	1	08/08/05	RS	SW846 1010
Solids, Percent	70.9			%	1	08/04/05	LM	EPA 160.3 M
Sulfide Reactivity	50 U	50	50	mg/kg	1	08/12/05	LE	SW846 CHAP7

RL = Reporting Limit  
MDL = Method Detection Limit

U = Indicates a result < MDL  
J = Indicates a result > = MDL but < RL



Misc. Forms

---

Custody Documents and Other Forms

---

Includes the following where applicable:

- Chain of Custody

3.1

# ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F33646 CLIENT: SHAW CTE PROJECT: 116220  
 DATE/TIME RECEIVED: 7/30 09:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 15.2  
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER  
 AIRBILL NUMBERS: 8504 2107 9661

## COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ NO COC RECEIVED
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☒ TEMPERATURE CRITERIA NOT MET

## TRIP BLANK INFORMATION

- ☒ TRIP BLANK NOT PROVIDED
- ☐ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

## SAMPLE INFORMATION

- ☐ SAMPLE LABELS PRESENT ON ALL BOTTLES
- ☐ CORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ TIMES ON COC DON'T MATCH LABEL
- ☐ ID'S ON COC DON'T MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING INSTRUCTIONS
- ☐ UNCLEAR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE(S) RECEIVED BROKEN
- ☐ % SOLIDS JAR NOT RECEIVED

## SOIL INFORMATION

NUMBER OF ENCORES ? 0  
 NUMBER OF 5035 FIELD KITS ? 0

SUMMARY OF COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

TECHNICIAN SIGNATURE/DATE CF 7/30/05 TECHNICIAN SIGNATURE/DATE \_\_\_\_\_

ASBD06/22/05

F33646: Chain of Custody  
 Page 2 of 2



denise.vantiem

10:35:55

outbind://314-000000000A566F108979144483B9F8B42BEBD0E80700CC50D

**VanTiem, Denise**

---

**From:** Smith, Jacqueline  
**Sent:** Friday, August 18, 2006 9:53 AM  
**To:** VanTiem, Denise  
**Subject:** RE: June Pcard Statement Audit

Hi Denise,  
Here is the information I need to complete your audit.

- The manager's signature is missing
- The employee number is missing which I have located for you this time but I will need you to apply this information to the cardholder log report on a monthly basis
- Page three of the cardholder log report

---

**From:** VanTiem, Denise  
**Sent:** Thursday, August 17, 2006 1:21 PM  
**To:** Smith, Jacqueline  
**Subject:** RE: June Pcard Statement Audit

I am unsure of what you are still waiting on from me. I have been on vacation this past week but looking back at the last couple e-mails I received from you, I thought I already sent you what you need. Please let me know what you are still looking for from me.

**Denise Van Tiem**  
Project Business Administrator  
Shaw Environmental & Infrastructure, Inc.  
11560 Great Oaks Way, Suite 500  
Alpharetta, GA 30022  
(770) 521-6529 direct  
(678) 485-1713 cell  
(770) 777-9545 fax  
denise.vantiem@shawgrp.com

---

**From:** Smith, Jacqueline  
**Sent:** Monday, August 14, 2006 10:51 AM  
**To:** VanTiem, Denise; Luttrell, Hope; Phillips, Rhett; Ramey, Deborah; Stone, Laura; Smyth, Maureen; Smith, Betsy; Thrush, Rodney; Horn, Alice; Shehee, Dolores; Thibodeaux, Tammy; Parker-Yap, Sarah; Rose, Michael T (Irving, TX)  
**Subject:** June Pcard Statement Audit

Please provide me the information I request from you in earlier email concerning your pcard statement or the person you are in charge of card. I have contact Brian Spoales concerning outstanding pcard issues on hold in my bin. I will need this information before a second meeting with him which I will request immediate action against the holders card.

Any questions concerning this email please contact me direct at 412-858-1569

Thanks

Jacqueline Smith  
Sox P-Card Auditor  
2790 Mossie Blvd  
Monroeville PA 15146  
412-858-1569 Direct  
225-987-3580 Fax  
Jacqueline.Smith@shawgrp.com

**ATTACHMENT B  
TREATABILITY STUDY**



Shaw Environmental & Infrastructure, Inc.

**TREATABILITY TESTING REPORT FOR  
THE STABILIZATION OF AMMONIA-  
CONTAMINATED TANK BOTTOM SLUDGE  
FROM THE CSXT WAYCROSS, GEORGIA SITE**

**Prepared By:**

**Shaw E&I Technology Applications Laboratories  
Knoxville, TN**

**R Gregory Bennett  
Senior Project Chemist**

**August 18, 2006  
Shaw Project 117998**



### Testing Objective

The objective of the treatability study for the ammonia-contaminated tank bottom sludge the CSXT Waycross, Georgia site was to impede the release of ammonia to the air during handling.

### Sample Receipt

The treatability study was run using 3-1 quart tank bottom sludge samples collected from a waste water treatment frac tank located at the CSXT site in Waycross, Georgia. These samples were from the scale and residue from the bottom of the tank. Ammonia emissions from the sludge have been problematic and have impeded disposal of the sludge. The samples were received at Shaw E&I's Treatability Laboratory on October 12, 2005. Upon receipt, the samples were logged-in, composited, homogenized and analyzed for the parameters in Table 1.

**Table 1. Characterization of the CSXT Bottom Tank Sludge**

Parameter	Methodology	Result
Solids Content (%)	ASTM Method D2166	6.4
Bulk Density (lbs/ft <sup>3</sup> )	ASTM Method D5057	64.1
pH (s.u.)	SW-846 Method 9045	8.8
Ammonia Nitrogen (mg/kg)	Standard Methods	845

### Formulation Screening

Portions (~100 g) of the composited sludge sample material were mixed with various amounts of reagents considered to inhibit the emission of ammonia. These reagents included ferrous sulfate, clinoptilite, Class F fly ash, and magnesium sulfate. Various reagent/waste addition levels were made for each reagent system. Table 2 contains the formulation information.

The ferrous sulfate was a technical grade obtained from QC Corporation in Cape Girardeau, Mo. The clinoptilite was obtained from East West Minerals in Mill Valley, CA. The Class F fly ash was obtained from Trans Ash in Cincinnati, OH. The technical grade magnesium sulfate was obtained from PQ Corporation in Philadelphia, PA.

All formulations were mixed by hand for 2-3 minutes or until visually homogeneous. The treated materials were placed into plastic containers which were tightly sealed with lids. The formulations were allowed to cure overnight before being tested to determine if the ammonia

odor still persisted after treatment. The pH of each treated material was also determined.

**Table 2. Stabilization Formulations for the CSXT Waycross Tank Bottom Sludge**

Formulation	Reagent	Mix Ratio <sup>a</sup>	Ammonia Smell (Yes/No)	pH (s.u.)
1	Ferrous Sulfate	0.01	No	6.8
2		0.02	No	6.1
3		0.05	No	5.9
4	Clinoptilite	0.01	Yes	8.9
5		0.020	Yes	9.0
6		0.05	Yes	9.1
7	Class F Fly ash	0.05	Yes	9.0
8		0.10	Yes	9.0
9		0.20	Yes	9.0
10	Magnesium Sulfate	0.05	Yes	9.0
11		0.10	Yes	9.0
12		0.20	Yes	9.1

<sup>a</sup> Mix Ratio = [(weight reagent)/(weight waste)]

## Conclusions

The characterization results (Table 1) indicate that the CSXT tank bottom sludge had ammonia nitrogen concentrations of 845 mg/kg and an alkaline pH (8.8 s.u.). At this pH, ammonia emission from the sludge will occur.

Based on the treatment results (Tables 2), treatment of CSXT Tank bottom sludge to impede the emission of ammonia could be successfully accomplished with the following formulation:

0.02 mix ratio of ferrous sulfate

This mixture will control the emissions of ammonia fumes and lower the sludge pH to below 7. The sludge can be mixed with 128 lbs of moist, technical grade ferrous sulfate heptahydrate per 100 cubic feet (roughly 5 inches in a 30-foot by 8 foot frac tank) of sludge using standard mixing equipment.

**ATTACHMENT C  
SITE PHOTOGRAPHS**





**Photographic Documentation**

**Client:** CSX Transportation

**Location:** Waycross, Georgia

**Photograph Date:** 2005

**Photograph No. 1**

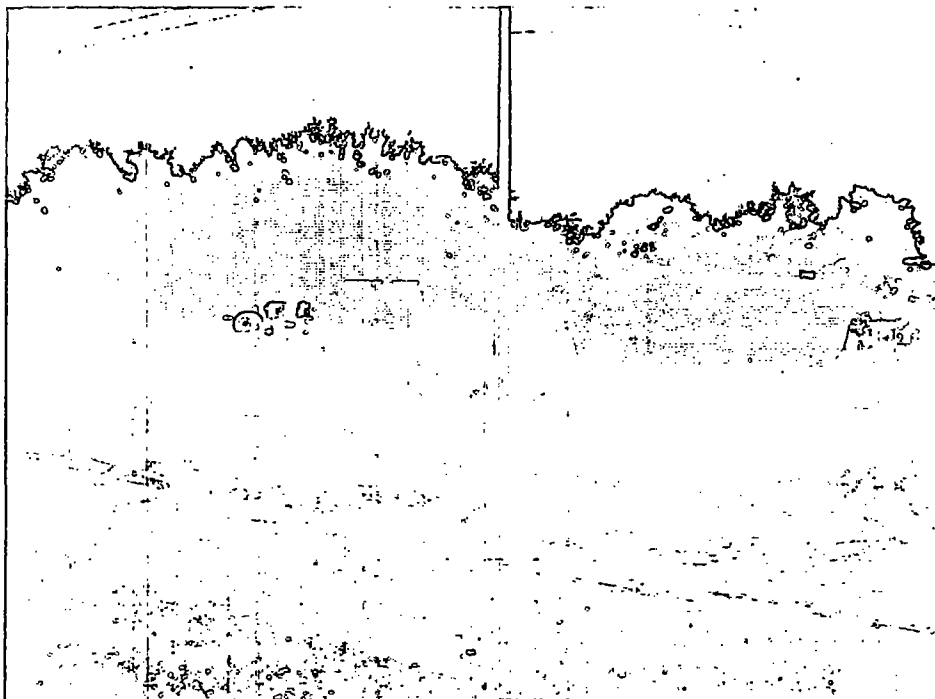
**Prepared by:** Shaw Environmental

**Photographer:** Shaw

**Project Number:** 117998

**Direction:** NW

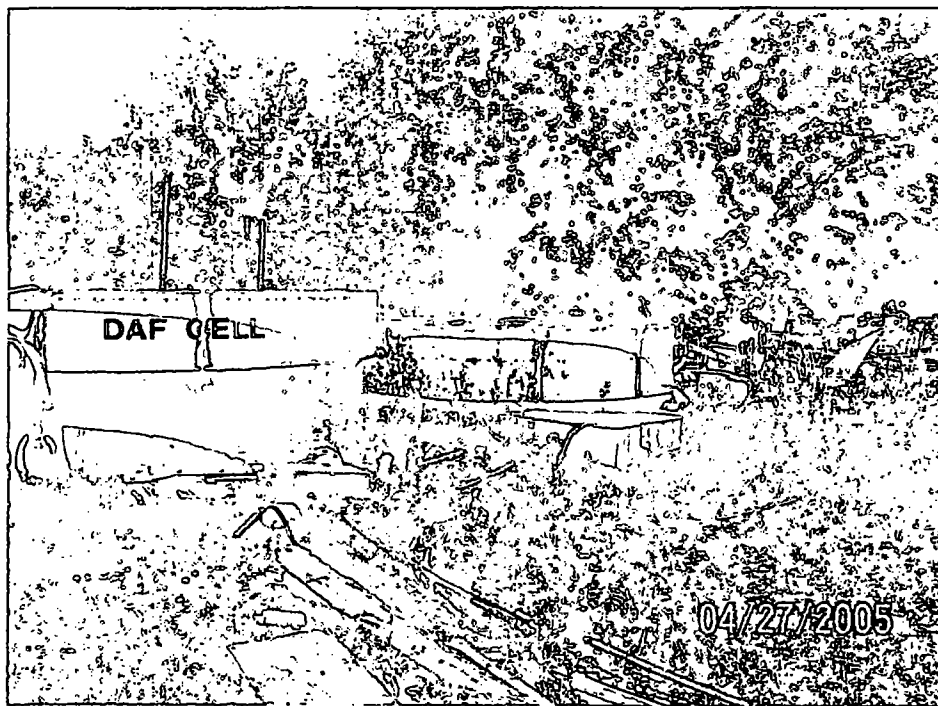
**View of site debris**



**Photograph No. 2**

**Direction:** W

**View of site debris**





Photographic Documentation

**Client:** CSX Transportation

**Location:** Waycross, Georgia

**Photograph Date:** 2005

**Photograph No. 3**

**Prepared by:** Shaw Environmental

**Photographer:** Shaw

**Project Number:** 117998

**Direction:** S

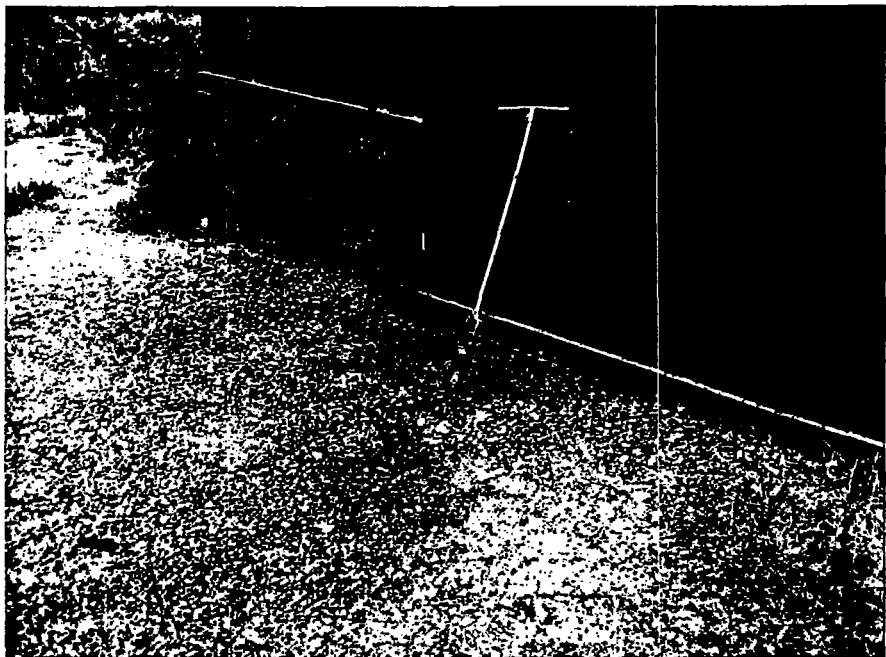
Baker Tanks



**Photograph No. 4**

**Direction:** S

Soil sample near Baker Tank





**Photographic Documentation**

**Client:** CSX Transportation

**Location:** Waycross, Georgia

**Photograph Date:** 2005

**Photograph No. 5**

**Prepared by:** Shaw Environmental

**Photographer:** Shaw

**Project Number:** 117998

**Direction:** S

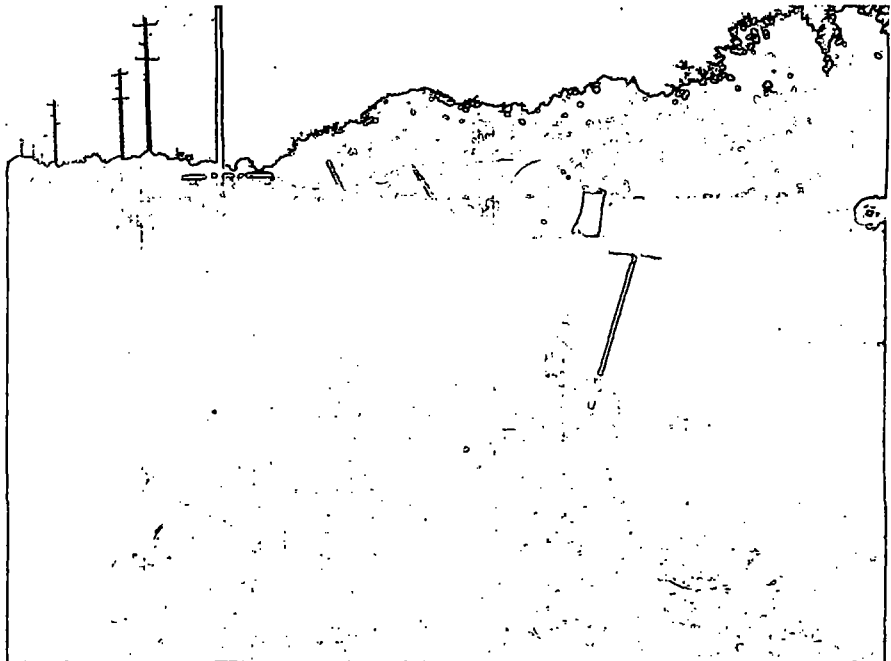
Soil sample #2 in low area of site.



**Photograph No. 6**

**Direction:** SW

Soil sample #3 location in low area of site.





**Photographic Documentation**

**Client:** CSX Transportation

**Location:** Waycross, Georgia

**Photograph Date:** 2005

**Photograph No. 7**

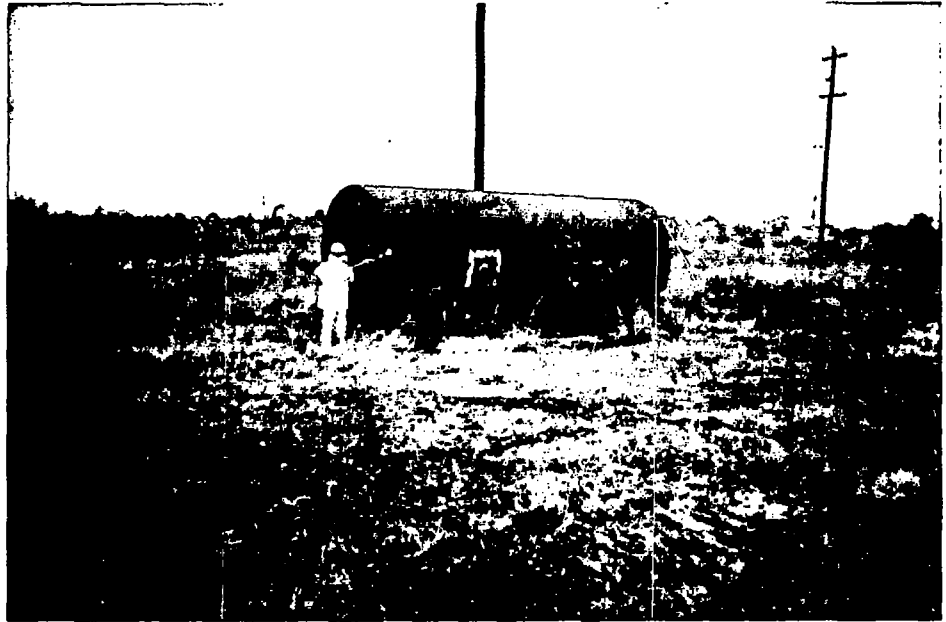
**Prepared by:** Shaw Environmental

**Photographer:** Shaw

**Project Number:** 117998

**Direction:** S

Tank cutting operation.



**Photograph No. 8**

**Direction:** E

Tank cutting operation and trackhoe used to move debris and tanks.





**Photographic Documentation**

**Client:** CSX Transportation

**Location:** Waycross, Georgia

**Photograph Date:** 2005

**Photograph No. 9**

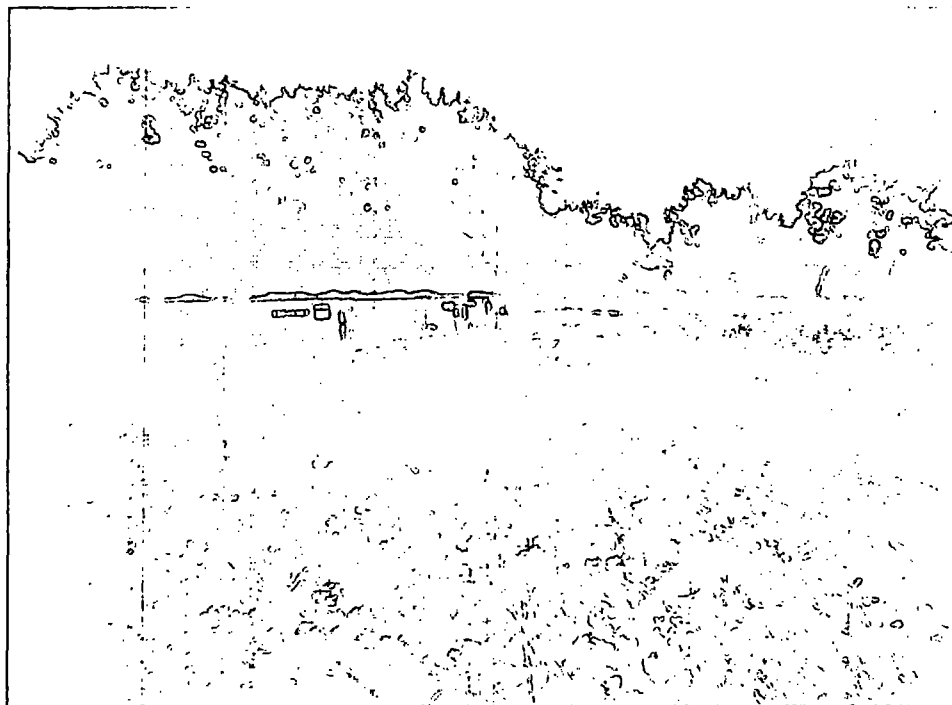
**Prepared by:** Shaw Environmental

**Photographer:** Shaw

**Project Number:** 117998

**Direction:** NW

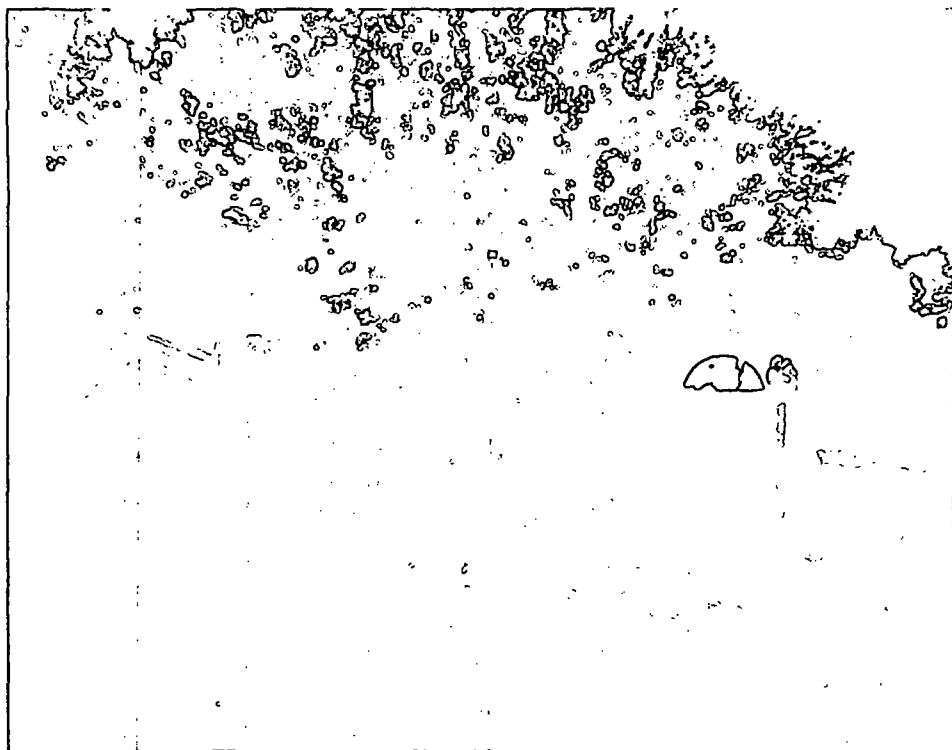
Debris roll-off staging.



**Photograph No. 10**

**Direction:** NW

Recycle roll-off staging.





**Photographic Documentation**

**Client:** CSX Transportation

**Location:** Waycross, Georgia

**Photograph Date:** 2005

**Photograph No. 11**

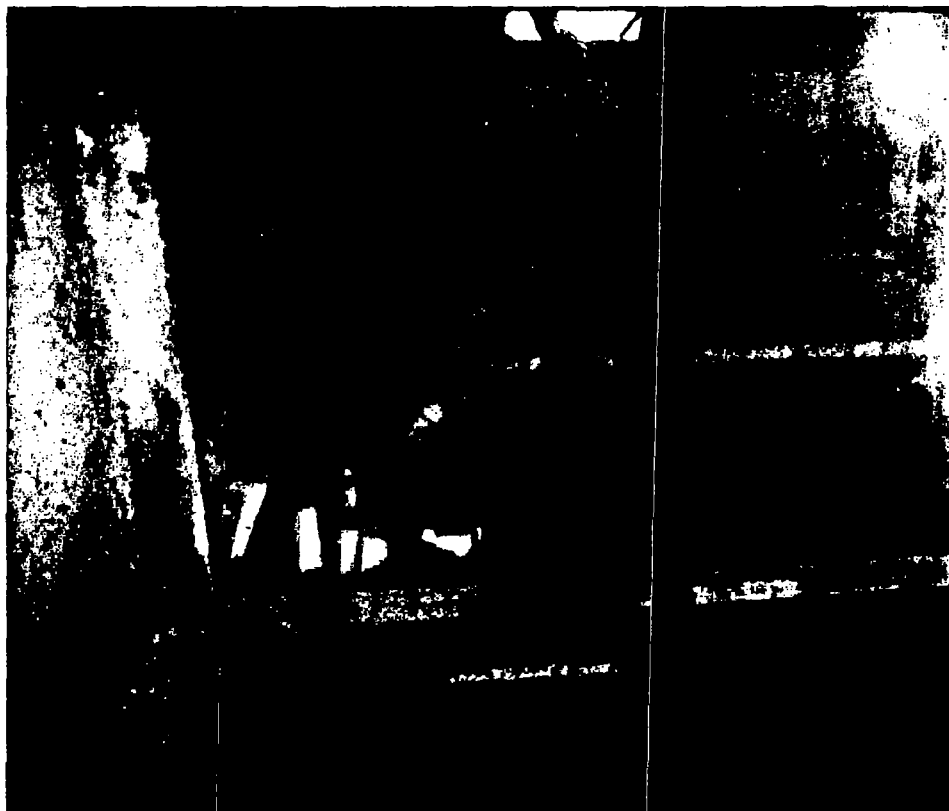
**Prepared by:** Shaw Environmental

**Photographer:** Shaw

**Project Number:** 117998

**Direction:** N

Level B tank cleaning.



**Photograph No. 12**

**Direction:** N

View of restored site.





**Photographic Documentation**

**Client:** CSX Transportation

**Location:** Waycross, Georgia

**Photograph Date:** 2005

**Photograph No. 13**

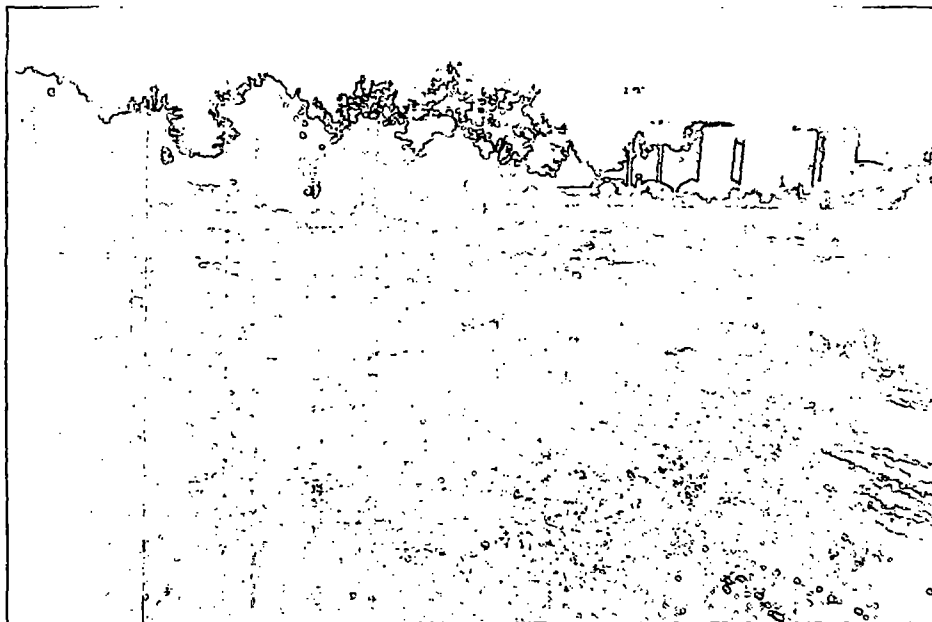
**Prepared by:** Shaw Environmental

**Photographer:** Shaw

**Project Number:** 117998

**Direction:** n

View of restored site.



**Photograph No. 14**

**Direction:** N

View of restored site. Trackhoe decontaminated and ready for pickup.



## REFERENCE 36



# SOLVENT HISTORY.COM

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The purposes of this page are:

- to provide and compile information on the history of chlorinated solvent usage, primarily in the US, but also in other countries as time and resources permit. For information on other synthetic organic solvents and petroleum distillates, please see [www.chemicalhistory.com](http://www.chemicalhistory.com).
  - to provide a list of sources to other resources on the history of chlorinated solvent use.
  - to provide a forum for discussion on issues related to chlorinated solvent usage. Information of interest submitted by contributors will be included in the page as time and resources permit. Send mail to [information@solventhistory.com](mailto:information@solventhistory.com)
- 

- Carbon Tetrachloride
  - Perchloroethylene / Tetrachloroethylene (PCE)
  - Trichloroethylene (TCE)
  - 1,1,1-trichloroethane (TCA)
  - Methylene Chloride
  - 1,2-dichloroethane (ethylene dichloride)
- 

## CARBON TETRACHLORIDE

The first chlorinated solvent to come into general use, carbon tetrachloride (CTC) was imported from Germany into the US as early as 1898. Under the trade name Carbona, it became an enormously popular dry cleaning and spot removing agent. CTC was produced in the US in significant quantities by Dow Chemical Company and Warner Chemical shortly after the turn of the century.

CTC's first widespread uses were as a household cleaning agent and a fire extinguishing fluid. Fumigation of stored grains with CTC began

before World War I, but became more widely adopted as better equipment and techniques were developed during the war. Because CTC produces highly toxic phosgene gas when heated in the presence of moisture, its use as a fire extinguisher came under scrutiny in the 1920s and 1930s. Additives were later developed and used to prevent phosgene formation. CTC also saw some medicinal use as a hookworm treatment in animals, and, primarily in tropical regions, in humans.

During the years preceeding World War II, perchloroethylene (PCE) and trichloroethylene (TCE) emerged as dry-cleaning and degreasing solvents, eroding CTC's market share. However, a major new use for CTC was discovered in 1929, when DuPont and General Motors produced the first chloroflourocarbons (CFCs). CFCs were produced by DuPont under the trade name "Freon." Production processes for the lighter CFCs, including the widely used compounds CFC-11 and CFC-12, used carbon tetrachloride as a feedstock. Despite CTC's loss of market share in the dry cleaning and degreasing markets, its total production increased throughout the 1930s, 1940s, 1950s, and 1960s due to its use in CFC production.

CTC production in the US plateaued in the 1970s. In 1968, the US Food and Drug Administration (FDA) moved to ban interstate commerce of CTC and CTC-containing products. The FDA believed CTC posed a hazard when present in homes and when used as a fire extinguisher. By 1970, CTC was banned from use in US commercial goods, and in 1972, it was identified as an animal carcinogen. Further decreases in CTC production occurred in the aftermath of Rowland and Molina's landmark 1974 paper identifying CFCs as depleters of stratospheric ozone.<sup>1</sup> After several years of controversy, CFCs were banned in aerosol products in 1978. Under the 1990 Clean Air Act amendments, emissive uses of CTC, CFC-11 and CFC-12 were banned as of January 1996. The 1992 amendments to the Montreal Protocol included a complete ban on CTC production and use as of January 1, 2000.

<sup>1</sup> Molina and Rowland, *Nature*, Vol. 248, p. 810, June 28, 1974.

For further information on the history of carbon tetrachloride, see [these articles](#) or contact [information@solventhistory.com](mailto:information@solventhistory.com).

## PERCHLOROETHYLENE / TETRACHLOROETHYLENE (PCE)

Tetrachlorethylene, also known as perchloroethylene or PCE, is widely known as a dry-cleaning solvent, but was also used in cleaning and degreasing (particularly when a stable, high-boiling point solvent was needed), in various textile production processes, and in the production of fluorinated compounds such as CFC-113. PCE was first synthesized in 1821 by Michael Faraday. Significant industrial uses in the US are not known prior to the early 1920s, when Dow Chemical began production of commercial quantities. PCE was introduced to the dry-cleaning industry during the 1930s, and became widely accepted due to its low toxicity relative to carbon tetrachloride, and its low flammability and less persistent odor relative to petroleum solvents. By 1950, PCE use in dry-cleaning led carbon tetrachloride by a factor of 3-to-1.

PCE production in the US more than tripled in the 1960s. However, improvements in the dry-cleaning process began to significantly decrease

the demand for PCE. In 1959, one drum of PCE could clean 500 pounds of clothing; by 1975, the number increased to 8,000; and by 1993, it reached 16,000. PCE production decreased by a factor of eight from 1980 to 1990. Despite the decline, and the effect of environmental regulations and toxicity studies, PCE is still used by 80 to 90 percent of today's dry cleaners. Equipment used today recovers 95 to 99 percent of the PCE used in dry-cleaning.

For further information on the history of tetrachloroethylene, see [these articles](#) or contact [information@solventhistory.com](mailto:information@solventhistory.com).

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## TRICHLOROETHYLENE (TCE)

Trichloroethylene (TCE) became one of the most widely-used chlorinated solvents for cleaning and degreasing because of its effectiveness, noncorrosivity, and nonflammability. TCE was first prepared in 1864, but was not produced commercially in the US until the 1920s. Earliest applications included use in boot polishes and printing ink dryers. TCE was used in the US food processing industry as an extraction solvent as early as 1927. During the 1930s, TCE's use in the dry-cleaning industry increased, and it began to replace carbon tetrachloride in solvent applications.

During World War II, the production and use of TCE increased significantly due to its use in degreasing. Supplies were controlled by the US government so that military demands could be met. The introduction of neutral stabilizer systems in 1954 helped retain TCE's position as the degreasing solvent of choice. It did, however, have other uses at this time, including dry-cleaning, and extraction of fats and oils. It was also used as a heat exchanging fluid, and in medical applications as an analgesic and anesthetic. DuPont was the largest producer of TCE in the late 1950s.

TCE became the first chlorinated solvent to be subjected to environmental regulation when the Los Angeles County Air Pollution Control District enacted Rule 66, which limited air emissions of TCE and other smog precursors. The use of TCE peaked in the US in 1970. Its decline in the following years was primarily due to increased evidence of toxicity and the advent of environmental regulations. The National Cancer Institute released evidence of TCE carcinogenicity in March 1975; in July 1975, General Foods ceased using TCE for decaffeination of coffee.

TCE use increased during the 1990s when TCA and other solvents were banned under the 1990 Clean Air Act Amendments. (TCA is discussed further below.) Dow Chemical and PPG were the remaining TCE producers as of 1997.

For further information on the history of trichloroethylene, see [these articles](#) or contact [information@solventhistory.com](mailto:information@solventhistory.com).

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## 1,1,1-TRICHLOROETHANE (TCA)

1,1,1-trichloroethane (TCA) was first prepared in 1840, but was not used in significant commercial quantities for over 100 years. It was first introduced commercially in the US by Dow Chemical in the mid-1950s. TCA's early uses were in cold cleaning applications and as an aerosol propellant. As a propellant, TCA was used in a variety of products including hair sprays. Despite its effectiveness as a cleaning solvent and its significantly reduced toxicity relative to TCE, TCA took many years to gain acceptance in the vapor degreasing market because it was relatively unstable, particularly in the presence of aluminum and when subjected to high temperatures. TCA was not widely used until improved stabilizer formulations were developed and implemented in the late 1950s and early 1960s. These stabilizer formulations used several chemicals, chief among them being 1,4-dioxane, to overcome TCA's corrosion problems. As a result of improved TCA stabilizers and the regulation of TCE as an air pollutant, the production of TCA surpassed TCE in 1973.

TCA, along with CFCs and other chemicals, were identified as ozone-depleting substances in the mid-to-late 1970s. Aerosol propellants were banned in the US in 1978. The 1990 Clean Air Act Amendments imposed a December 1995 deadline for ending emissive uses, and included other interim deadlines and schedules that significantly decreased TCA use. Dow Chemical ceased TCA production in February 1994.

For further information on the history of 1,1,1-trichloroethane, see [these articles](#) or contact [information@solventhistory.com](mailto:information@solventhistory.com).

---

**For further information on the chlorinated solvents discussed above, see:**

Doherty, Richard E., *A History of the Production and Use of Carbon Tetrachloride, Tetrachloroethylene, Trichloroethylene and 1,1,1-Trichloroethane in the United States: Part 1 - Historical Background; Carbon Tetrachloride and Tetrachloroethylene*, Journal of Environmental Forensics, Vol.1, June 2000, pp. 69-81.

Doherty, Richard E., *A History of the Production and Use of Carbon Tetrachloride, Tetrachloroethylene, Trichloroethylene and 1,1,1-Trichloroethane in the United States: Part 2 - Trichloroethylene and 1,1,1-Trichloroethane*, Journal of Environmental Forensics, Vol. 1, June 2000, pp. 83-93.

Contact [information@solventhistory.com](mailto:information@solventhistory.com) for further information on these articles.

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## METHYLENE CHLORIDE

Methylene chloride (dichloromethane) was first prepared by Regnault in 1840, but did not become an important industrial chemical until World War II. The post-war years saw a five-fold increase in production. The peak years of production were the late 1970s and early 1980s.

In 1985, a National Toxicology Program study found that methylene chloride caused cancer in mice.

Because methylene chloride is one of the more stable chlorinated solvents, only small quantities of stabilizers are added. Chemicals used as stabilizers included phenols, amines, epoxides, and a mixture of nitromethane and 1,4-dioxane.

One of methylene chloride's first uses was in paint strippers, and it remained the predominant use for many decades. It was also used as an extraction solvent in laboratories and in the production of spices, beer hops, and decaffeinated coffee. Uses in aerosols decreased after the 1985 cancer study results were released. Other uses included metal degreasing and chemical processing.

---

## 1,2-DICHLORETHANE

1,2-dichloroethane or ethylene dichloride has very few solvent or emissive uses, but it is produced in volumes much greater than most other chlorinated compounds. Its chief use is in the production of vinyl chloride monomer. It is also used in the production of chlorinated solvents such as TCE, PCE, TCA, and vinylidene chloride.

1,2-DCA formerly was used in varnish and finish removers, soaps, metal degreasers, paints, coatings, adhesives, and in ore flotation. It was also used as a grain, soil, and household fumigant.

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Please send e-mail to [information@solventhistory.com](mailto:information@solventhistory.com). Comments, suggestions, etc. are welcome.

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## REFERENCE 37

# Primary Metals

[Table of Contents](#) [Industry Overview](#) [Steel Making Industry](#) [Ferrous & Non-Ferrous Foundries](#) [Aluminum Smelting & Refining](#)  
[Copper Processing](#) [Lead Processing](#) [Zinc Processing](#) [Glossary](#)

## 3 Ferrous and Non-Ferrous Foundries

Ferrous and non-ferrous foundries specialize in melting and casting metal into desired shapes. Foundry products are most often used in automobiles, plumbing fixtures, train locomotives, airplanes and as metal pieces in other kinds of equipment. Independent foundries are classified under SIC code 3300; however, many specialty or smaller production foundries often operate within larger plants classified under other SIC codes.

In 1990, iron and steel accounted for 84% of metals cast (McKinley, 1994). The remaining 15% of foundry operations come from aluminum, copper, zinc and lead production. The foundry industry currently produces 11 million tons of metal product per year, with a shipment value of \$19 billion. Almost 200,000 people are employed in over 3,000 foundries in the United States. Although the large iron and steel foundries produce billions of dollars in metal each year and provide many jobs, most foundries have far smaller budgets and employ less than 100 people.

### Foundry Processes

#### Cast Making

The first step in metal casting (Figure 3) involves the creation of a mold into which the molten metal will be poured and cooled. The materials used to make the molds depend on the type of metal being cast and the desired shape of the final product. Sand is the most common molding material; however, metals, investment materials, and other compounds may also be used.

#### Figure 3. Metal Casting Process (USEPA, 1981)

Green sand mold are used in 85% of foundries. Green sand is a mixture of sand, clay, carbonaceous material and water (Figure 4). The sand provides the structure for the mold, the clay binds the sand together and the carbonaceous materials prevent rust. Water is used to activate the clay. The green sand mixture is packed around a pattern of the metal piece and allowed to harden. The mold is carefully removed from the pattern and prepared for the molten metal.

#### Figure 4. Green Sand Composition

Sand molds are used only once. Molten metal is poured into the mold and allowed to cool. After cooling, the mold is broken away from the metal piece in a process called shakeout. Most of the sand from green sand molds is reused to make future molds.

Sand mixtures are also often used to create cores. Cores are pieces that fit into the mold to create detailed internal passages in the metal piece. Cores must be strong and hard to withstand the molten metal, and collapsible so they can be removed from the metal piece after it has cooled. To obtain these properties, resins or chemical binders are usually added to sand mixtures. Depending on the binder used, molds may be either air or thermally set.

Other molding materials include chemically bonded sand, metal or refractories. These materials are used in the remaining 15% of foundry applications. Shell molds use chemically bonded sand to make the molds. Permanent metal molds may be used in foundries that produce large quantities of the same piece. Investment molds are made from ceramic substances called refractories. They are used in high precision metal castings.

### Metal Melting

Foundries melt metals in one of several types of furnaces depending on the type of metal being used (Table 1). Furnaces types include cupolas, electric arc, induction, hearth or reverberatory and crucible. Because of the different nature of metals, different inputs are required and different pollution is released from each type.

**Table 1. Common Types of Metal Melting Furnaces**

Furnace Type	Raw Materials	Outputs	Process
Cupola Furnace	Iron ore, scrap iron, lime, coke	Molten iron	Alternative layers of metal and coke are fed into the top of the furnace. The metal is melted by the hot gasses from the coke combustion. Impurities react with the lime and are separated.
Electric Arc Furnace	Scrap iron, flux	Molten iron and steel	Electric arcs from carbon electrodes melt the scrap metal. The flux reacts with impurities.
Induction Furnace	Scrap iron or non-ferrous metals	Molten iron or non-ferrous metals	Induction furnaces are the most common type used by both ferrous and non-ferrous foundries. Copper coils heat the



			metal using alternating currents. The flux reacts with impurities.
Reverberatory, Hearth, or Crucible Furnace	Non-ferrous metals, flux	Molten non-ferrous metals	Reverberatory furnaces melt metals in batches using a pot-shaped crucible that holds the metal over an electric heater or fuel-free burner. The flux reacts with impurities.

### Cupola Furnaces

Cupola furnaces are the oldest type of furnaces used in foundries. They are tall and roughly cylindrical and are most often used for melting iron and ferro alloys. . Alternating layers of metal and ferro alloys, coke, and limestone are fed into the furnace from the top. Coke makes up 8 - 16% of the total charge to provide the heat that melts the metal (USEPA, 1992). Limestone is added to react with impurities in the metal and floats to the top of the metal as it melts. As in steel melting, this limestone/impurities combination is called slag. By floating on top of the metal while it melts, the slag protects the metal from oxidation.

Cupola furnaces are lined with refractories, or hard, heat resistant substances such as fire clay, bricks or blocks. The refractory protects the furnace shell from abrasion, heat and oxidation. Over time the refractory breaks down and eventually becomes part of the slag.

Cupola furnaces are usually attached to emissions control systems to capture air emissions. Usually, the air emission systems use either high energy wet scrubbers that use water to remove air pollution from the gas stream or dry baghouse systems that use fabric filters to capture the emissions.

### Electric Arc Furnaces

Electric arc furnaces are often used in large steel foundries and steel mills. The metal is charged into the furnace, with additives to make recovery of slag easier, and heat to melt the metal is produced with an electric arc from three carbon or granite electrodes. The electric arc furnace is lined with refractories which slowly decompose and are removed with slag. Electric arc furnaces also usually employ air emissions equipment to capture most air pollution.

### Induction Furnaces

Induction furnaces are the most widely used type of furnace for melting iron and are increasingly popular for melting non-ferrous metals (USEPA, 1992). They are popular because they provide excellent metallurgical control and are relatively pollution free. Coreless induction

furnaces are used for smaller (5-10 ton) operations. In coreless induction furnaces, refractory lined crucibles are surrounded by water-cooled, copper coils.

For larger quantities, channel induction furnaces are used. In these furnaces the copper coils are surrounded by inductors to promote metal melting. Channel furnaces are commonly used to hold the molten metal prior to casting.

Induction furnaces use alternating currents to create heat and melt the metal. The refractories are usually made of silica, alumina or magnesia. They break down over time and become part of the slag.

### Reverberatory or Hearth Furnaces

Hearth furnaces are used in batch melting of non-ferrous metals. The hearth can be heated by either electric or natural gas methods. Hearth furnaces are used to produce small quantities of metal, usually for art and similar industries.

### Metal Casting

After metal has been melted, it is poured into a mold and allowed to cool. To remove the mold, sand castings enter a process called shakeout where the sand mold is shaken from the metal piece. During the process dust and smoke are collected by dust control equipment. Permanent molds are pried from the metal pieces without being destroyed. Investment molds and shell molds are destroyed during removal, creating solid waste.

Any additional parts used to hold the piece during casting are removed. The metal piece is cleaned using steel shot, grit or other mechanical cleaners to remove any remaining casting sand, metal flash or oxide.

A surface coating may be applied to the metal piece at the foundry; however, such coating is usually done at metal finishing plants. Further discussion of metal finishing can be found in *The Pollution Prevention for the Metal Finishing Industry*.

### Foundry Waste Streams

The waste products produced by foundries directly relate to the metal type, the furnace type and the molding technology used. For example, foundries that use sand molds generate the most waste from sand. Nonferrous foundries and steel foundries may produce hazardous waste because of the lead, zinc, cadmium and other metal present in the waste. Cupola furnaces produce more air pollution than induction furnaces due to coke use and sand castings produce more solid waste than permanent molds because of the sand fines that cannot be reused.

By volume, gaseous waste is the largest waste source from foundries (Dieter, 1995). Air emissions come from the binder systems used in mold making, the vapors from metal melting and airborne sand used in the pouring and shakeout steps. Air emissions have not been well

quantified; however, they generally contain metals, semi-volatile and volatile organic compounds. They mainly come from the melting procedures. Pouring and cooling steps contribute about 16% of the total organic and semi-volatile wastes from foundries (Shah, 1995).

Most of the gaseous metal emissions are captured in the emissions control systems attached to furnaces, shakeout and cleaning areas of the foundry. Cupola furnaces contributed more metallic air emissions than other furnace types. Metal emissions from induction furnaces are very small. The core and mold making processes produce almost insignificant levels of metal emissions. Emissions from the pouring process depend on the metal temperature. The hotter the metals, the more metal emissions (Shah, 1995).

Organic air emissions come largely from unreacted components of resins, solvents and catalysts. They come primarily from the core and mold making steps and are not well quantified (Shah, 1995). OSHA standards have been the primary reason for monitoring air emissions in the past. However, with the Clean Air Act and its amendments as well as increasing regulations from the EPA, more air emissions studies are being done.

### **Liquid Emissions**

Liquid pollution makes up a small portion of the total waste stream from foundries (Dieter, 1995). Liquid waste comes from non-contact cooling water used to cool metal and other work pieces or from wet scrubber air emission systems. Water runoff from floor cleaning and other maintenance procedures may also produce liquid waste. However, volumes of liquid waste are relatively small and do not pose a large pollution problem for foundries. Some plants have water treatment facilities to remove contaminants for water reuse.

### **Solid Waste**

Solid waste makes up a large portion of the pollution from foundries. On-quarter to one ton of solid waste per one ton of castings is expected (Shah, 1995). The waste comes from sand, slag, emissions control dust and spent refractories. Sand waste from foundries using sand molds has been identified as the most pressing waste problem in foundries (Twarog, 1992). Molding and core sand make up 66-88% of the total waste from ferrous foundries (USEPA, 1992).

### **Sand Waste**

Green foundry sand is routinely reused. After the sand is removed from the metal piece, it can easily be remolded. However, sand fines develop with reuse. These particles are too small to be effective in molds and have to be removed and often landfilled.

Sand that is chemically bound to make cores or shell molds is more difficult to reuse effectively and may be landfilled after a single use. Sand recovery methods, as discussed later, have been investigated with mixed results.

Sand wastes from brass and bronze foundries pose further waste problems as they are often hazardous. Lead, copper, nickel, and zinc may

be found in the sand in sufficient levels to require further treatment before disposal. If metal levels are sufficient, recovery methods may be employed.

### Investment Casting Waste

Although investment castings are not as widely used as sand castings, they also produce solid waste, as they are usually destroyed when removed from a work piece. Spent molds are non-hazardous unless heavy metal alloy constituents are present. Spent wax, used as patterns for the molds, also contribute to solid waste. The patterns are removed by melting the wax and can usually be reused.

### Cleaning Room Waste

Finished metal pieces are often cleaned in abrasion cleaning systems. The abrasive cleaners and the sand they remove from the metal pieces contribute to solid waste. Grinding wheels and floor sweepings also add solid waste. These wastes are collected and usually landfilled.

### Air Emissions Control Systems

Baghouse air emission control systems are one of the most frequently used technology for controlling air emissions in foundries. Air is pumped into the baghouse where particulates accumulate on a fabric filter. The system is efficient for removing particles above or below 0.1 - 0.3 micrometers (Shah, 1995). Other types of air emissions control systems may also be used including wet scrubbers, absorption and adsorption systems, combustion and electrostatic precipitation. All systems produce a solid waste from the air emissions and release the cleaned air.

The emissions control dust is collected at almost all stages of foundry production. If it does not contain hazardous wastes, it is usually landfilled. However, steel foundries frequently produce emissions control dust that contains zinc, lead, nickel, cadmium, and chromium, depending on the metal content. Nonferrous emissions control dust may also be classified as hazardous due to copper, aluminum, lead, tin and zinc. Depending on the metals content in the emissions control dust it may be permitted for land fill, or it may require further treatment before disposal. Nonferrous foundry dust often contains sufficient levels of metals to make metal recovery economically favorable.

### Slag Wastes

Slag waste is often very complex chemically and contains a variety of contaminants from the scrap metals. Common components include metal oxides, melted refractories, sand, and coke ash (if coke is used). Fluxes may also be added to help remove the slag from the furnace. Slag may be hazardous if it contains lead, cadmium, or chromium from steel or nonferrous metals melting. Iron foundry slag may be highly reactive if calcium carbide is used to desulfurize the iron. Special handling is required for highly reactive waste.

### Pollution Prevention Methods for Foundries

## **Sand Reclamation**

Green sand can be reused multiple times without significant refinement. The sand is filtered to remove fines that develop from the process. Additional sand is added to account for sand that is lost. Then the sand is remolded for a different metal piece.

Chemically bound sand used for core making and other types of molds is not so easily reused. However, many methods have been developed to recover foundry sand, with mixed success. The object of sand reclamation is to remove residual binders and contaminants from the sand grains so the sand can be reused without affecting the quality of the mold. The sand reclamation process is defined by the American Foundrymen's Society Sand Reclamation and Recovery Committee as "the physical, chemical or thermal treatment of a refractory aggregate to allow its reuse without significantly lowering its original useful properties as required for the application involved."

Four methods for recovering sand have been developed. The method that will be useful depends largely on the type of metal cast, the binders used, and the desired reuse.

### **Attrition Sand Reclamation**

Attrition sand reclamation technology spins two streams of sand in opposite directions in the presence of heat. The combination of sand abrasion and binder combustion free the sand particles from some binders. Attrition cannot remove all residual binders, but works well with no-bake binders. The yield from this process is a high strength recycled sand.

Because all binders cannot be removed through attrition, the sand characteristics may be changed. For some casting operations the characteristics may be changed significantly enough that the sand may be ineffective for future castings.

Attrition methods of sand reclamation may also produce large quantities of dust. The dust can be captured in air emission control equipment, hence contributing to the total volume of solid waste.

### **Dry Sand Reclamation**

Dry sand reclamation relies on mechanical and pneumatic scrubbers to remove lumps and binders from sand (Figure 5). Mechanical scrubbing moves each sand grain through a sand-to-metal or sand-to-sand interface to remove impurities. Pneumatic scrubbers use air to propel sand between baffles. These scrubbers are particularly good for removing clay from molding sands and binders in systems that are not baked.

#### **Figure 5. Dry Sand Reclamation (Heine, 1983)**

Dry reclamation can produce large quantities of dust. These air emissions have to be monitored and captured by control equipment. Dry

sand reclamation may also not be capable of removing binders to the extent necessary for reuse in some foundry operations.

### **Water (Wet) Reclamation**

Wet reclamation uses water to remove sand binders (Figure 6). The process uses on the different water solubilities of sand and binders to separate the two. Clay bonded systems work well with water reclamation processes because the clays are very soluble in water. Sodium silicate sand binders can also be removed using wet reclamation. The sodium silicate dissolves part of the sand crystal when binding, but can be removed by exposing it to water. After the sand is soaked in a water bath it is dried and reused.

#### **Figure 6. Wet Sand Reclamation (Heine, 1983)**

Although wet reclamation was used in the 1950s and 1960s, it has been nearly eliminated as a method of sand recovery. Chemical binders are also no longer sufficiently hydrophilic to dissolve in water. Further, organic resins that do dissolve and other water soluble impurities can cause significant water contamination. The high volume of waste water and strict environmental regulations can make wet sand reclamation too expensive.

### **Thermal Sand Reclamation**

Thermal reclamation uses heat in a rotary kiln, multiple-hearth furnaces, or a fluidized bed to combust binders and contaminants (Figure 7). In removing binders, the process can cause sand to change in composition. Combustion products from the fuel used to heat the sand and thermal cracking of the sand crystals may occur. The resulting sand may be significantly different than the original sand. Depending on the type of casting, thermally treated sand may or may not be usable.

#### **Figure 7. Thermal Sand Reclamation (Heine, 1983)**

Infrared energy can also be used to thermally treat sand. This method may maintain more of the sand's original composition, while still destroying binders. Infrared units, called electric sand reclamation units, are in place in the United Kingdom and Canada ("Navistar Goes Infrared," 1993). External blowers push the sand through fluidized beds, allowing the sand to directly contact the infrared radiation which breaks down the binders. The electric sand reclamation units do not produce the combustion products associated with traditional thermal reclamation processes.

### **Sand Recycling**

Another option for foundry sand is recycling. Many industries use sand as a raw material in their processes. As foundry sand is usually not hazardous, it can serve this purpose. Markets for spent foundry sand include manufacturing of: cement, concrete, asphalt, bricks and tiles, flowable fill (permeable, low-strength concrete), geotechnical fill and roadfill, daily landfill cover, and manufactured topsoil and

composting. Liability and local legislation must, of course, be considered before selling spent foundry sand.

### Spent Slag and Emissions Control Dust

Slag and emissions control dust constitute the remainder of the solid waste produced by foundries. Not much has been written regarding process modification to reduce these solid wastes. However, if the slag or dust contained sufficient metal content, they can be fed back into the furnaces to reclaim the remaining metal dust. The metals can also be recovered from the dust using electrolytic or other metal recovery techniques. The recovered metal can either be added to the molten metal or sold for other uses.

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## Case Studies

### Air Emissions Reduction

#### Replacing Organic Cleaners with Citrus Based Solvents Pollution Prevention Case Study, Enviro\$ense, October 31, 1995

Northern Precision Castings, Geneva, Wisconsin, is an investment casting operation employing 150 people and casting more than 200,000 pounds of metal per month. The operation uses ceramic molds and wax patterns. The wax patterns must be cleaned thoroughly for proper ceramic adhesion. The cleaner used was the solvent 1,1,1-Trichloroethane (TCA) which evaporated to leave the surface clean. The evaporation produced 18,000 pounds (1988) of emissions.

Environmental regulations pertaining to TCA caused Northern Precision Casting to consider alternatives. They requested alternatives from their solvent supplier. The supplier's first recommendation was a switch to freon until a better alternative could be identified. The freon produced fewer emissions than the than TCP and was used for six to nine months. After that period, freon was replaced with a citrus-based, non-hazardous solvent. The new solvent has been effectively cleaning the wax assemblies with minimal emissions.

Product quality was a concern prior to the cleaning chemical switch. However, the change produced no change in mold quality. Initially, the citrus-based solvent produced an odor the workers found offensive, but the problem has been resolved.

The switch from organic solvent cleaners to a citrus-based cleaner has required no capital cost and no significant changes in operations and maintenance costs. The fugitive air emissions prior to the shift were 18,000 pounds (1988). After the move to the citrus-based cleaner, emissions constituted water-soluble liquid waste which can be discharged to the Publicly-Owned Treatment Works (POTW).

### Foundry Sand Reclamation

#### Michigan Department of Commerce and Natural Resources, November 1993, #9303

Wolverine Bronze or Roseville, Michigan installed a thermal sand recycling system in an attempt to cut costs of sand purchases. The system produced sand quality adequate to meet the molding needs; however, the system was not economically beneficial. As the sand needs at the facility varied greatly, use of the machine varied. However, the thermal apparatus required constant heat to provide quick start up without damage to the system. With the heat requirements, the thermal sand recycling operation did not save significant amounts of money over the purchase of new sand.

In 1989, low energy sand recycling systems were evaluated to replace the thermal system. An attrition sand recovery system was installed. In

the attrition system, sand grains rub together at high speeds to remove residual binders and inorganic contaminants. The system has produced significant cost savings over the use of new sand. The primary savings stems from reduced energy and maintenance requirements over the thermal recovery system.

### Cupola Slag Reduction

#### Iowa Waste Reduction Assistance Program, Cast Study #94-20

Quinn Machine and Foundry of Boone, Iowa produces concrete pipe forms out of iron. Slag from the cupola furnace was being produced at a rate of approximately 8,000 pounds per day. Quinn sought to reduce the slag production and, in turn, reduce their volume of waste. They first attempted to locate a metal recovery operation for the slag. However, metal recovery did not prove economical for the facility.

After further evaluation, it was determined that a smaller charge in the furnace would increase the yield and reduce slag formation. The change has resulted in the predicted reductions. From the changes, landfill costs have been reduced by approximately \$1,275 per year.

## REFERENCE 38

# Georgia Department of Natural Resources


2 Martin Luther King, Jr. Drive, S.E., Suite 1154, Atlanta, Georgia 30334-9000

Noel Holcomb, Commissioner  
Environmental Protection Division  
Carol A. Couch, Ph.D., Director  
404/656-2833

September 8, 2006

## **TRIP REPORT**

**SITE NAME & LOCATION:** Seven Out LLC Tank (BCX, Inc.)  
901 Francis Street  
Waycross, GA 31503  
EPA ID # GAN000407811

**TRIP BY:** Edwin L. Williams  Geologist Billy Hendricks  
Environmental Specialist

Kristen Sanford Geologist Brett Blackwelder  
Environmental Engineer

Fred Rowe Environmental Engineer Bruce Khaleghi  
Environmental Engineer

**OFFICIALS CONTACTED:** None

**DATE OF TRIP:** August 28-September 1, 2006

**REFERENCES:** Georgia Hazardous Waste Management Act  
Georgia Hazardous Waste Management Rules  
Comprehensive Environmental Response and  
Liability Act (CERCLA)  
Seven Out LLC Tank Preliminary Assessment (PA)

## **COMMENTS:**

### August 28, 2006

Mr. Hendricks and I arrived at the above listed address at 1:30 p.m. on August 28, 2006. The temperature was in the low 90s and there was a slightly overcast sky. The purpose of the trip was to conduct the groundwater and soil sampling portion of the Site Inspection of the subject site. The tasks for the remainder of this day were to walk the site, educate Mr. Hendricks on the site, and to mark the sampling locations.

Mr. Hendricks and I began by walking the site while I informed him of the different aspects of the historical and more recent activities at the site. The site is basically comprised of four (4) separate parcels of property, all owned by Seven Out, and one additional parcel of property, owned by CSX Transportation.

I discussed the historical operations of the parcels of property with Mr. Hendricks. The parcel at 901 Francis comprises the former Waycross Coca-Cola Company building and the former Waycross Cooperative Laundry building. This most recently operated as the Seven Out Main

Office and a waste testing and storage facility. The parcel at 903 Francis represents the vacant lot between 901 Francis and 801 Francis. This was not currently developed, however, it had historically been the site of Gillon Machine Shops and Foundry. The parcel behind 801 Francis was the location of the idled wastewater and used oil treatment plant and tank farm of Seven Out. This parcel was identified as being at 3 Folks Street. The parcel behind the treatment plant/tank farm was on the CSX Transportation property. This parcel was leased to Seven Out and was a staging area for additional tanks and Baker tanks that stored wastewater awaiting treatment at the plant.

I then explained the overland flow route and the surface water pathway to Mr. Hendricks.

We then proceeded to mark the sampling locations for the site. Background soil locations were selected outside of the fence on the northwest corner of the 901 property. The locations for SO-SS-010 and SO-SB-012, surface and subsurface soils samples, respectively, were flagged. It was decided that groundwater probably flowed toward the perennial stream (which would mean a southeast to northwest gradient), so a groundwater sample location was placed inside the fence in the northwest corner of 901. This sample, SO-GW-001, would represent groundwater contamination migrating from the tank farm, the former foundry, the waste storage area, and possibly the former laundry.

We then proceeded south on the 901 parcel and selected a sampling location just west of the shell of the waste storage building for SO-SS-024 and SO-SB-025, surface and subsurface soil samples respectively, that would identify if releases in the area of the waste storage building had occurred. The soil sampling locations were flagged. We also decided to locate groundwater sample, SO-GW-004, at this site to better test for groundwater contamination from the waste storage facility.

We proceeded south on the 901 parcel and planned on sampling outside the former laundry, however, the area was underlain by thick concrete. Mr. Hendricks observed that the foundation of the inside of the former laundry was quite broken up in places, so chunks of concrete were removed and it was decided that SO-SS-022 and SO-SB-023, surface and subsurface soil samples respectively, would be taken from inside the former laundry. The soil sampling locations were flagged. Because of the close proximity of SO-GW-004 and our inability to actually operate the GeoProbe unit inside the building, we opted to not attempt a groundwater sample, SO-GW-003, at this location.

Mr. Hendricks and I proceeded east onto the vacant lot property between 901 and 801 Francis. This property housed the former Gillon Machine Shops and Foundry. Having very little data on this operation, we selected a central location in the parcel to take SO-SS-020 and SO-SB-021, surface and subsurface samples respectively. The locations were flagged. We also decided to take a groundwater sample, SO-GW-005, at this location, to evaluate whether groundwater might have been impacted by disposal activities associated with the foundry.

We proceeded southeast onto the wastewater treatment plant parcel, 3 Folks Street. Along the grassy area immediately south of the secondary containment of the tank farm, we chose sampling location SO-SS-017, a surface soil location, near the overhead pipeline and flagged it. The purpose of this location was to attempt to determine the extent of surface soil contamination, previously noted by EPA contractors. We continued eastward and flagged SO-SS-018, a surface

soil location. This sample location was in the vegetated area behind the secondary containment where a large pile of stained mulch was observed. It was an apparent filter press unloading/loading area.

We proceeded north around the outside of the secondary containment to a vegetated area between the tank farm and 801 Francis (the back wall of the Sports Shop). At this location, we flagged SO-SS-012 and SO-SB-013, surface and subsurface soil locations. This area was currently wet and had been the low spot of the secondary containment where rainwater, mixed with waste would have overflowed onto the soil. A groundwater sample proposed for this area was eliminated because it was not considered downgradient of any of the suspected contamination and it was not in a viable area because remnants of railroad tracks were in the vicinity.

We proceeded south on Folks Street and turned back to the west. We proceeded just off of the road and selected the area where we would put in our background groundwater well, SO-GW-002. We then proceeded west to the location of the pump station where wastes would be pumped out of train tank cars and pumped to the treatment plant. At the connection where trains would connect to the lines, we marked sample sites SO-SS-014 and SO-SB-015, surface and subsurface samples.

We then proceeded back to Folks Street and went around the CSX Transportation gate to the areas where the ASTs and Frac/Baker tanks had been located. We selected a low area to the east of the roadway for SO-SS-019 and a low area to the west of the road for SO-SS-018, both surface soil samples.

We then proceeded back to the rail crossing and chose an attribution sample location, SO-SS-027, in the drainage ditch where the road crosses over the drainage ditch. We proceeded down the railroad right-of-way to the overgrown area where the culvert drained from the site into the drainage ditch. We marked a site for SO-SS-026. That completed all of our sample location marking, however, there was some concern over the suitability of SO-SS-026. We proceeded back onto the site between 901 Francis Street and 3 Folks Street where the drain culvert was located. It was determined that the drain culvert had ample sediment in front of it to produce a suitable, site-generated, surface sample. We decided to remove the attribution sample from the drainage ditch, eliminating the need for it, and relocated SO-SS-026 to the culvert.

That completed the day's activities of marking the sample locations.

#### August 29, 2006

It should be noted that utility clearance checks had been verified from the Waycross Cable Company, Bell South, A T & T, Waycross Water and Sewer Authority, Georgia Power Company, and the Georgia Natural Gas Company prior to initiating any intrusive investigative work. Additionally, property access had been obtained from Bennie James (801 Francis Street owner), Vicki Carden (901, 903 Francis Street and 3 Folks Street owner), Ira Walker (CSX Transportation contact), Ray Harris (local well owner on Elizabeth Street), and Will Corbett (Waycross Water Authority contact) prior to sampling on their respective properties.

## Seven Out Sampling Trip Report

September 8, 2006

Page four

The remainder of the sampling crew arrived the evening before. The rest of the sampling crew included Fred Rowe, Engineer; Brett Blackwelder; Engineer; and Kristen Sanford, Geologist. We arrived at the site at 7:00 a.m. The temperature was warm (80s) and slightly overcast. Highs were expected to be in the mid 90s. Two sampling teams were created for the purpose of pulling the surface and subsurface soils. One team was comprised of Blackwelder, Rowe, and Sanford and the other team was comprised of Hendricks and myself. I gave Blackwelder, Rowe, and Sanford a general overview of the site and showed them where all of their sampling locations were marked. We briefly went over the sampling procedures and provided them with the sampling equipment, coolers, sample containers, labels, and documentation. They took off to start their sampling. Mr. Hendricks and I took off to get the other samples.

At the end of the day, all of the surface and subsurface soil samples had been collected without any problems. All samples were returned on ice to the hotel for safekeeping and documentation was verified. During the evening, Mr. Bruce Khaleghi, Engineer, arrived to take the soil samples to the lab the following morning.

### August 30, 2006

Ample icing of the coolers was verified for their trip back to the lab in Atlanta. All sample coolers were loaded into Mr. Khaleghi's van by 7:00 a.m. and he was en route to Atlanta by 7:00 a.m. Because the bulk of the time-sensitive sampling was completed, Blackwelder and Rowe were released to return to Atlanta. Khaleghi was also instructed that he would not be needed for an additional sample run. That left Sanford, myself, and Hendricks to collect the remaining groundwater samples.

We arrived at the site about 7:15 a.m. It was warm, but breezy and overcast. The area was starting to feel the effects of Tropical Storm/Hurricane Ernesto, which was still southeast of our location. We set up the Geoprobe at the location of our determined background groundwater location, SO-GW-002. The groundwater screen was pushed and opened up at 19.5' below ground surface (bgs). Groundwater was quickly obtained from the well, however, it shortly became erratic, surging at times and almost dry at other times. After purging a minimum of three well volumes and reaching a turbidity less than 10 NTUs, we were able to get a good, constant flow for the inorganic samples. Over the time period that we filled the vacuum jug for the semi-volatile samples, flow would dramatically drop off and then recover. The volatile organic samples were taken last directly from the Teflon tubing. Total sampling time for the well was 4.5 hours. As samples were collected, they were put on ice over the 4.5 hours. Mr. Hendricks received a call from Mr. Khaleghi at 11:00 am stating that the soil samples had been delivered to the lab.

While the well was being sampled, I proceeded to retrace the soil sampling locations and completed photographing and recording GPS locations for all of them. I also photographed and obtained GPS readings for SO-GW-002. Proper plugging of the holes was also verified.

At about 1:30 pm we had pulled off of the well and had begun sampling at SO-GW-005. Again, we pushed the GeoProbe to 19.5' and set the screen at 19.5'. The well produced excellent flow and all samples were obtained under optimum conditions. Because of the excellent flow from the well, the groundwater duplicate was also taken at this sampling location. Since this well was

## Seven Out Sampling Trip Report

September 8, 2006

Page five

performing so well, Sanford and I removed the GeoProbe and went to the location of SO-GW-004 to start that well. The first attempt at the well was dry. The second attempt at the well was more positive, however, the well flowed similarly to SO-GW-002, until it just gave out altogether. We were never able to obtain a low enough turbidity to sample the well, so we pulled out and moved the GeoProbe back over to the location of SO-GW-005. By this time all of the sampling had been completed and the samples were on ice. Sampling time for this well was about 2.5 hours. We pulled out of that location and decided to call it a day, since we still had equipment to clean. I photographed the location and recorded the GPS readings. We returned to the hotel and placed the samples in the hotel room for safekeeping.

### August 31, 2006

The next morning we returned to the site at about 7:05 a.m. We immediately set up at the SO-GW-001 location. A well was pushed with the GeoProbe to 19.5' and good flow was obtained.

Mr. Hendricks was left to sample the well once the parameters were suitable and three well volumes had been removed. Ms. Sanford and I went back to the location of SO-GW-004 and made a third attempt at the well. The third attempt was good and we were able to produce good groundwater from the well. After purging at least three well volumes and reaching a turbidity less than 10 NTUs, we began sampling the well. There were no problems in sampling this well. In the meantime, the SO-GW-001 had begun to slow down in its production. Mr. Hendricks was having to chase the top of the groundwater, however, it finally stabilized. The sampling at SO-GW-004 was completed before the sampling at SO-GW-001, taking 2 and 3 hours respectively. Ms. Sanford and I pulled off of the SO-GW-004 and moved the GeoProbe back into position over the SO-GW-001 hole. After the sampling was completed at SO-GW-001, the iced samples were documented and prepared for transport back to the hotel. I completed the photography of the wells and obtained the GPS readings for them. I also verified the plugging of the wells at this time.

We verified that all gates at the facility were locked and departed from the location. We returned to the hotel, unloaded the samples into the room and then broke for lunch. During lunch, I contacted Mr. Hill and the Waycross Water Authority to let them know that we would be arriving to sample their wells in about an hour and two hours, respectively.

Following lunch, we arrived at Mr. Hill's residence and after speaking with him a few minutes while the well was purging, began sampling the well. Mr. Hill indicated that the well had been measured at about 29 feet deep. He had the pump replaced and new wiring installed on the well. He only used it to water his garden and wash off his fruits and vegetables, prior to taking them inside. They are again washed off inside the house. The water supply for the house is from the City of Waycross water system. We completed sampling his well and put the samples on ice prior to leaving the residence. I took a photograph of the well house and tap we sampled from and took GPS readings for the location.

We then arrived at the Waycross Water Treatment facility where two wells, Waycross #2 and Waycross #3 are located. Well #2 had not been operating lately, so we sampled Well #3. After we completed the sampling of this well, which was 600 feet deep, I photographed the well head and tap where the sample was taken and obtained GPS coordinates for the location.



Seven Out Sampling Trip Report

September 8, 2006

Page six

We then packed the samples on ice and returned to the hotel where we unloaded the samples and secured them in the room.

September 1, 2006

The groundwater samples were loaded into the truck and we all left Waycross at 7:00 a.m and headed to Atlanta to drop off the samples. Ms. Sanford and I arrived at the EPD Lab in Atlanta at 12:03 pm and unloaded the samples and signed the chain-of-custody over to the lab. We returned to the office and unloaded the equipment from the vehicles.


RECOMMENDATIONS:

Provide all property owners copies of the analytical for their respective samples. Provide keys to locks to site owner for new locks that were installed on gates at 901 Francis Street.

PHOTOGRAPH: 33

SAMPLES: Groundwater (7)  
Surface Soil (12)  
Subsurface Soil (7)

REVIEWED BY:



U . S . E P A R E G I O N I V

# SDMS

## Unscannable Material Target Sheet

DocID: 10509016 Site ID: GA000407B11

Site Name: Sever 037 LLC Tank

### Nature of Material:

Map: \_\_\_\_\_

Computer Disks: \_\_\_\_\_

Photos: ✓

CD-ROM: \_\_\_\_\_

Blueprints: \_\_\_\_\_

Oversized Report: \_\_\_\_\_

Slides: \_\_\_\_\_

Log Book: \_\_\_\_\_

Other (describe): \_\_\_\_\_

Amount of material: \_\_\_\_\_

**\*Please contact the appropriate Records Center to view the material.\***

Bldg has 7 bays

5899 N. P. Road

NATIONAL DISTRIBUTING CO?

Debris rel next to 5899

Winchase Apt.

Seven Out LLC - Waycross, GA 901 FRANCIS ST

8/29/06 8:05 AM SUNNY HUMID 80's

TRACED SOIL SAMPLES SS-19 - Outside

Fence to West of Bldg - Encloses First

JURFACE 0-2' Hand Auger

SB-11 - Same location 2-3' - Hand

AUGER - Encloses from Hole

FINISHED 8:55

SS-20 / SB-21 center of vacant lot where

former laundry existed - 9:15 - 10:04

Hand augered - encloses first, encloses from  
hole - noticed possible coke in sample.

SS-24 / SB-25 - to west of slant of waste  
storage facility, @ 901 - 10:17 - 11:24

hand augered - encloses first, encloses from  
hole - noticed coal and iron nodules in sample

SS-22 / SB-23 - taken in former laundry bldg

at 901 thru broken concrete floor - 11:40 -

12:30 P., nothing noteworthy about sample

8/30/06 8:00 AM - installed GWS-002

bln tent form - Good flow ab 10:12 A

Turb. 3.65, began sampling & finished at 1:55 P

8/30/06 10:40 A GETTING GPS PHOTOS  
SEVEN OUT LLC - 901 FRANKS ST  
WATERBURY, CT

SS-12 } 31.20747 ± 21'  
SB-13 } 82.36312  
229' ASL

PICT. 7 AT NE CORNER TANK FARM  
NEXT TO LIGHT POLE

\* SS-19 31.20677 ± 30  
82.36279

IN FRONT TANK AREA TO LEFT  
PICT 8 OF CSX GATE IN FRONT OF OLD  
LOADING DOCK

SS-18 31.20661 ± 18  
82.36361

PICT. 9 IN FRONT TANK AREA TO RIGHT  
OF CSX GATE BEHIND LOADING  
RAMP OF OLD DOCK

\* SS-16 31.20724 ± 31  
SB-11 82.36324

PICT. 10 BELOW EXISTING DIRT PILE BEHIND  
TANK FARM  
229'

SS-17 31.20723 } ± 23'  
82.36340

PICT 11 BEHIND TANK FARM NEAR OVERHEAD  
PIPELINE  
229'

SS-26 31.20734 } ± 11'  
82.36415

PICT 12 BETWEEN TANK FARM & 901 FRANKS  
@ TERMINATION OF RAILROAD AT  
SEDIMENT BUILDUP IN CULVERT  
229'

SS-20 31.20764 } ± 13'  
SB-21 82.36392

PICT 13 IN OPEN LOT OF FORMER FOUNDRY  
B/W 901 & 801 FRANKS STREET ON  
N S OF 2 TREES  
229'

\* SS-10 31.20784 } ± 17'  
SB-11 82.35465

PICT 14/1 IN FRONT OF SEVEN OUT GATE (RT. SIDE)  
ON 901 FRANKS STREET  
229'

PHIL DEMARCO 912/ 550-9478

ALLEN BAYSON 912/ 550-9229

SS-24 31.20741 }  $\pm 14'$

SB-25 82.36440

SB DUP

229'

PICT 2 BETWEEN STORAGE BLDG &

OLD LAUNDRY IN GRASSY AREA NEXT  
TO FOUNDATION

SS-22 31.20739 }  $\pm 23'$

SB-23 82.36461

PICT 3 & 4 WITHIN 3 & 4<sup>th</sup> BAY OF

OLD LAUNDRY BELOW FOUNDATION

8/30/2006 - 11:02 AM

50-GW-002 31.20709  $\pm 26'$

82.36319

Background BEHIND SE CORNER OF

229' OPPOSITE SIDE GRAVEL DRIVE

PICT 24

PICT 5-23 - EXCESSIVE SHOTS

50-GW-005 FOUNDRY

3:03 P TURBIDITY 1132

3:10 P " 410

3:15 P " 17

3:25 P " 4.8

Sampling 3:32

SCREEN @ 19.5'

GW-004 WASTE STORAGE AREA

PUMPING BUT WENT DOWN ON VERY

LOW FLOW - EPISODES OF CONSTANT

TURBID FLOW FOLLOWED BY ALMOST

NO FLOW.

SHUT OFF TO RECHARGE AT 5:04 PM

SCREEN @ 19.5'

5:22 P TURBIDITY 7.3

NOT PRODUCING ENOUGH

PUMPING OUT TO TRY TOMORROW

5:30

PULLED OUT OF GW-005

HEADINGS TO HOTEL 6:00

8/31/2006 7:15 AM

PUMPING IN 50-GW-001

(GOT GOOD FLOW)

TURBIDITY = 985

TURBIDITY = 7.5

TURBIDITY = 4.1

SAMPLING AT 8:55

FINISHED AT 12:00 NOON

PULSED OUT OF HOLE

MOVING TO TRY 50-GW-004

AGAIN 9:00 A

TUBING WOULD NOT GO THRU

PIPE - PULLED OUT TO REEX

PROBLEM WAS THE USE OF A

DRY CAP W/ INTERNAL THREADING

BAU IN W/ NEW PIPE

GOT GOOD FLOW

TURBIDITY = 1206 9:30

TURBIDITY = 126 9:45

TURBIDITY = 5.3 9:25

FINISHED SAMPLING @ 11:00 A

PULSED OUT OF HOLE 11:20 A

50-GW-004

31.20743  $\pm$  54'

82.36460

PICT 25 NEAR SHELL OF BLDG -

REMAINING FOUNDATION

224' 268'

50-GW-001

31.20775

82.36465

$\pm$  24'

PICT 26

PICT 26/1 INSIDE NW CORNER OF 901

FRANKS STREET, INSIDE FENCED AREA

WEST SIDE OF DRIVEWAY

182'

50-GW-005

31.20768

82.36403

$\pm$  16'

PICT 2

AT 55 20/50 21 IN OPEN

EOT.

LEAVING SITE @ 12:02

LUNCH

50-GW

2:40 PM - SO-GW-007 - SAMPLING @ 2:40 P

PLOT #15 HARRIS WELL LOCATION

31.21010

82.36383

} ±17'

SAMPLING OVER @ 3:10 P

SO-GW-009 - CITY OF WAYROSS WATER PWT

31.21181

82.35728

} ±16'

PLOT 6 - SAMPLING @ 3:30 P

WELL #3 City of Wayross

SAMPLING OVER @ 4:15 P

~~Bob Eliott~~

~~Derrick Eliott~~

~~MUR Used Oil Services~~

~~GAZ 000014100~~

~~Used oil (Non-HAZ) Manifest~~

~~9 drums (495 gallons) mixed~~

~~Chlorine/halogen test - passed (<1000 ppm)~~

~~11/27/05~~

Sewer Out LLC - Waycross, GA

29 August 2000

B. Blackwelder, F. Rowe, K. Sanford

Outside Secondary Containment

SS-12 @ 0800

~ 1 ft

SB-13 @ 0815

taken  $\frac{1}{2}$  3 + 4 ft

hit water + ~ 3 ft down

SS-14 @ 0920

~ 1 ft

SB-15 @ 0930

taken  $\frac{1}{2}$  3 + 3  $\frac{1}{2}$  ft, dark stain in soil  
observed

SS-16 @ 1020

1-2 ft

very black, strong odor detected

SS-18 @ 1055

1-2 ft

very sandy (looks like commercial sand)

\* top ~ 1 ft gravel removed before sampling



29 August 2006

B Blackwelder, F Rowe, K Sanlo

SS-17 @ 1145

lots of roots

SS-19 @ 1158

SS-26 @ 1211

# Seven Out Groundwater (GeoProbe) Sampling Notes

GW Sample	Date	Time	Turbidity	Flow	Notes
SO-GW-002	8/30/2006	9:45 AM	47.3	Sporadic	
Pushed to 19.5'		10:05 AM	750	98%	
		10:12 AM	3.63	Constant	
			Began sampling		
		1:55 PM	Completed sampling		
SO-GW-005	8/30/2006	3:03 PM	1132	Constant	
Pushed to 19.5'		3:10 PM	910	Constant	
		3:15 PM	17	Constant	
		3:25 PM	4.8	Constant	
			Began sampling,		Took duplicate
		5:30 PM	Completed sampling		
SO-GW-004	8/30/2006	4:30 PM	7.3	Minimal Flow	
Pushed to 19.5'		5:04 PM		None	Went dry before 3 volumes removed, wait to see if it will recharge
		5:22 PM			Still Nothing, Leaving and will try again in morning
SO-GW-001	8/31/2006	7:30 AM	985	Constant	
Pushed to 19.5'		7:45 AM	7.5	Constant	
		8:15 AM	4.1	Constant	Turbidity good but not yet removed 3 well volumes
		8:55 AM	Began sampling	Constant	Flow slowed
		Noon	Completed sampling		
SO-GW-004	8/31/2006	9:10 AM	1206	Constant	
Pushed to 19.5'		9:15 AM	126	Constant	
		9:25 AM	5.3	Constant	
			Began sampling	Constant	
		11:00 AM	Completed sampling		

## REFERENCE 39

# PHYSIOGRAPHIC MAP OF GEORGIA

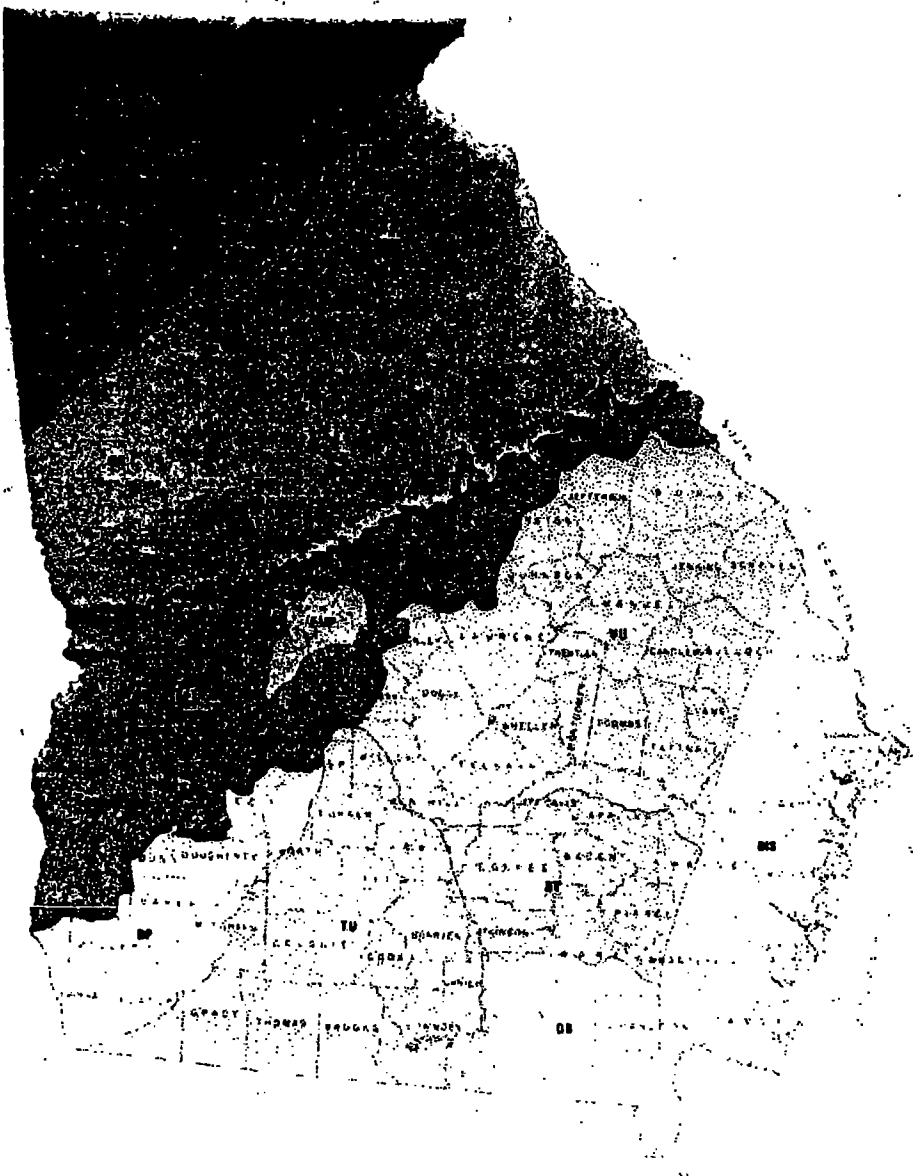
by

William Z. Clark, Jr. and Arnold C. Zisa

DEPARTMENT OF NATURAL RESOURCES  
Joe D. Tanner, Commissioner

THE GEOLOGIC AND WATER RESOURCES DIVISION  
Sam M. Pickering, State Geologist and Division Director

Atlanta  
1976



BT

**Bacon Terraces District** - Several moderately dissected terraces, generally parallel to the present coastline, are detectable on topographic maps of the Bacon Terraces District. However, they are very difficult to observe on the ground because the east facing scarps are very subtle. The terrace levels occur at elevations of 330-310 feet, 295-275 feet, 265-255 feet, 240 feet, 230 feet, 215-190 feet, and 180-160 feet. This district, on the north, west, and south, corresponds to the Satilla River drainage basin with its boundaries on the basin divide. The eastern boundary is the western base of Trail Ridge at approximately the 150 foot elevation. The southeast trending, very extended, dendritic drainage pattern has formed on Upper Tertiary sediments. This drainage network has produced long, narrow interfluvies with gently rounded to flat summits that rise gradually 50 to 100 feet above the narrow, marshy floodplains.

OB

**Okfeenokee Basin District** - Low relief, decreasing to the southeast, and numerous swamps are characteristic of the Okfeenokee Basin District. Relief varies from approximately 50 feet to less than 5 feet. Elevations in the district range from 240 feet in the north west on Pliocene-Pleistocene deposits to 75 feet in the southeast on Pleistocene deposits. The swamps range in size from a few hundred square feet to the 660 square miles of the Okfeenokee Swamp. The northwestern portion of the Okfeenokee Swamp, like the northern and western portions of the district, is drained by the southeast flowing tributaries of the southwest flowing Suwannee River. The southeastern portion of the swamp is drained by the south-flowing St. Marys River. At the extreme southern end of the district the St. Marys River turns east and flows through a gap in Trail Ridge. The northern and western boundaries of the district coincide with the northern and western drainage divides of the Suwannee River. The eastern boundary is the western base of Trail Ridge.

Barrier Island Suwannee District - (Map shows only the western portion)

## REFERENCE 40



# The Satilla Initiative

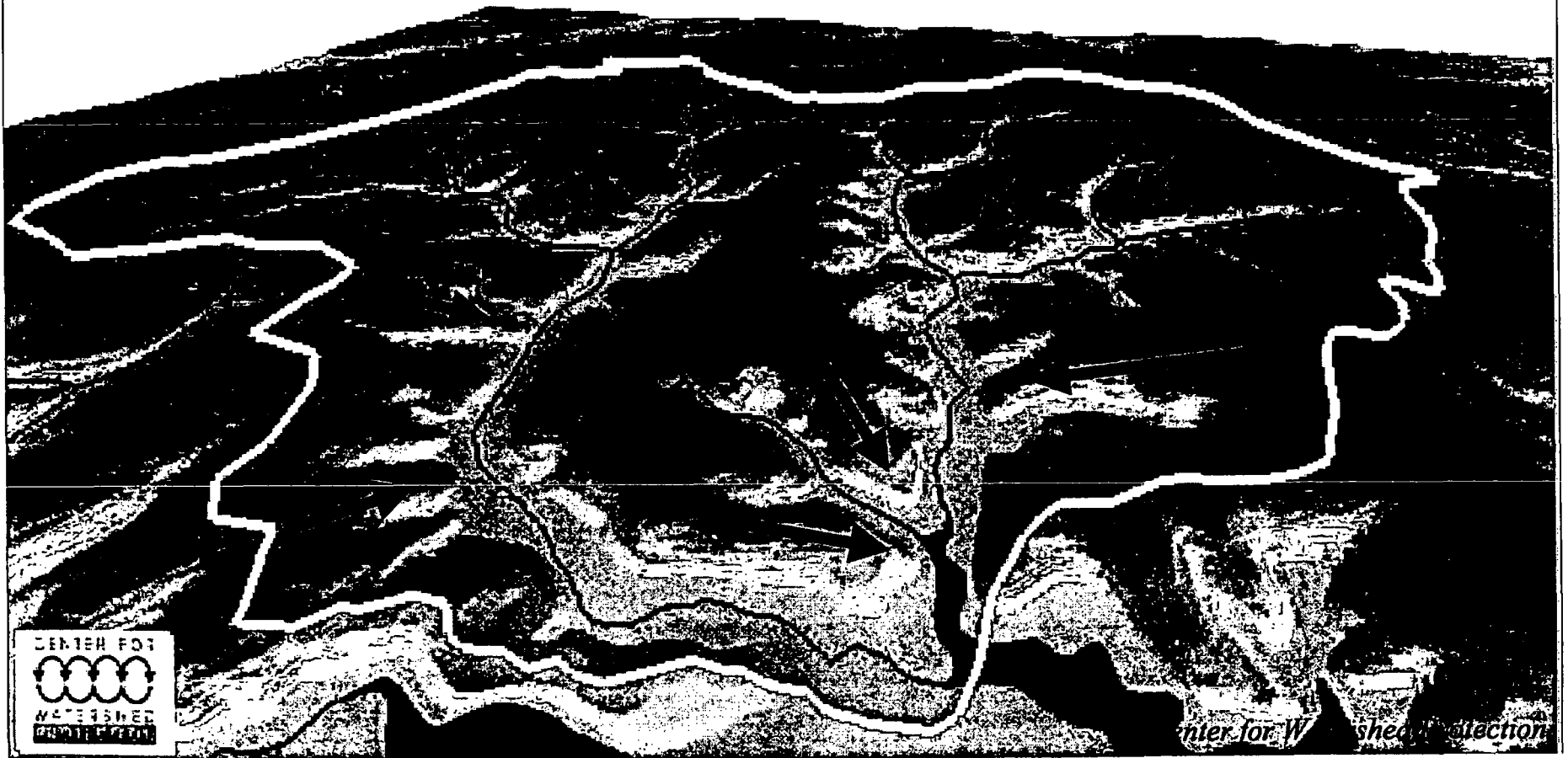
Spring 2004

# Overview

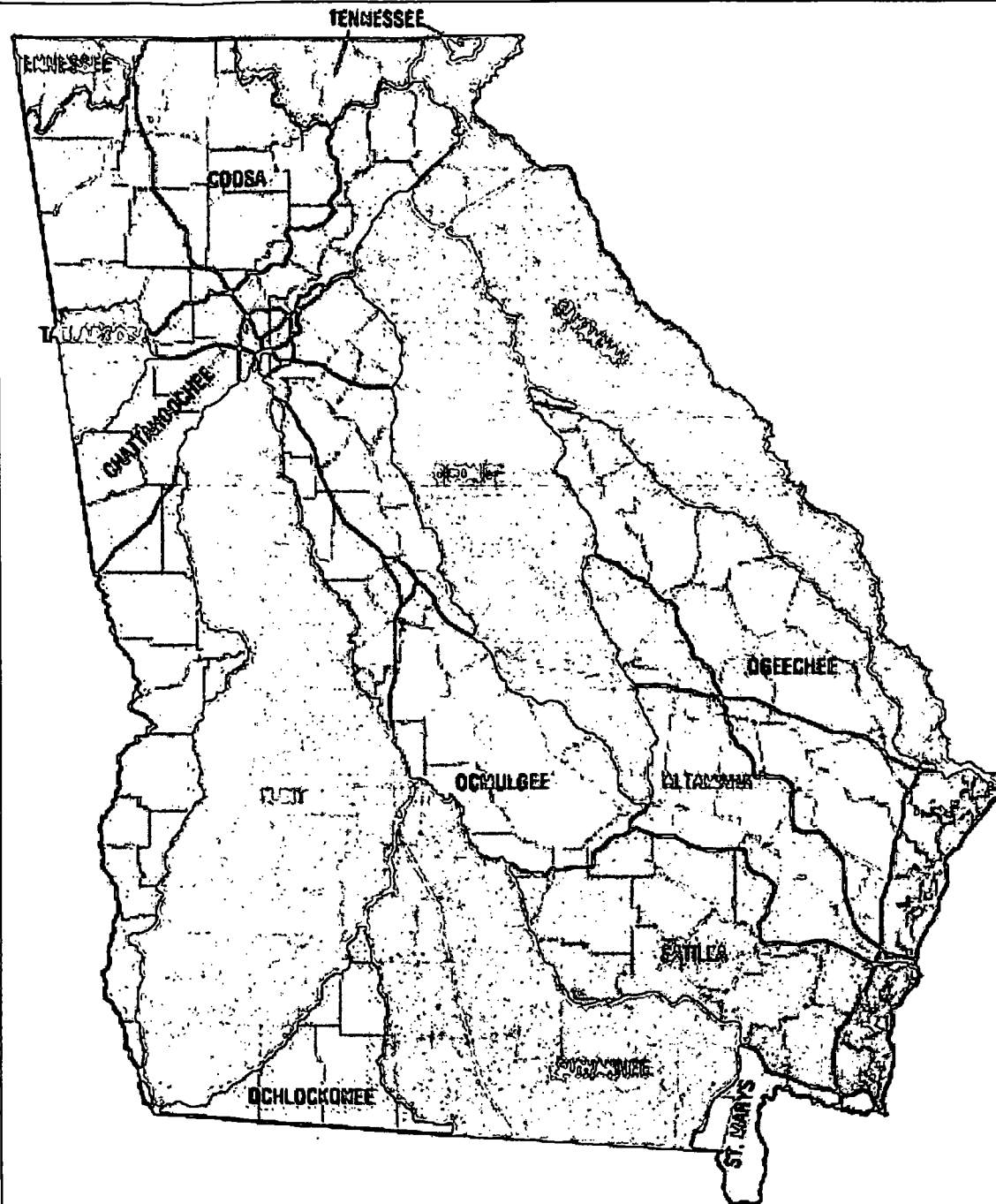
- Background on the Satilla watershed
  - Including summary of region and current environmental issues
- Rivers 101
- Expectations for & overview of the class

# What Is a Watershed?

A watershed is the area of land that drains  
to a particular point along a stream

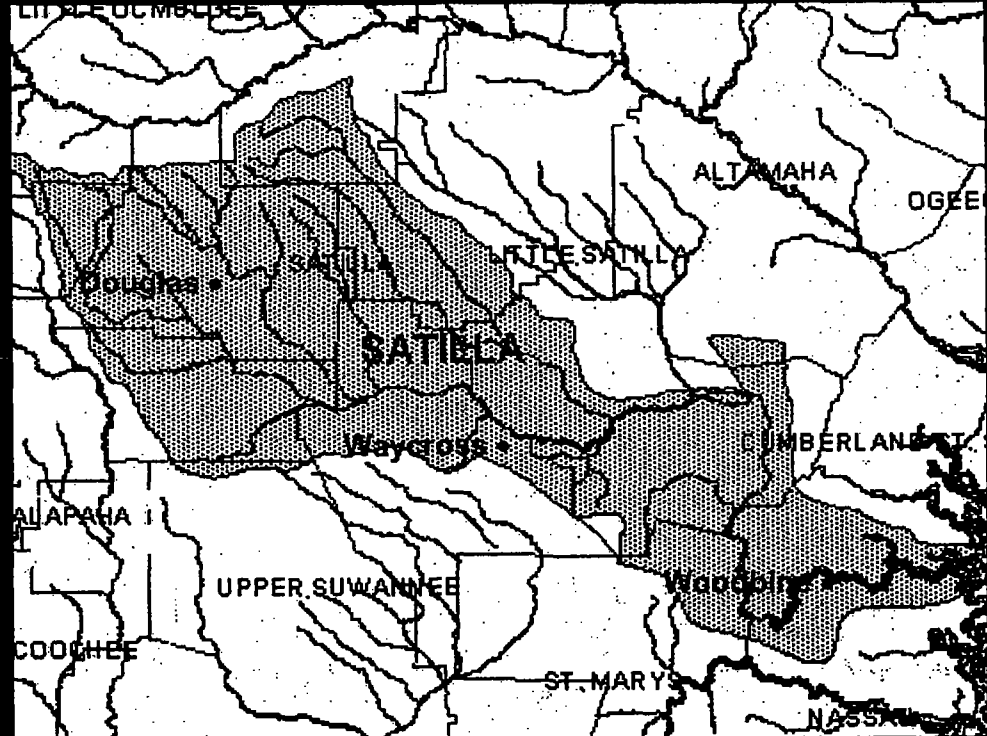






# Satilla River Basin

- Lies entirely with Atlantic coastal plain
- Basin occupies 3,940 square miles
- Satilla River flows 260 miles before emptying into St. Andrews Sound
- Other major waterways in basin include Alapaha River, Little Satilla River, Turtle River, Seventeen Mile Creek and Hurricane Creek



# Why the Satilla?

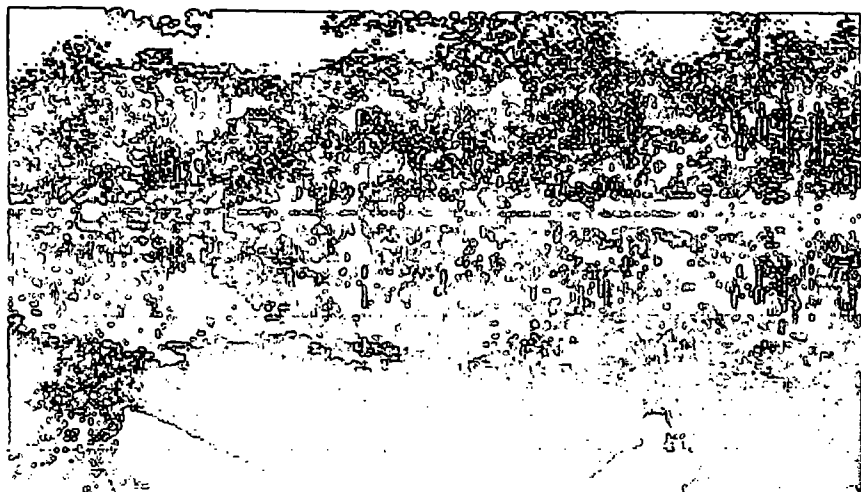
- Georgia DNR specifically asked UGA to initiate program in Satilla similar to Etowah
- UGA received property along Satilla
- Development, agricultural runoff and industrial-residential pollution are relatively low so there is potential for protection

AND...

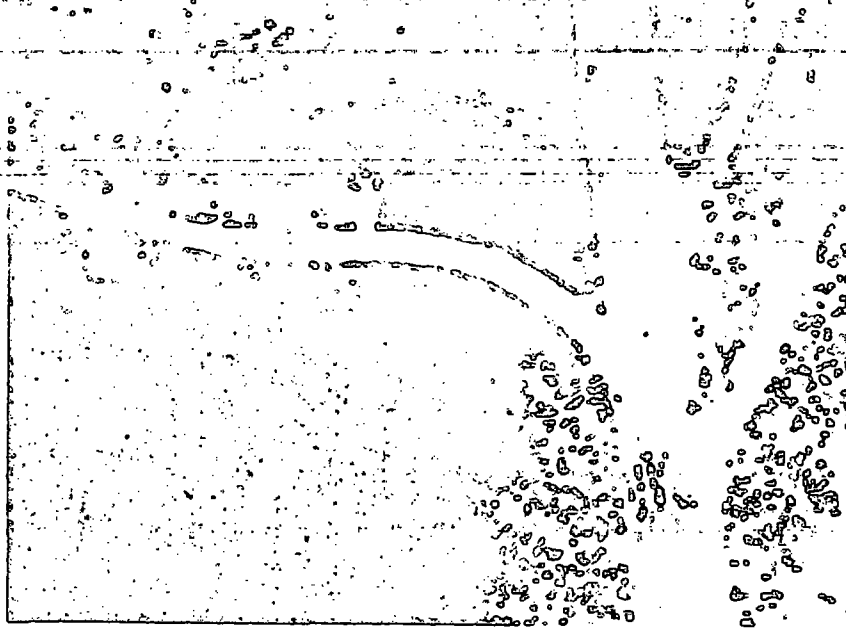
# A Unique Ecosystem

- Black-water river with beach-white sandbars
- Extensive bottomland forests and cypress and black gum swamps bordering river
- Bluffs go up to 50 ft above river in upper reaches and 8 ft in lower reaches
- Near Woodbine, Satilla widens and loses canopy of trees, and then becomes tidally influenced and surrounding vegetation consists of marsh





# Satilla Wildlife



# Satilla Wildlife

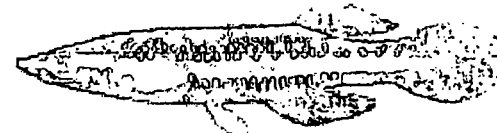
- Raccoons, opossum, armadillos, bobcats, otters, beaver, gray foxes, black bear, alligators and turtles
- Game species include white-tailed deer, wild turkey, gray squirrel and feral hogs
- Birds include belted kingfisher, barred owl, great horned owl, red tail hawk, wood storks, herons and osprey

# Satilla Fishes

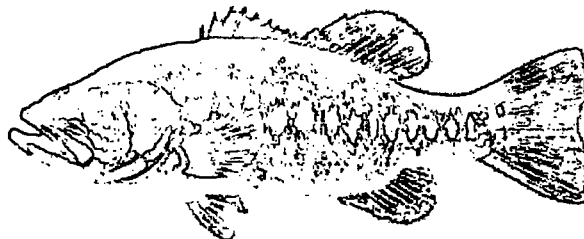
- 52 species that represent 16 families live in the watershed
- Supplies major fisheries for redbreast sunfish and catfish



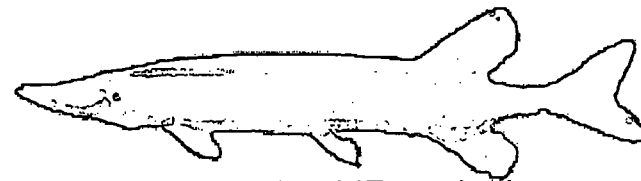
Redbreast Sunfish (*Lepomis auritus*)



Banded Topminnow (*Fundulus cingulatus*)



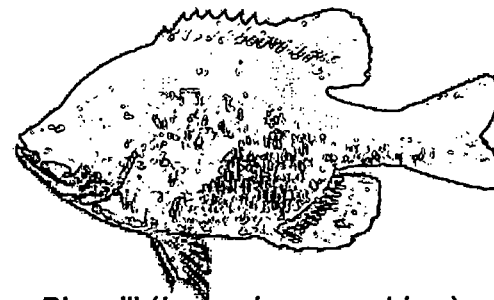
Largemouth Bass (*Micropterus salmoides*)



Chain Pickerel (*Esox niger*)



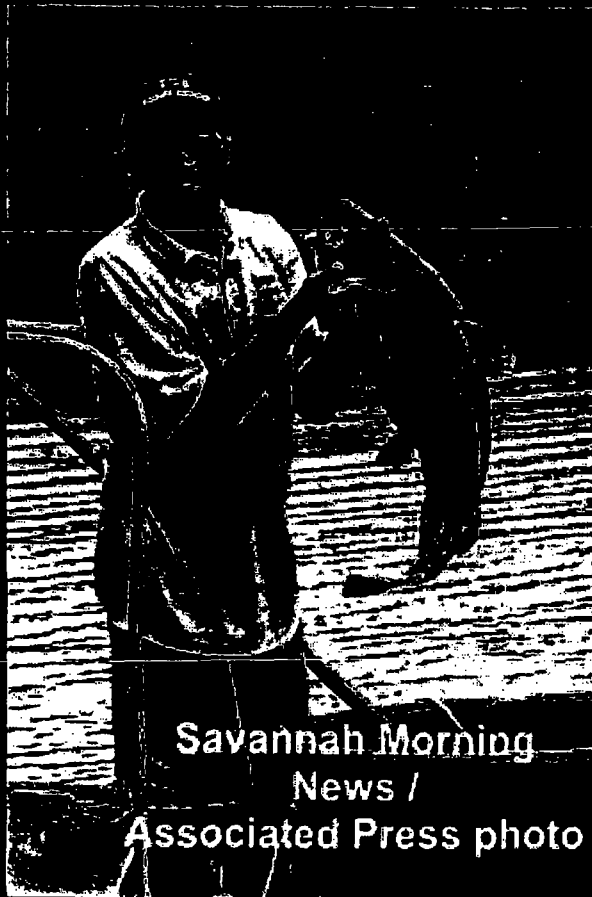
Channel Catfish (*Ictalurus punctatus*)



Bluegill (*Lepomis macrochirus*)

# Flathead Catfish

(*Pylodictus olivaris*)



Savannah Morning  
News /  
Associated Press photo

- Invasive species in Satilla
- Decimates populations of other fishes, especially the redbreast sunfish
- Georgia DNR's Wildlife Resources Division has a removal program to keep population from gaining dominance
- Harvest all flathead catfish caught in Satilla; Do not release any



# Satilla Flora

- Wet areas: cypress and black gum swamps
- Drier areas: water oak, laurel oak, sweetbay, red maple and pine
- Many higher, sandy plateaus converted to monoculture pine plantations



# Chinese Tallow

(*Sapium sebiferum*)

- Invasive species found around Satilla



- Gradually displacing black willow and other native species on sandbars and margins of river

# Laura Walker State Park

- Only publicly owned lake in the Satilla River Watershed

• 116-acre blackwater

- Fisheries for largemouth bass, bluegill, catfish, chain pickerel and flier



# Brief History of Satilla

- “Satilla” comes from Saint Illa, an officer in the Spanish Army
- Early times, the Satilla was known for abundant game and fur
- By the late 1800s, pioneer families established sustainable farming near the river
- Many famous large rice plantations near coast – Belleview, Fairfield and Refuge

# Brief History of Satilla

- Satilla and its bottomlands provided numerous natural resources to settlers
  - Farmers grazed cattle and hogs in bottomlands
  - Longleaf pines were timbered and rafted down river
  - Pine forests supported naval stores industry (turpentine)
- Early 1900s, wood pulp and paper mills were established in the areas and began the steady depletion of the natural forested areas

# Development in the Watershed

- As of 1995, about 101,000 people live in the Satilla watershed
- Between 1975 and 1995, population increased at a rate of 1% per year
- Satilla River basin supported 182,100 jobs in 1995
- Moving from a manufacturing-based to a service-based economy



# Stresses to the Satilla

- Lack of planning, zoning and enforcement of regulations
- Rural development has continued without controls
- Cabins and trailer sites have encroached into floodplain

# Stresses have resulted in...

- Lack of public awareness and concern
  - Dead animal carcasses
  - Cars and ATVs damage streambed
- Pollution from raw sewage and medical waste spills, domestic trash and litter



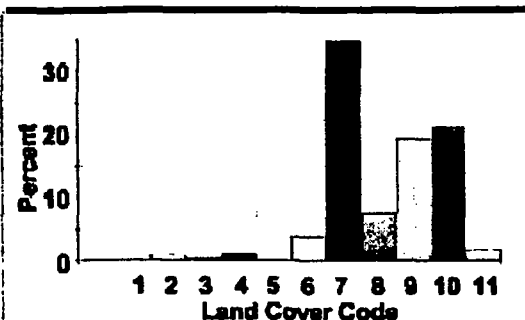


# Change in Land Use and Cover

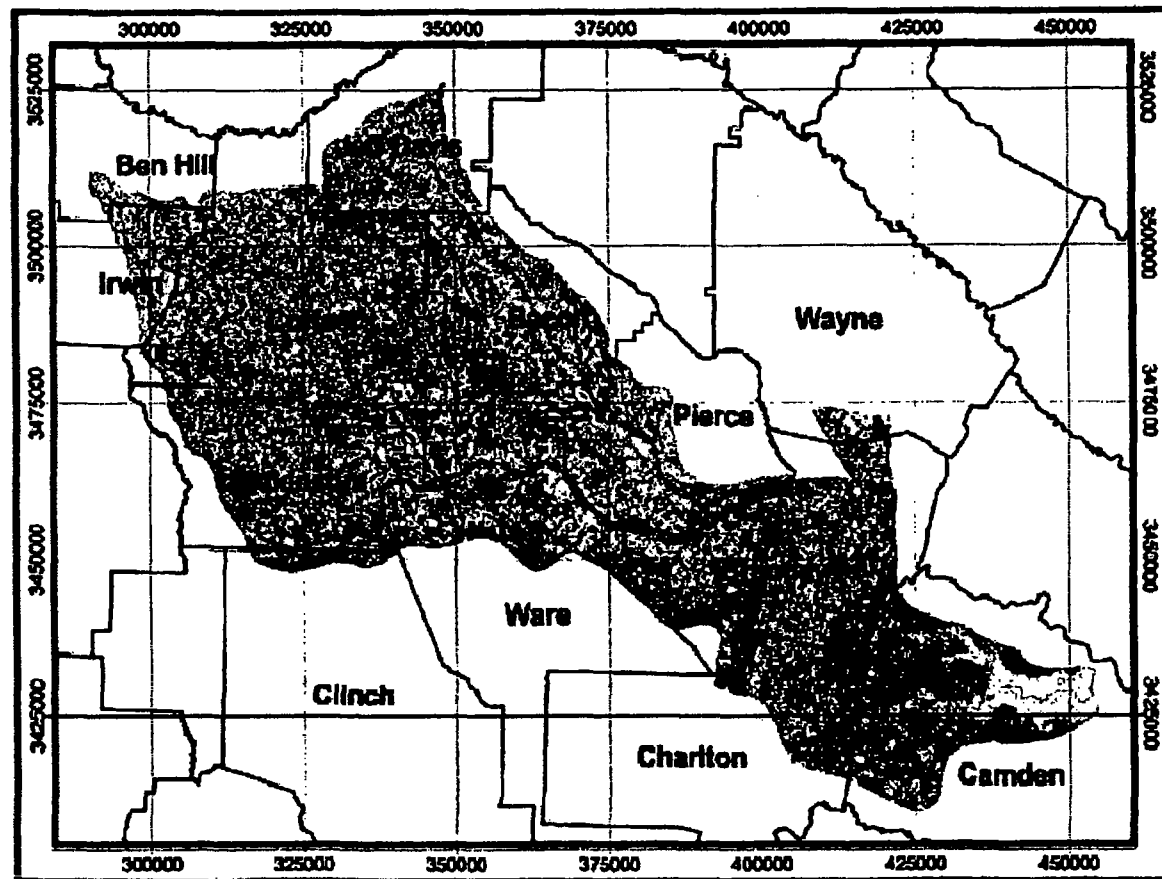
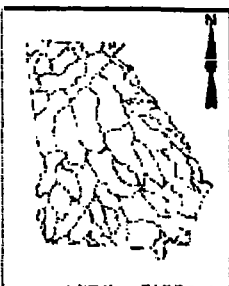
Major Land Cover %	1974	1990
Upland Forest	56.39	56.19
Deciduous	0.10	7.00
Pine	51.74	34.50
Mixed	4.48	14.73
Agriculture	26.14	22.04
Urban	1.11	1.70
Non-forested Wetland	1.51	3.49
Forested Wetland	14.32	15.71
Water/Flat/Beaches	0.52	0.87

# SATILLA WATERSHED

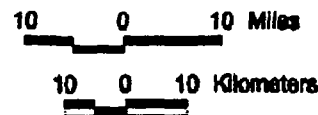
1974 Land Cover



1	Sand/Rock/Mines
2	Open Water
3	Low Intensity Urban
4	High Intensity Urban
5	Clearcut/Sparse
6	Deciduous Forest
7	Evergreen Forest
8	Mixed Forest
9	Agriculture
10	Forested Wetland
11	Non-forested Wetland



Source: 1974 Landsat MSS

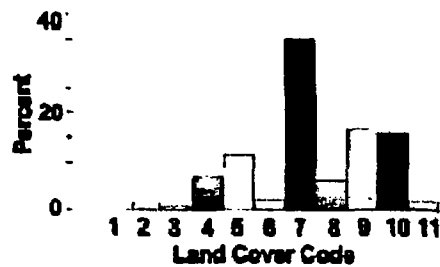


Projection:  
UTM 17  
NAD 83

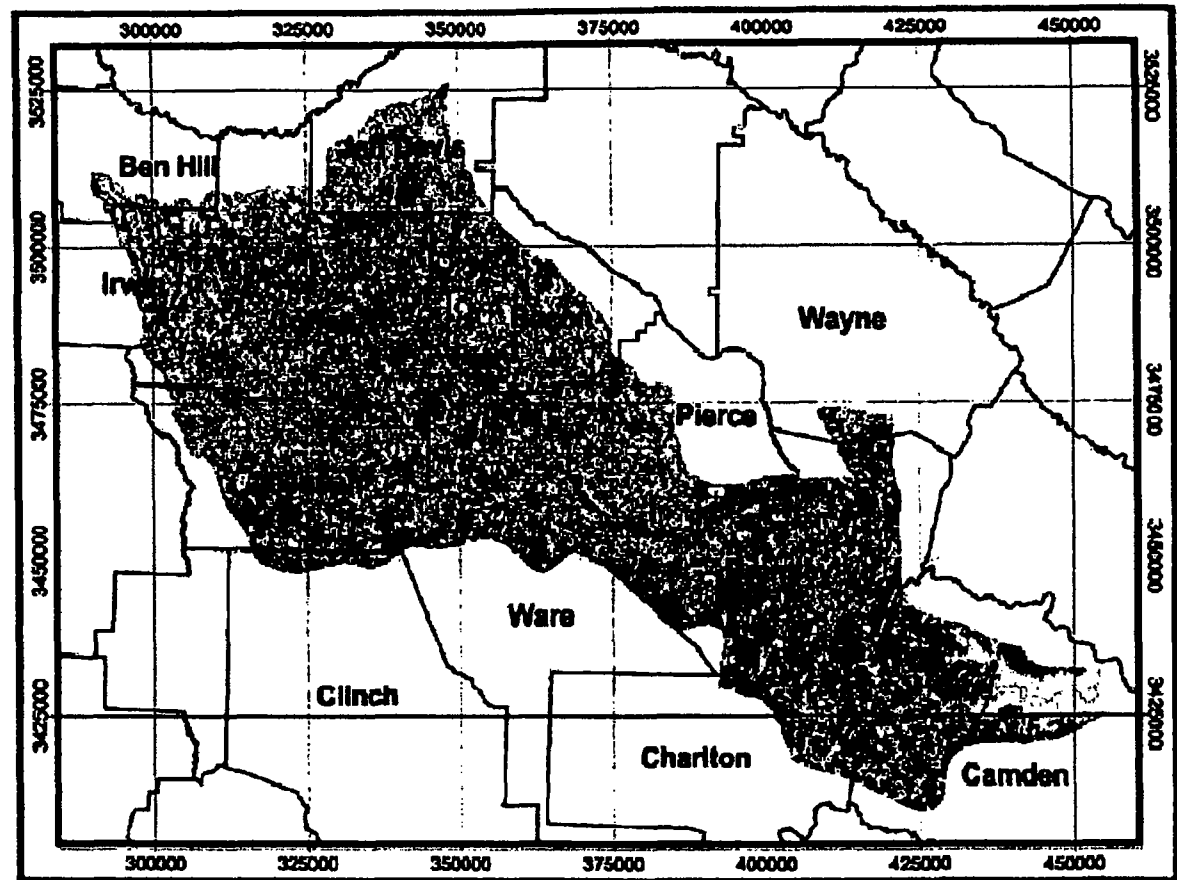
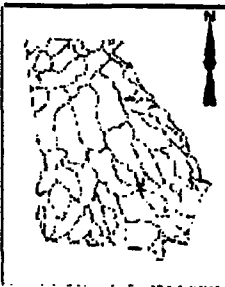


# SATILLA WATERSHED

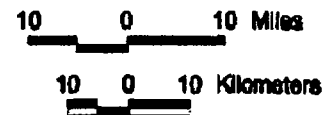
1998 Land Cover



1	Sand/Rock/Mines
2	Open Water
3	Low Intensity Urban
4	High Intensity Urban
5	Clearcut/Sparse
6	Deciduous Forest
7	Evergreen Forest
8	Mixed Forest
9	Agriculture
10	Forested Wetland
11	Non-forested Wetland



Source: 1998 Landsat TM

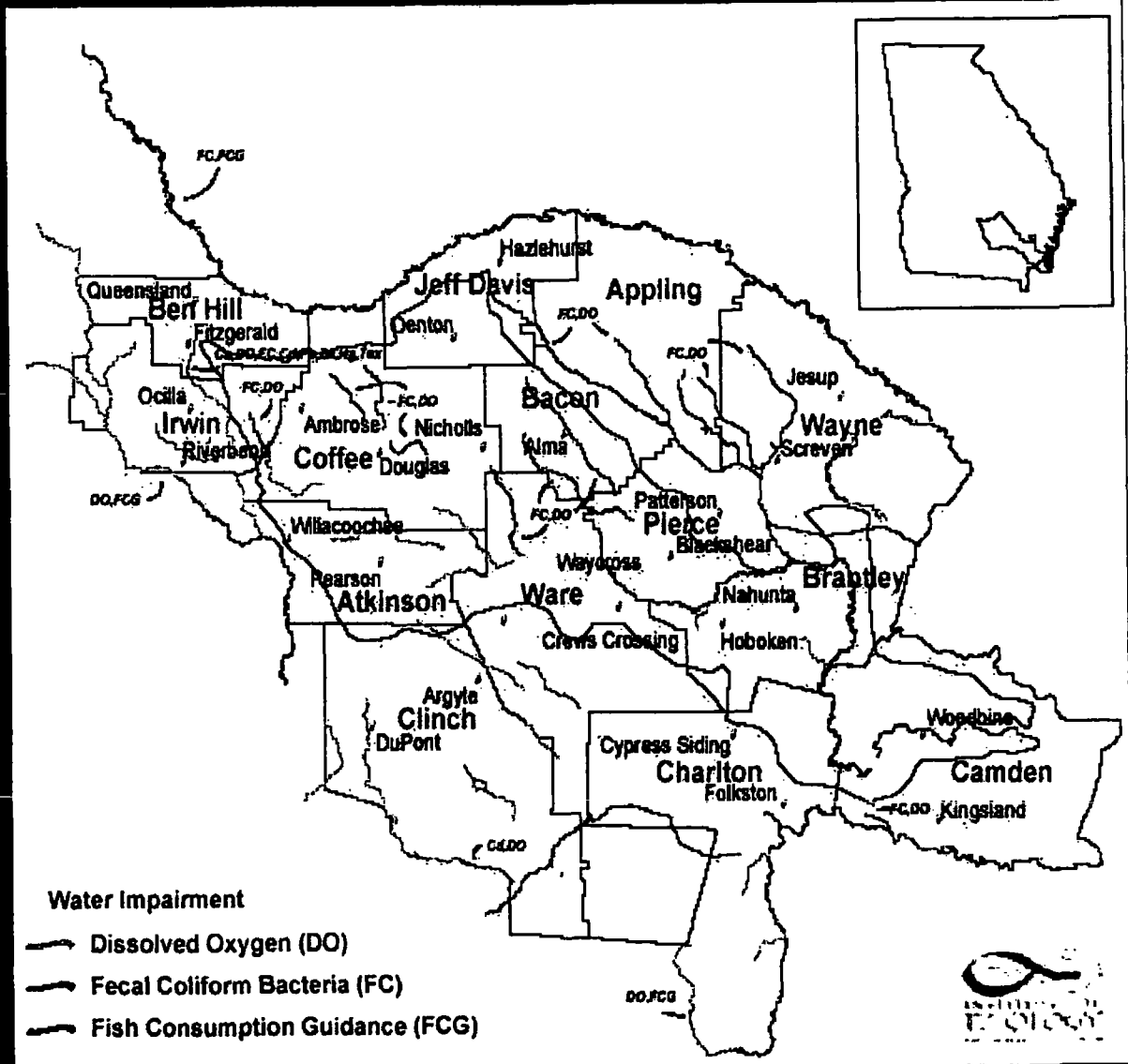


Projection:  
UTM 17  
NAD 83



# Impaired Waterways

- 19 stream segments do not support designated use (*fecal coliform and dissolved oxygen*)
- 2 stream segments do not meet fish consumption guidelines (*mercury*)



# Streams Not Supporting Designated Uses

Stream	Location	Designated Use	Criterion Violated	Potential Cause(s)
Big Creek	S. Prong Big Cr. To Satilla River (Brantley)	Fishing	DO	NP (Non Point)
Big Satilla Creek	Headwaters near Hazlehurst to Sweetwater Cr. near Baxley (Jeff Davis / Appling)	Fishing	DO,FC	UR (Urban Runoff)
Boggy Creek	Dry Creek to Little Satilla Cr. north of Screven (Wayne)	Fishing	DO,FC	NP
Broxton Creek	Seven Cr. To Seventeen Mile River near Broxton (Coffee)	Fishing	DO,FC	NP
City Drainage Canal	Trib. To Satilla River, Waycross (Ware)	Fishing	FC	UR
Colemans Creek	Dry Brach S. of Surrency to Big Satilla Cr. Near Screven (Appling / Wayne)	Fishing	DO,FC	Ur
Hog Creek	Hurricane Cr. To Satilla River S. of Nicholls near Bickley (Coffee / Ware)	Fishing	DO,FC	NP
Hurricane Creek	Downstream Little Cr. To Ten Mile Cr. Near Alma (Bacon)	Fishing	DO,FC	NP
Little Hurricane Creek	Ga. Hwy. 32 to Hurricane Cr. (Bacon / Ware / Pierce)	Fishing	DO,FC	NP
Little Satilla Creek	Keene Bay Branch to Dry Branch near Odum (Wayne)	Fishing	DO,FC	UR

Source: Georgia EPD, 2002

# Streams Not Supporting Designated Uses

(Continued)

Stream	Location	Designated Use	Criterion Violated	Potential Cause(s)
Little Satilla Creek	Boggy Cr. To Little Satilla River near Screven (Wayne)	Fishing	DO	NP
Pudding Creek	Park Bay to Satilla River N. of Pearson (Atkinson)	Fishing	DO	NP
Red Bluff Creek	Little Red Bluff Cr. to Satilla River E. of Pearson (Atkinson)	Fishing	DO	NP
Reedy Creek	Headwaters to Big Satilla Cr. Near Screven (Appling / Wayne)	Fishing	DO,FC	UR
Roses Creek	Upstream Ga. Hwy. 206 to Seventeen Mile River near Broxton (Coffee)	Fishing	DO,FC	NP
Satilla Creek	Hunters Cr. E. of Ocilla to Satilla River (Irwin / Coffee)	Fishing	DO,FC	NP
Satilla River	Satilla Cr. to Reedy Cr. Near Douglas (Coffee)	Fishing	DO	NP
Seventeen Mile River	Twenty Mile Cr. N. of Douglas to Otter Cr. Downstream Gen. Coffee St. Park (Coffee)	Fishing	DO,FC	UR
Sweetwater Creek	Black Water Cr. to Big Satilla Cr. near Baxley (Appling)	Fishing	DO,FC	UR

Source: Georgia EPD, 2002

# Satilla River

## Conclusion:

- Unique ecosystem in Georgia
- Right now, development and pollution are low, but are increasing.

The Time is Now...

# Rivers 101

Background information  
on rivers and the  
importance of aquatic  
resource protection



Dr. Ron Carroll  
Institute of Ecology



# The Satilla Initiative

The Satilla Initiative is a service learning course that provides a structured and supportive format for students to apply policy, design and ecological principles learned in the classroom to the real world of people and policy.



# Mission Statement

To help protect the ecological integrity of the Satilla River Basin by working with stakeholders to reduce the impact of human activities on water quality and biodiversity.

# Practicum Goals

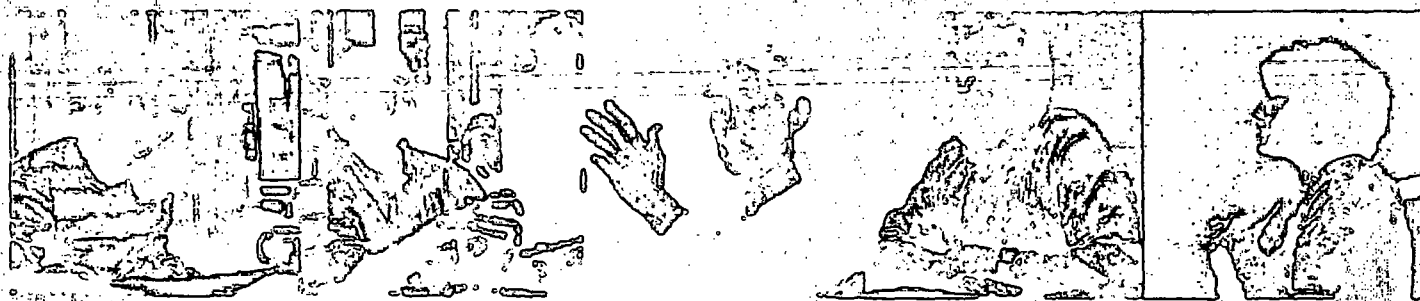
- Provide an educational environment where students can apply skills learned in the traditional classroom to pressing community concerns and problems
- Provide an opportunity for students and faculty to work with other disciplines in integrated environmental decision-making and problem-solving thus improving their ability to understand, communicate with, and influence other disciplines

# Practicum Goals

- Increase awareness of the importance of addressing environmental issues proactively within the university community and the broader community
- Respond to community concerns and problems in Satilla River basin
- Build capacity for service learning at UGA

# Satilla Initiative

- Law
- Ecology
- Education
- Agricultural engineering
- Environmental design
- Forestry



# How the Practicum Works

- Students choose groups/projects
- Faculty provides support
  - Developing work plans/strategy
  - Lectures
  - Resources (literature, contacts)
  - Group oversight
- Reflections throughout semester
- Final products

# Expectations

- Attend class lectures and field trip
- Read assignments prior to each lecture
- Work together to define class projects
- Attend group meetings and work cooperatively to develop a work plan and to complete project
- Attend individual meetings with professors
- Keep a journal of work completed and reflections
- Students will be graded on class participation and project substance and presentation.





# Potential Projects

- Develop a stormwater management plan for the City of Waycross
- Identify solution to City of Waycross sewage spills
- Develop strategy for eliminating disposal of animal carcasses in the river
- Manage ATVs and other off-road vehicular traffic within the banks (and streambed!)
- Develop plan for controlling invasive flora and fauna
- Manage industrial forestry practices within the watershed

# Potential Projects/cont.

- Manage siting and operation of septic tanks within watershed
- Titanium mining
- Sand mining
- Develop an ongoing forum/organization for regional discussion of/action on water-related issues
- Develop management plan for the Institute of Ecology's property adjacent to the Satilla
- Durango Paper Mill Relocation
- Research and recommend state and local strategies for protecting wetlands, including isolated wetlands

# What Next?

- Pass around contact sheet
- Talk about rubric
- Talk about paddling trip
- Any questions?

# Special thanks

- Georgia Department of Natural Resources
- Georgia Wildlife Federation
- Gloria Taylor and Save Our Satilla – SOS
- Jack Sandow, fisheries biologist and local expert
- UGA Natural Resources Spatial Analysis Lab – NARSAL
- Georgia River Network
- Photos: Randall Hollis, Jack Sandow and SatillaRiver.com

## REFERENCE 41

UNITED STATES DEPARTMENT OF THE INTERIOR  
Harold E. Ickes, Secretary

SURVEY OF THE  
W. H. W. H. W. H.

Bulletin 941

# GEOLOGY OF THE COASTAL PLAIN OF GEORGIA

BY

C. WYTHE COOKE



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1948

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.  
Price \$1.25

Georgia were formed during the glacial stages, when the climate presumably was somewhat cooler than now, and that they are not now increasing. Proof of this supposition is lacking, but peat now below tide level in Blackwater River in western Florida contains fresh-water microscopic plants (diatoms) like those of much more northern latitudes.<sup>40</sup> Search should be made for diatoms in the peat deposits of Georgia.

#### BRANDYWINE FORMATION

##### GENERAL FEATURES

*Name.*—The Brandywine formation was named in 1915<sup>41</sup> from a place in Prince Georges County, Md. It was later restricted<sup>42</sup> to the deposits that accumulated in the sea and estuaries at a stage of sea level about 270 feet higher than the present. The formation in Georgia has never been formally described, but the older name Brandywine was substituted in 1931<sup>43</sup> for the name Hazelhurst terrace, which was described in 1925.<sup>44</sup>

*Distribution.*—The Brandywine sea probably extended across Georgia from Screven County to Thomas County, but much of its deposits have been removed by erosion. Recognition of them is made difficult by the lack of topographic maps except in the area east of longitude 82°, where the Brandywine formation is thoroughly dissected. The generalized boundaries shown on the geologic map (pl. 1) will be greatly modified by detailed mapping.

*Thickness, lithologic character, and stratigraphic relations.*—The Brandywine formation probably does not much exceed 50 feet in thickness. It consists chiefly of sand and gravel resembling the coarser unconsolidated parts of the Hawthorn formation, from which much of it appears to have been derived. No fossils have been found in it. It lies unconformably on the Hawthorn and possibly other formations. Any formations that may overlie it are presumably also unconformable, for the sea probably withdrew beyond the present seacoast at the end of Brandywine time.

*Economic significance.*—Some of the sand and gravel deposits in the Brandywine formation may be of value for structural work or as road metal.

<sup>40</sup> Hanna, G. D., Diatoms of the Florida peat deposits: Florida Geol. Survey, 23d-24th Ann. Repts., pp. 68-69, pls. 1-11, 1923.

<sup>41</sup> Clark, W. B., The Brandywine formation of the Middle Atlantic Coastal Plain: Am. Jour. Sci., 4th ser., vol. 40, pp. 499, 505, 1915.

<sup>42</sup> Cooke, C. W., Seven coastal terraces in the Southeastern States: Washington Acad. Sci. Jour., vol. 21, p. 506, 1931.

<sup>43</sup> Idem, p. 506.

<sup>44</sup> Cooke, C. W., Physical geography of Georgia; the Coastal Plain: Georgia Geol. Survey Bull. 42, p. 29, 1925.

#### COHARIE FORMATION

##### GENERAL FEATURES

*Name.*—The Coharie formation was named in 1912 by Stephenson<sup>45</sup> from Great Coharie Creek in Sampson County, N. C. Cooke<sup>46</sup> more precisely defined it by reference to a shore line about 215 feet above sea level. The remnants of the original surface in Georgia were called the "Claxton terrace"<sup>47</sup> before their identity with the Coharie terrace was established.

*Distribution.*—Much more of the Coharie than of the Brandywine has been preserved, especially in the southern part of Georgia, where a broad stretch about 50 miles long has been cut through by only a few streams. Farther north the areas are smaller. The boundaries of the formation shown on the geologic map (pl. 1) are merely provisional because most of the Coharie areas are not included in topographic maps.

*Thickness and lithologic character.*—The Coharie formation consists chiefly of sand, some of which is as coarse as rice. Angular pebbles apparently derived from the Hawthorn occur in it at some places, and it contains also smooth flat beach pebbles of transparent quartz. Its thickness is doubtless variable, but probably does not much exceed 50 feet. No fossils have been found in it.

*Stratigraphic relations.*—If the Coharie anywhere lies on the Brandywine formation, the relations are probably unconformable, for the sea presumably retreated beyond the present coast line during the interval between Brandywine and Coharie time. At most places it lies unconformably on the Hawthorn formation. The inconspicuousness of the scarp separating the Coharie terrace from the next lower Sunderland terrace and the apparent straightness of the Sunderland shore line suggest that the Coharie was immediately succeeded by the Sunderland without an intermediate retreat of the sea beyond the Sunderland shore.

*Economic significance.*—Sand and gravel are the only deposits in the Coharie formation that are likely to be of commercial value.

#### SUNDERLAND FORMATION

##### GENERAL FEATURES

*Name.*—The Sunderland formation and the Sunderland terrace correspond approximately to the Okefenokee formation and the

<sup>45</sup> Stephenson, L. W., The Coastal Plain of North Carolina; the Quarternary formations: North Carolina Geol. Survey, vol. 3, p. 273, 1912.

<sup>46</sup> Cooke, C. W., Correlation of coastal terraces: Jour. Geology, vol. 38, p. 582, 1930; Seven coastal terraces in the Southeastern States: Washington Acad. Sci. Jour., vol. 21, p. 506, 1931.

<sup>47</sup> Cooke, C. W., Physical geography of Georgia; the Coastal Plain: Georgia Geol. Survey Bull. 42, p. 29, 1925.

## REFERENCE 42



# Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, SE, Suite 1154, Atlanta, Georgia 30334

Noel Holcomb, Commissioner

Carol A Couch, Ph.D., Director

(404) 656-2833

## **TRIP REPORT**

### **SITE NAME & LOCATION:**

Seven Out LLC Tank  
901 Francis Street  
Waycross, Georgia 31501  
Ware County  
GAR000030007

### **TRIP BY:**

Brett Blackwelder *RB*  
Environmental Engineer  
Georgia Environmental Protection Division,  
Hazardous Waste Management Branch,  
Government Facilities Unit

Edwin Williams  
Advanced Geologist  
Georgia Environmental Protection Division,  
Hazardous Waste Management Branch,  
Government Facilities Unit

### **DATE OF TRIP:**

April 7-8, 2005

### **PURPOSE:**

This Trip Report documents a Site Inspection by Brett Blackwelder and Edwin Williams representing the Hazardous Waste Management Branch of the Georgia Environmental Protection Division (GA EPD). The purpose of this inspection was to gather information for a Preliminary Assessment (PA) of Seven Out LLC Tank in Waycross, Georgia.

### **BACKGROUND:**

Seven Out LLC Tank is the parent company of BCX, Incorporated. The GA EPD's information for the site at 901 Francis Street in Waycross is filed under BCX, Inc. Waycross Facility. This site has the EPA Identification Number GAR000030007. The Ware County Assessor's Office lists the property at 901 Francis Street as owned by Seven Out LLC, A Florida LC Company. The address for Seven Out LLC is listed as 1859 East Adams Street, Jacksonville, Florida, 32202. The United States Environmental Protection Agency (US

EPA) refers to the site at 901 Francis Street as the Seven Out LLC Site. For consistency the site will be referred to as the Seven Out LLC Site for the remainder of this report. The GA EPD received the EPA Notification of Regulated Waste Activity (EPA Form 8700-12) from the facility on December 11, 2001. The facility notified as a used oil processor. However, GA EPD files indicate that the facility primarily accepted "non-hazardous wastewater" as identified on facility manifests.

## **COMMENTS:**

The first visit to the site was on Thursday April 7, 2005, at approximately 2:30 pm. At the time of the visit there was steady rainfall. A windshield survey of the site was performed from the State vehicle. The site did not appear to be in use. Using a GPS (Global Positioning System) receiver the sites geographic coordinates were determined to be latitude 31 degrees 12 minutes 26.8 seconds North and longitude 82 degrees 21 minutes 49.8 seconds West. The GPS receiver indicated an elevation of 147 feet above sea level. The building at 901 Francis Street was closed and locked (See Photographs 24, 43, and 44). East of this building at 801 Francis Street is a building, which houses The Sports Shop, Inc. Mr. Bennie James owns the Sport Shop Inc. building and property. Immediately behind this building is the used oil processing plant or "tank farm" (See Photographs 1-8 and 17-19). The tank farm is separated from the building at 901 Francis Street by a combined asphalt and concrete parking area.

The area surrounding the Seven Out LLC facility is a mixed use area including commercial, industrial, and residential property (See Photographs 40-42 and 45-47). Included are The Sports Shop, Inc., NASCO Engine Rebuilding, Praxair Distribution SE (welding supplies, industrial and scientific gases, etc.), and Tri-State Technical Services (commercial laundry equipment). The nearest residential property is located at 103 Folks Street approximately 200 feet from the tank farm area (See Photograph 46). The property south of the site is owned by CSX Railroad. Four frac tanks from the site are located on CSX property (See Photographs 13-14).

The two primary areas of concern are the tank farm and the frac tanks. Stained soil has been observed outside the secondary containment in place around the tank farm (See Photograph 4) and near the frac tanks. The tank farm and the area containing the frac tanks are separated by railroad tracks and a drainage ditch (See Photographs 9-12). Drainage from the site flows into the drainage ditch, which flows west approximately 1300 feet into an unnamed creek. A resident at 1310 Alpha Street stated that the creek always had water in it and that she had never observed anyone fishing in the creek. The Probable Point of Entry (PPE) would be at the point where the drainage ditch meets the unnamed creek. This creek flows northeast for approximately 2000 feet before continuing underground by culvert. Water then flows underground in an east direction for approximately 3000 feet before exiting near the intersection of Lee Avenue and Memorial Drive (Hwy 23). Water then flows east for less than 1000 feet into the City Drainage Canal. The City Drainage Canal flows in an northeast direction for approximately 2.8 miles before joining the Satilla River. An

employee of Wings Bait and Tackle located at 427 Memorial Drive stated that children sometimes fish for brim in the City Drainage Canal, however most fishing is done in the Satilla River.

Research on the history of the Seven Out LLC Tank site included visits to the Ware County Tax Assessor's office at 215 Oak Street and the Ware County Courthouse at 800 Church Street, both located in Waycross. Historical property information is taken largely from information found on Sanborn Fire Insurance Maps. The building at 901 Francis Street is shown as a Coca-Cola Bottling Co. building on a map dated March 1922. The Sanborn Map for 1930 shows additions were made to this building. The Sport Shop Inc. building is shown on the 1922 Sanborn Map as P.A. Hay Co. and described as a grocery warehouse with part of the building used for hay and feed. The site of the tank farm is shown on the 1922 Sanborn Map as having a building marked John D. Hopkins and used for storing hay and grain and in 1930 grocery was added.

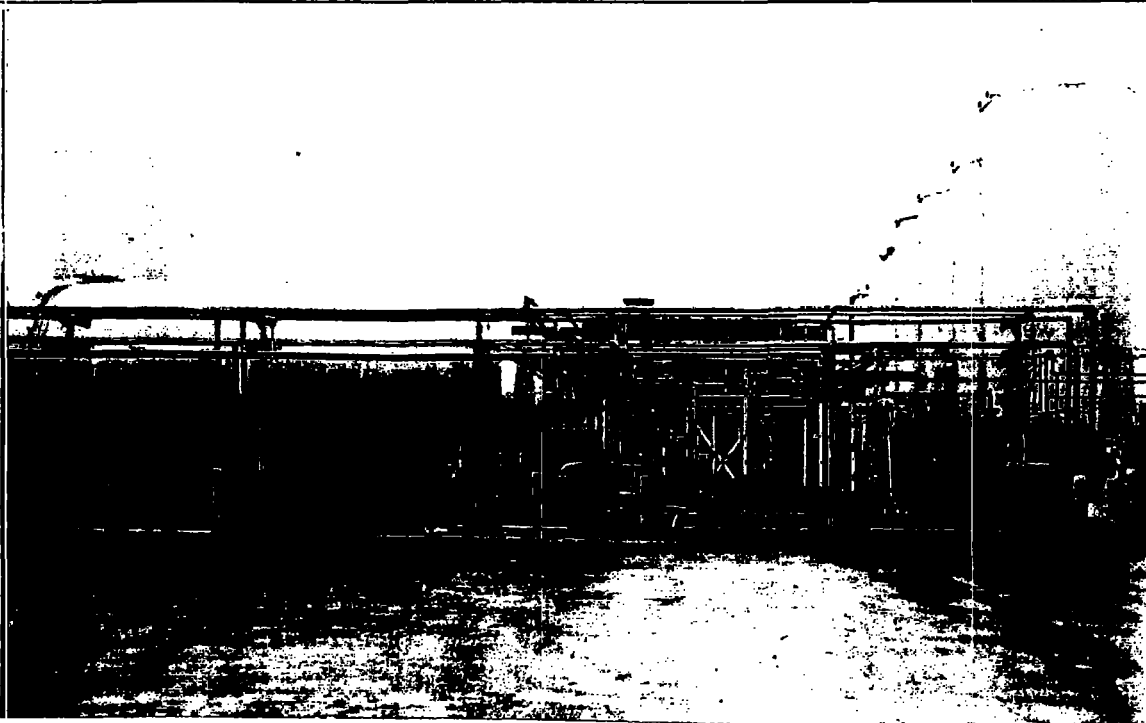
Another visit to the site was made on the morning of Friday April 8, 2005. The rain had ceased and upon arrival it was discovered that contractors were working at the site. Mr. Terry Stilman, EPA On-scene Coordinator (OSC), was present at the site and Mr. Shane Raiford with the United States Coast Guard, representing EPA was also present. The contractors were pumping rainwater out of the tank farm secondary containment area.

#### **ATTACHMENTS: Forty-Seven (47) Photographs**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 1 of 47 Date: 4/7/2005 Time: 2:30 pm Direction: looking NE Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of back southwest corner of wastewater treatment plant.**



**Picture: 2 of 47 Date: 4/7/2005 Time: 2:32 pm Direction: looking E Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of back south side of wastewater treatment plant.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 3 of 47 Date: 4/7/2005 Time: 2:34 pm Direction: looking NW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of wastewater storage tanks on the east side of the wastewater treatment plant.**

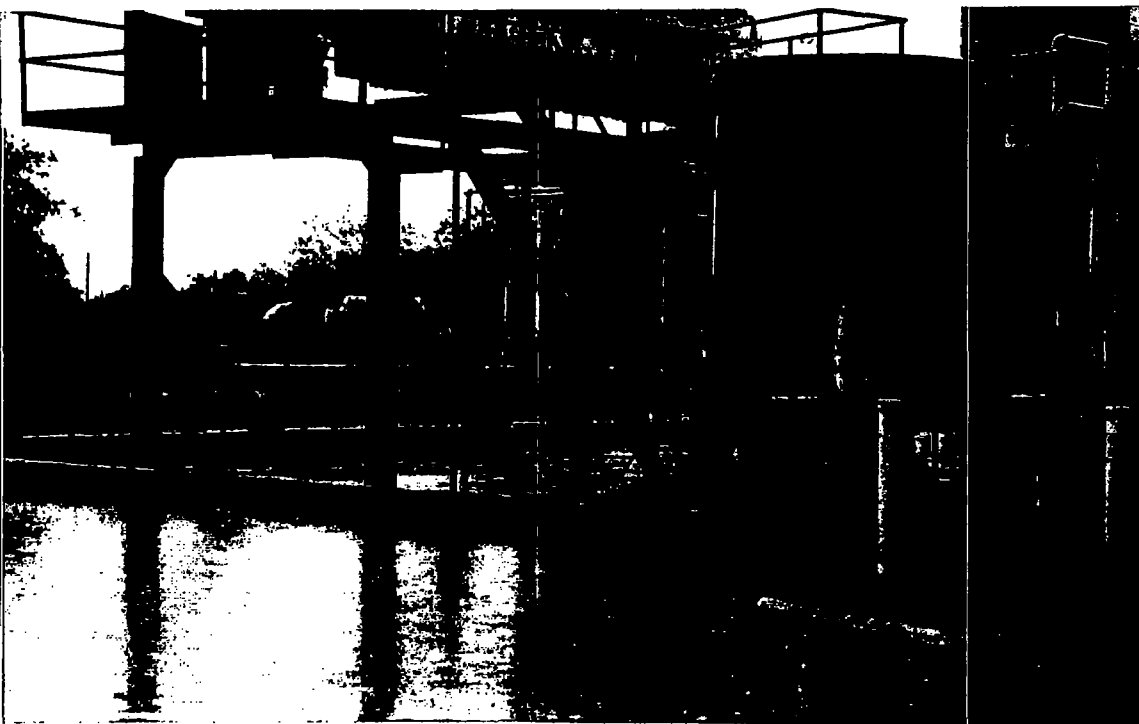


**Picture: 4 of 47 Date: 4/7/2005 Time: 2:36 pm Direction: looking NW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of east side of wastewater treatment plant. Note stained soil/sawdust outside of containment area.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**

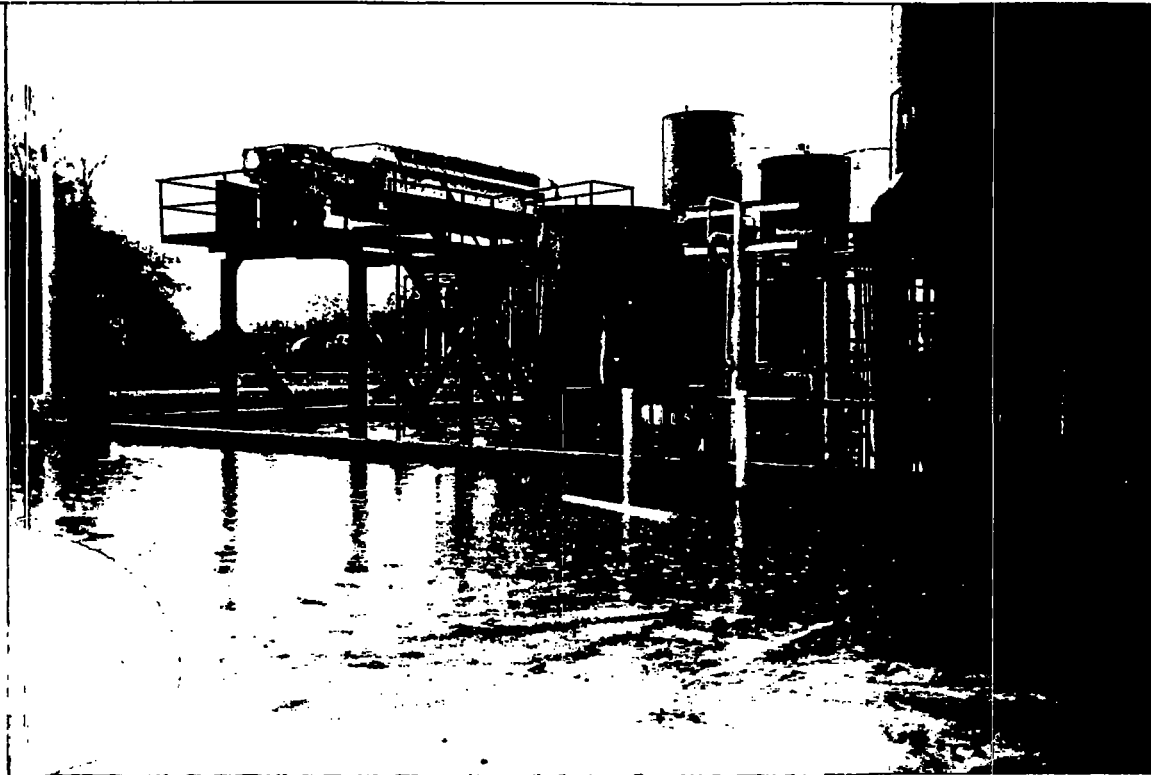


**Picture: 5 of 47 Date: 4/7/2005 Time: 2:38 pm Direction: looking SW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of standing rainwater in the secondary containment on the east side of the wastewater treatment plant.**



**Picture: 6 of 47 Date: 4/7/2005 Time: 2:40 pm Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of ponded rainwater on the outside of the plant's secondary containment.**

Seven Out LLC Photo Log  
901 Francis Street, Waycross, GA 30503-2335  
CERCLIS ID # GAN000407801



Picture: 7 of 47 Date: 4/7/2005 Time: 2:42 pm Direction: looking SW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of standing rainwater in the secondary containment on the east side of the wastewater treatment plant.



Picture: 8 of 47 Date: 4/7/2005 Time: 2:44 pm Direction: looking WNW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of chemical treatment tanks on the east side of the wastewater treatment plant.

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 9 of 47 Date: 4/7/2005 Time: 2:46 pm Direction: looking SW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of storm water drain at the edge of parking lot between 901 Francis Street and 801 Francis Street. Drain empties to ditch on east side of facility.**



**Picture: 10 of 47 Date: 4/7/2005 Time: 2:48 pm Direction: looking W Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of drainage ditch located on east side of facility where suspected improper wastewater discharges may have occurred.**



**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**

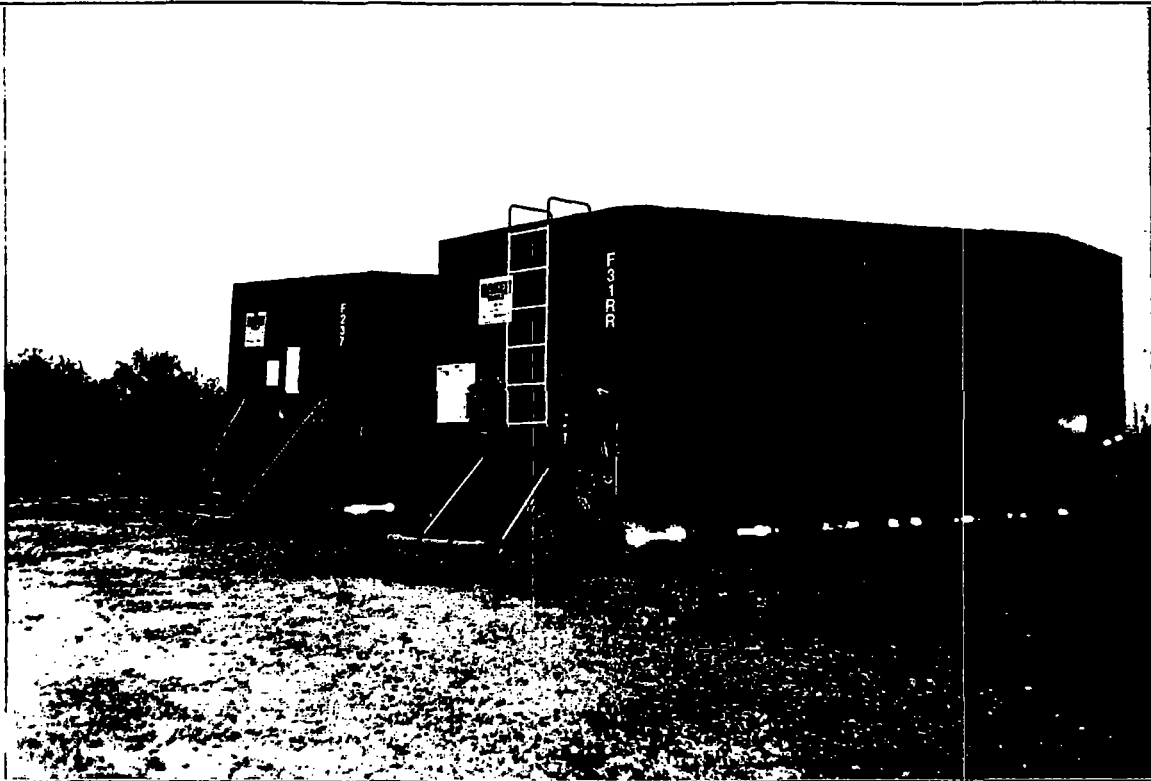


**Picture: 11 of 47 Date: 4/7/2005 Time: 2:50 pm Direction: looking N Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of facility's storage tanks with the drainage ditch in the foreground.**



**Picture: 12 of 47 Date: 4/7/2005 Time: 2:52 pm Direction: looking NW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of ditch area where drainage from site flows under railroad tracks and discharges into drainage ditch on east side of facility.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 13 of 47 Date: 4/7/2005 Time: 2:54 pm Direction: looking SE Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of "frac" tanks on CSX rail property. Tanks were used to store wastewater for future treatment.**



**Picture: 14 of 47 Date: 4/7/2005 Time: 2:56 pm Direction: looking SE Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of the "frac" tanks on the CSX rail property.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**

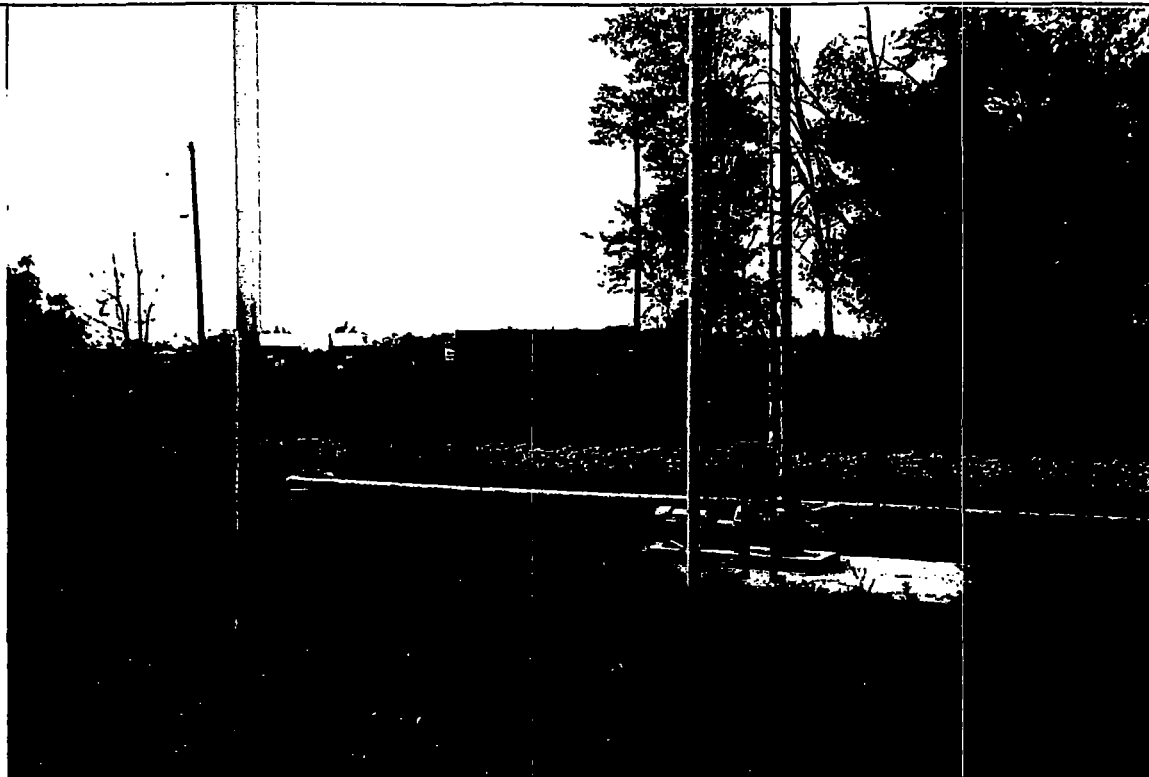


**Picture: 15 of 47 Date: 4/7/2005 Time: 2:58 pm Direction: looking NW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of some ASTs abandoned on the property of CSX rail where the "frac" tanks were stored.**



**Picture: 16 of 47 Date: 4/7/2005 Time: 3:15 pm Direction: looking N Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of a portion of the surface water pathway located northwest of the facility.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 17 of 47 Date: 4/8/2005 Time: 8:30 am Direction: looking SE Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of some of the piping outside of the secondary containment system of the wastewater treatment plant.**



**Picture: 18 of 47 Date: 4/8/2005 Time: 8:32 am Direction: looking E Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of soil on east side of wastewater treatment plant.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 19 of 47 Date: 4/8/2005 Time: 8:34 am Direction: looking NE Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of wastewater treatment plant from SE corner.**



**Picture: 20 of 47 Date: 4/8/2005 Time: 8:40 am Direction: looking S Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of south side of property attached to 901 Francis Street (main office of Seven Out LLC).**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 21 of 47 Date: 4/8/2005 Time: 8:44 am Direction: looking E Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of 901 Francis Street property and vacant on south side of 901 Francis Street.**

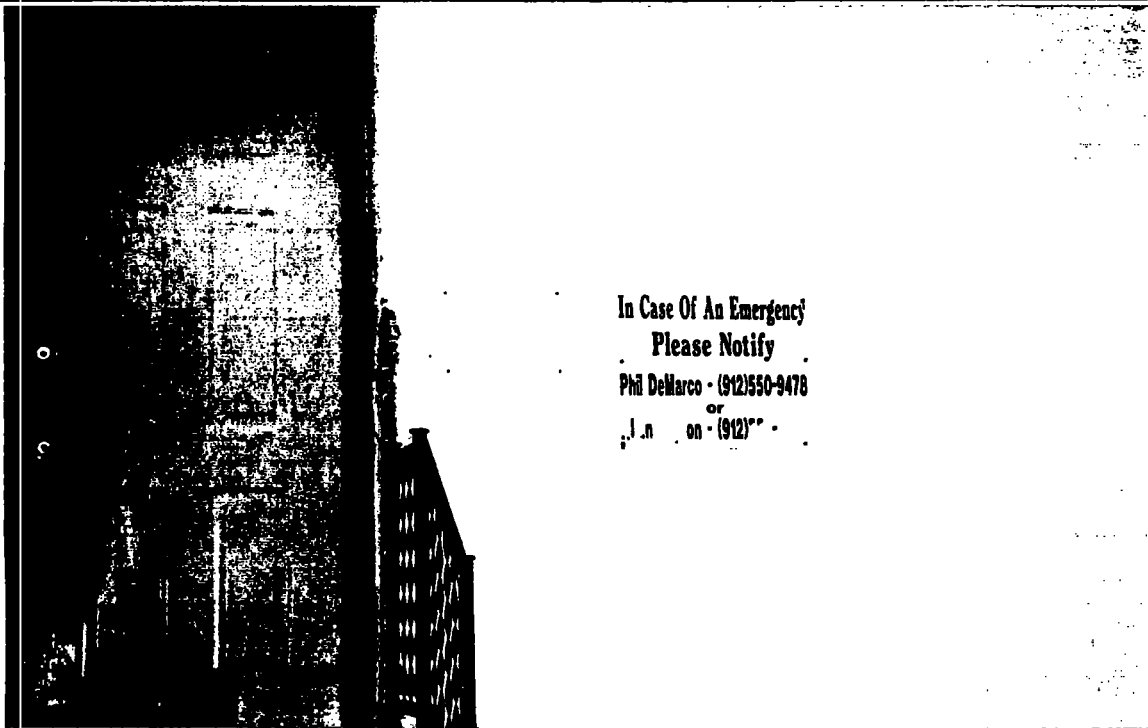


**Picture: 22 of 47 Date: 4/8/2005 Time: 8:46 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of abandoned trailer with used engine parts on vacant lot next to 901 Francis Street. Trailer is backed up to property line.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 23 of 47 Date: 4/8/2005 Time: 8:48 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of used engine parts on the lot two lots south of 901 Francis Street at the Engine Rebuilders facility.**



**Picture: 24 of 47 Date: 4/8/2005 Time: 8:50 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of contact information for the 901 Francis Street location.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 25 of 47 Date: 4/8/2005 Time: 8:54 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of floor drain inside 901 Francis Street.**



**Picture: 26 of 47 Date: 4/8/2005 Time: 8:56 am Direction: looking SW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of southeast corner of open area of 901 Francis Street.**



**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 27 of 47 Date: 4/8/2005 Time: 8:58 am Direction: looking W Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of south side of open area of 901 Francis Street.**



**Picture: 28 of 47 Date: 4/8/2005 Time: 9:00 am Direction: looking W Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of southwest side of open area of 901 Francis Street**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 29 of 47 Date: 4/8/2005 Time: 9:02 am Direction: looking NW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of south and southwest side of open area at 901 Francis Street.**



**Picture: 30 of 47 Date: 4/8/2005 Time: 9:04 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of interior of one of rooms of annex to 901 Francis Street.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**

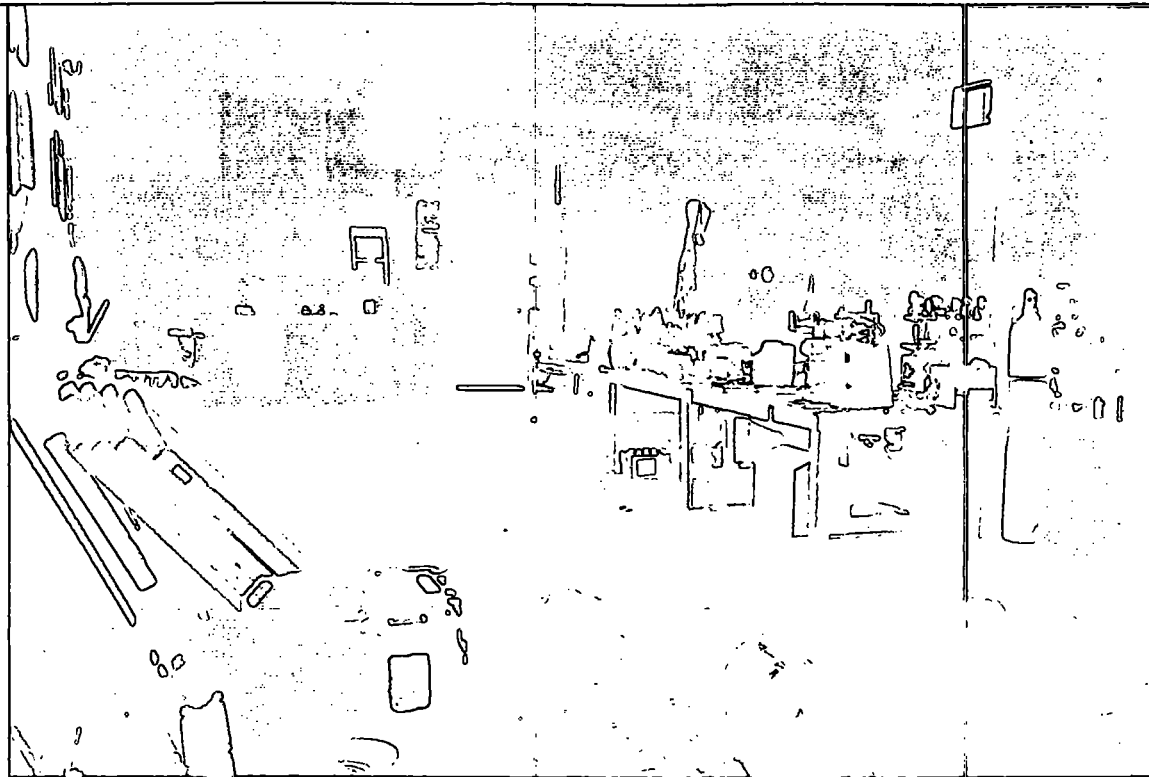


**Picture: 31 of 47 Date: 4/8/2005 Time: 9:06 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of interior of additional part of annex of 901 Francis Street.**

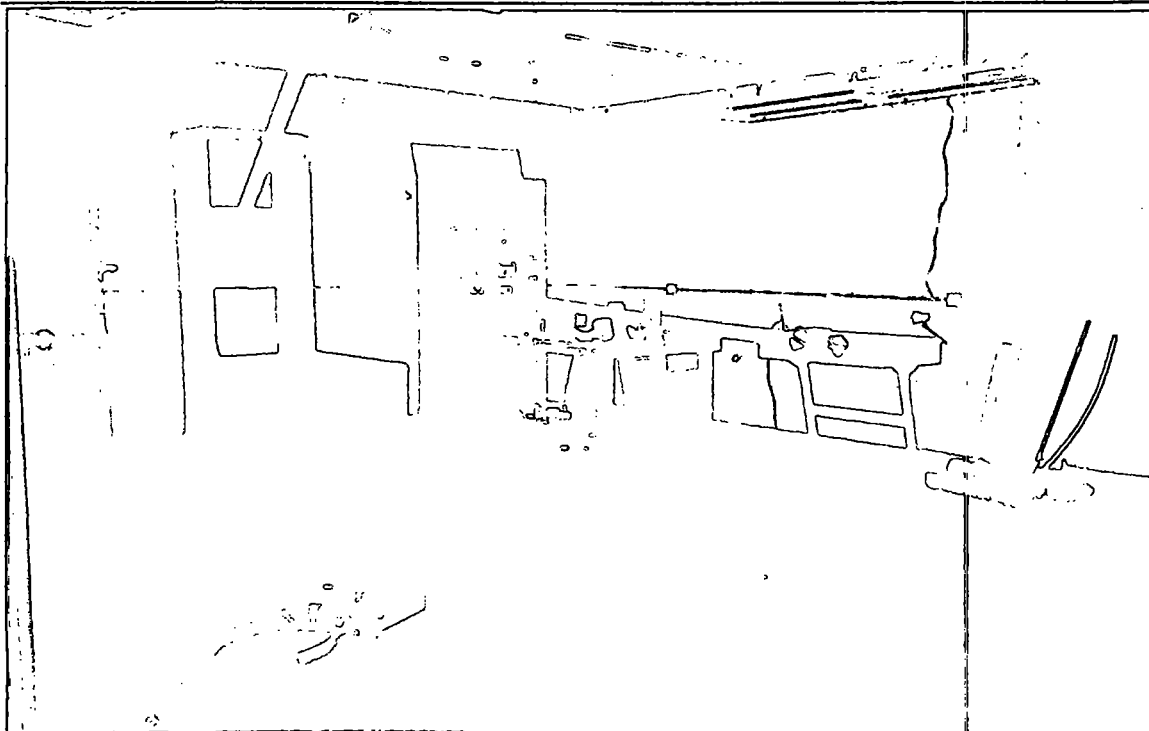


**Picture: 32 of 47 Date: 4/8/2005 Time: 9:08 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of interior of 901 Francis Street showing supplies and materials in use by EPA Removal Contractor.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**

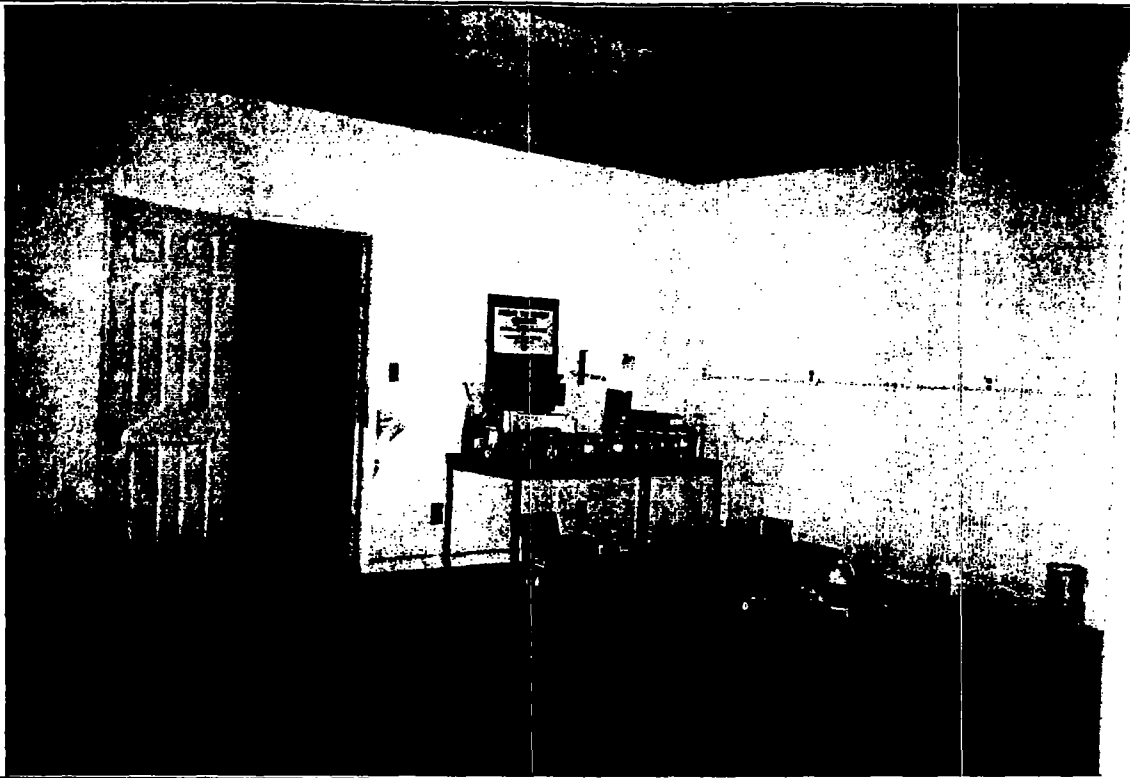


**Picture: 33 of 47 Date: 4/8/2005 Time: 9:10 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of inside of 901 Francis Street, used by EPA Removal Contractor as their operation's base.**



**Picture: 34 of 47 Date: 4/8/2005 Time: 9:12 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of inside of 901 Francis Street, used by EPA Removal Contractor as their operation's base.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**

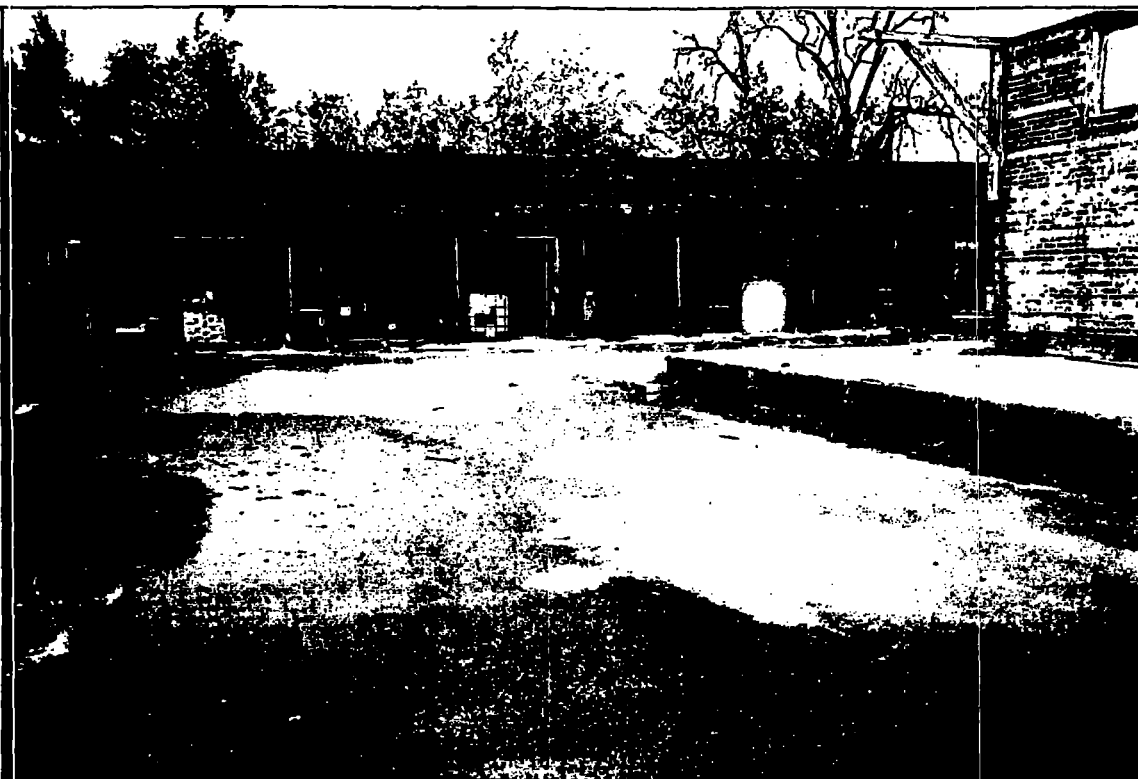


**Picture: 35 of 47 Date: 4/8/2005 Time: 9:14 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of inside of 901 Francis Street, used by EPA Removal Contractor as their operation's base.**



**Picture: 36 of 47 Date: 4/8/2005 Time: 9:16 am Direction: looking W Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of outside area of 901 Francis Street.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 37 of 47 Date: 4/8/2005 Time: 9:18 am Direction: looking W Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: Additional view of outside area of 901 Francis Street.**

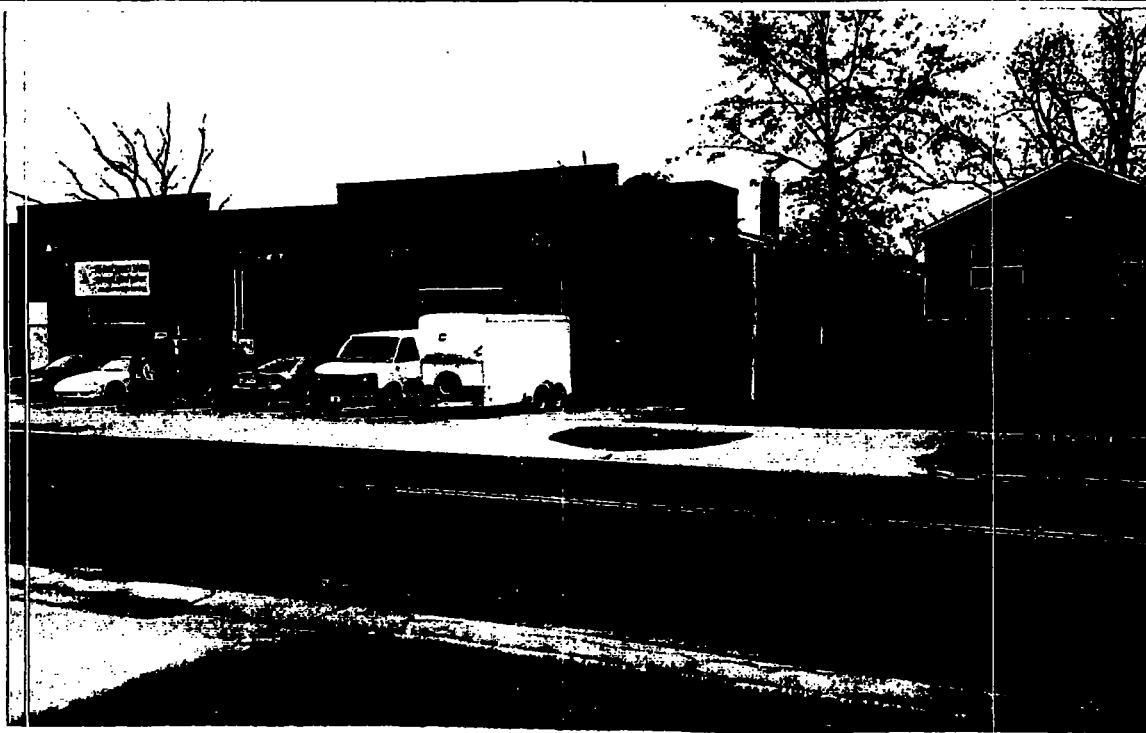


**Picture: 38 of 47 Date: 4/8/2005 Time: 9:20 am Direction: NA Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of exterior of annex to 901 Francis Street.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 39 of 47 Date: 4/8/2005 Time: 9:22 am Direction: looking W Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of vegetation (uncompromised) on the east side of 901 Francis Street.**



**Picture: 40 of 47 Date: 4/8/2005 Time: 9:30 am Direction: looking W Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of house and business to southwest of 901 Francis Street.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



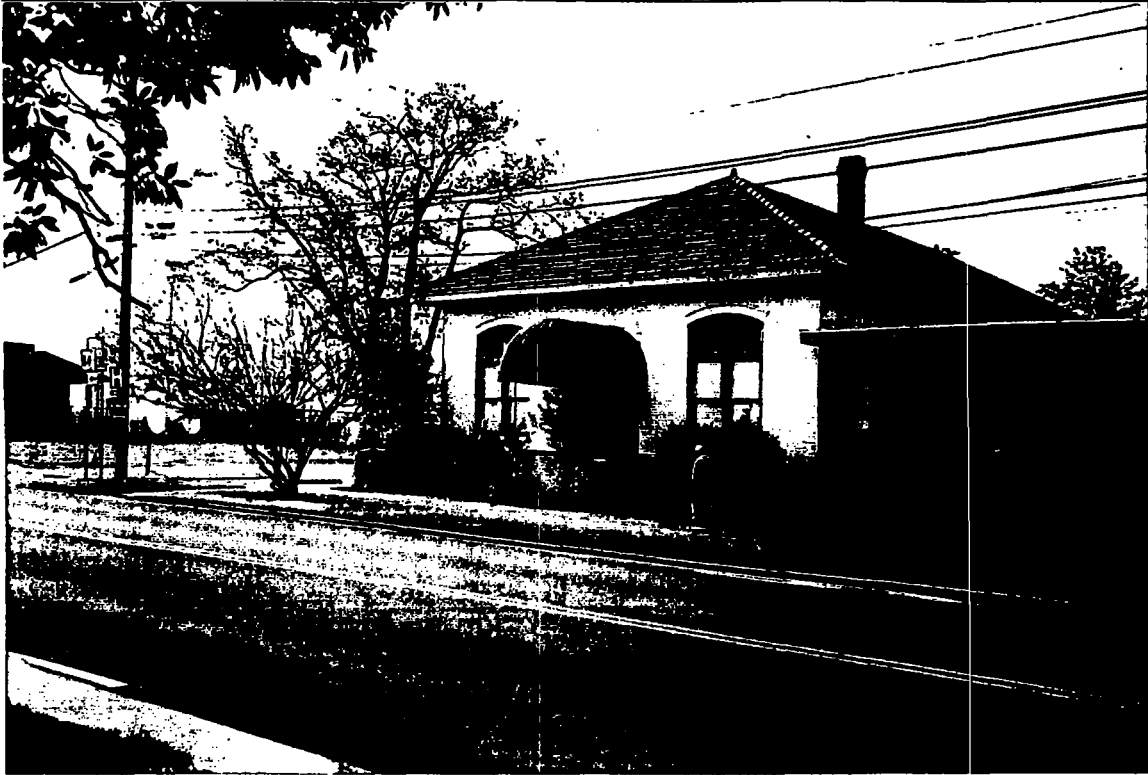
**Picture: 41 of 47 Date: 4/8/2005 Time: 9:32 am Direction: looking N Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of house and business (Praxair) across street from 901 Francis Street.**



**Picture: 42 of 47 Date: 4/8/2005 Time: 9:35 am Direction: looking SW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of businesses to SW of 901 Francis Street.**



**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 43 of 47 Date: 4/8/2005 Time: 9:37 am Direction: looking NE Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of front of 901 Francis Street.**



**Picture: 44 of 47 Date: 4/8/2005 Time: 9:37 am Direction: looking E Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of front of 901 Francis Street.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 45 of 47 Date: 4/8/2005 Time: 9:45 am Direction: looking N Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of nearby residence on McDonald Street.**



**Picture: 46 of 47 Date: 4/8/2005 Time: 9:55 am Direction: looking N Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of nearby residence on Folks Street.**

**Seven Out LLC Photo Log**  
**901 Francis Street, Waycross, GA 30503-2335**  
**CERCLIS ID # GAN000407801**



**Picture: 47 of 47 Date: 4/8/2005 Time: 10:05 am Direction: looking SW Agency: Georgia Hazardous Waste Management Branch Photographer: Eddie Williams Subject: View of businesses to southeast of 901 Francis Street.**

[illegible]

901 FRANCIS STREET  
WAYCROSS, GA 31501  
GAND00407811 VISUAL SITE INSPECTION  
THURS 4/7/05

ARRIVED AT SITE 2:30 PM  
MODERATE TO HEAVY RAIN, ~60°F

USING A GARMIN ETREX VISTA  
OBTAINED LAT, LONG, ELEVATION

W 082° 21' 49.8"

147 FEET ABOVE SEA LEVEL

SITE DOES NOT APPEAR TO  
BE IN USE. BUILDING AT  
901 FRANCIS IS LOCKED

TANK FARM HAS SECONDARY  
CONTAINMENT IN PLACE

RAILROAD TRACKS BORDER SOUTHERN  
EDGE OF PROPERTY. A DRAINAGE  
DITCH RUNS PARALLEL TO THESE TRACKS  
BETWEEN SITE AND TRACKS.

FLOW FROM SITE ENTERS  
DRAINAGE DITCH AND FLOWS  
WEST,

IN FRONT (N) OF TANK FARM  
IS A BUILDING HOUSING THE  
SPORT SHOP, INC.

AN UNPAVED ROAD CONNECTS THE  
SITE WITH CSX RAILROAD  
PROPERTY SOUTH OF THE SITE.  
FOUR "FRAC" TANKS BELONGING  
TO SEVEN OIL ARE  
LOCATED ON CSX PROPERTY

THE AREA SURROUNDING THE  
SITE IS MIXED COMMERCIAL,  
RESIDENTIAL, AND INDUSTRIAL.

THE NEAREST RESIDENCE IS LOCATED  
AT 103 FOLKS STREET,

THE DRAINAGE DITCH AT THE SITE  
CONTINUES WEST AND EMITTES INTO  
A CREEK WHICH FLOWS IN A NORTHERN  
DIRECTION.

~~THE~~

A RESIDENT AT 1310 ALPINE ST  
STATED SHE HAS NEVER OBSERVED  
ANYONE FISHING IN THIS CREEK AND  
THAT IT ALWAYS HAS WATER  
IN IT.

THE CREEK FLOWS UNTIL IT GOES  
UNDERGROUND NEAR MCDONALD AND  
ISABELLA STREET. CREEK APPEARS  
TO EXIT UNDERGROUND NEAR  
INTERSECTION OF LEE AVE AND MEMORIAL.  
CREEK THEN JOINS LARSEN CREEK.  
FLOWS LARSEN CREEK TO THE SATILLA RIVER.  
EMPLOYEE AT WILCO'S BAIT (4:10 PM)  
TACKLE ON MEMORIAL DRIVE  
STATED THIS LARSEN CREEK IS  
THE CITY DRAINAGE CANAL.  
EMPLOYEE STATED KIDS SOMETIMES  
FISH IN CANAL BUT MOST FISHING  
IS IN THE SATILLA. CANAL HAS BLM,  
SATILLA HAS BLM, STRIP CRACKER, CATFISH,  
BASS.

SEVEN OUT LLC TANK  
FRI 4/8/05

VISITED TAX ASSESSORS OFFICE  
AND COURTHOUSE TO REVIEW  
RECORDS PERTAINING TO THE  
SITE'S HISTORY.

REVISITED SITE SINCE IT WAS  
NOT RAINING,

EPA CONTRACTORS WERE PRESENT  
PUMPING WATER FROM THE TANK  
FARM SECONDARY CONTAINMENT  
AREA. TERRY STILMAN, EPA OSC  
WAS PRESENT.

IMMEDIATELY WEST OF THE 901  
FRANCIS BLDG. IS A VACANT LOT  
AND THEN NASCO ENGINE REBUILDING.

ACROSS FRANCIS STREET TO THE NORTH  
IS A VACANT LOT AND NORTH OF THIS  
LOT IS A HOUSE WHICH IS FOR SALE.

OTHER BUSINESSES IN THE AREA  
ARE: PRAXAIR DISTRIBUTION SE (WELDING SUPPLIES)  
IND. MED. GASES

TRI-STATE TECHNICAL SERVICES (COMMERCIAL  
LAUNDRY EQUIPMENT)

TANK  
FARM

SPECIAL  
GROUPS

901

VACANT  
LOT

NASCO

VACANT  
LOT

HOUSE  
FOR SALE

912/449-4000

VACANT  
LOT

PRAXAIR

TRI-STATE

## REFERENCE 43

**GEORGIA WELLHEAD PROTECTION PLAN**

**for**

**CITY of WAYCROSS**

**WARE COUNTY**

**Permit #2990002**

**Expiration Date: June 15, 2001**

**RECEIVED**  
AUG 23 1999

**SURFACE WATER PROGRAM**

**Field Survey By: Sandra Jo Robertson**

**Prepared By: Sandra Jo Robertson**

**Checked By:**

**Approved By:**

**Distribution:**

*Susan Brunwald*

2 GGS Files; 1 WRMB; 1 Local Government

**Date: July 15, 1999**

**Date: July 27, 1999**

**Date:**

**Date: 8/17/99**



## SYSTEM INFORMATION

<b>Water System:</b>	<b>Waycross Water System</b>
<b>County:</b>	Ware
<b>System ID No.:</b>	2090002
<b>Expiration Date:</b>	June 15, 2001
<b>Number of Wells:</b>	3
<b>System Type:</b>	municipal
<b>Population:</b>	16,410
<b>Class:</b>	2
<b>Region:</b>	Southeast
<b>Province:</b>	Coastal Plain
<b>Aquifer Type:</b>	unconfined Coastal Plain (Wells #1, & #2) and confined Coastal Plain (Well #3)
<b>Significant Recharge Area:<sup>1</sup></b>	no
<b>Pollution Susceptibility:<sup>2</sup></b>	higher susceptibility
<b>Supplier:</b>	City of Waycross
<b>Contact:</b>	William Bland
<b>Title:</b>	Water Superintendent
<b>Address:</b>	P. O. Box 99 Waycross, Georgia 31506
<b>Phone No.:</b>	(912) 267-2900
<b>Fax No.:</b>	(912) 267-2990
<b>WHPA Delineated:</b>	July 15, 1999
<b>PPSI Conducted:</b>	July 15, 1999
<b>Alternate Water Source:</b>	The Waycross Water System consists of three wells. Should one well become inoperable, the other wells would serve the city's water needs until the well was again operational or a new water source found.

<sup>1</sup>Hydrologic Atlas 18, Most Significant Ground-Water Recharge Areas of Georgia, Georgia Department of Natural Resources, Atlanta, 1989.

<sup>2</sup>Hydrologic Atlas 20, Ground-Water Pollution Susceptibility Map of Georgia, Georgia Department of Natural Resources, Atlanta, 1992.

**Part 1: DELINEATING THE WELLHEAD PROTECTION AREA**  
see attached map

**Well #1**

**Location description:** Located at the city water plant on Alice Street. GPS reading taken at the wellhead.

**Longitude:** [REDACTED]

**Latitude:** [REDACTED]

**Quadrangle:** Waycross East

**Aquifer Type:** unconfined Coastal Plain\*

**Delineation Method:** volumetric flow equation

**Pumping Rate:** 1000 gpm (Water System Operator)

**Cement Pad:** present

**Well House:** not present

**Fence:** present

**Locked Gate:** present

**Control Zone:** 15 foot radius

**Inner-Management Zone:** 250 foot radius

**Outer-Management Zone:** 825 foot radius

**Well #2**

**Location description:** Located within the city water plant building on Alice Street. GPS reading taken 8 feet west of wellhead.

**Longitude:** [REDACTED]

**Latitude:** [REDACTED]

**Quadrangle:** Waycross East

**Aquifer Type:** unconfined Coastal Plain\*

**Delineation Method:** fixed radius

**Pumping Rate:** 1700 gpm (Water System Operator)

**Cement Pad:** present

**Well House:** present / locked

**Fence:** not present

**Locked Gate:** not present

**Control Zone:** 15 foot radius

**Inner-Management Zone:** 250 foot radius

**Outer-Management Zone:** 1041 foot radius

\*Wells #1 and #2 delineated as unconfined Coastal Plain (open hole) due to lack of specific well construction data.

**Well #3****Location description:**

Located at Legion Park on GA Route 122. GPS reading taken 5 feet north of the wellhead.

**Longitude:****Latitude:****Quadrangle:****Aquifer Type:****Delineation Method:****Pumping Rate:****Cement Pad:****Well House:****Fence:****Locked Gate:****Control Zone:****Management Zone:**

Waycross East

confined Coastal Plain

fixed radius

2850 gpm (Water Sys)

present

present / locked

not present

not present

15 foot radius

100 foot radius

**Part 2: POTENTIAL POLLUTION SOURCE (PPS) INVENTORY**  
(see APPENDIX A for reference of PPS Codes)

PPS#	PPS Code	Description
1.	O04	electrical transformers
2.	O07	utility poles
3.	O08	vehicle parking areas
4.	S05	sewer lines
5.	T01	access and secondary roads
6.	F01	above ground storage tanks - gas and diesel
7.	F05	auxiliary fuel for Well #1 (has a spill containment system) removed underground storage tank (UST) ID #1510038 82°21'28.415"W 31°12'42.303"N
8.	I10	storm water runoff
9.	W13	dumpsters
10.	T03	State Route 122
11.	T03	Norfolk Southern Railroad
12.	B23	city maintenance yard (used oil and vehicle fluids) 82°21'27.011"W 31°12'43.503"N
13.	B23	city fire department maintenance yard (used oil and vehicle fluids) 82°21'26.831"W 31°12'40.522"N
14.	B23	fire extinguisher refurbishing business 82°21'26.175"W 31°12'40.512"N Address: ABC Fire Equipment Co. 103 Isabella Street Waycross, Georgia 31506 (912) 286-3208
15.	B23	wrecker and road service shop (closed) 82°21'28.856"W 31°12'44.321"N Address: Allico Street Waycross, Georgia 31506
16.	B23	business district
17.	T03	State Route 38
18.	T03	U.S. Routes 82 & 84

**Well #1****Control Zone:  
15 foot radius****No potential pollution sources present.****Inner-Management Zone:  
250 foot radius**

<b>PPS#</b>	<b>PPS Code</b>	<b>Description</b>
1.	O04	electrical transformers
2.	O07	utility poles
3.	O08	vehicle parking areas
4.	S05	sewer lines
5.	T01	access and secondary roads
6.	F01	above ground storage tanks - gas and diesel
7.	F05	removed underground storage tank (facility ID #1510036)
8.	I10	storm water runoff
9.	W13	dumpsters
11.	T03	Norfolk Southern Railroad
12.	B23	city maintenance yard
13.	B23	city fire department maintenance garage
14.	B23	fire extinguisher refurbishing business

**Outer-Management Zone:  
825 foot radius****Note: PPS's #1, 2, 3, 4, 5, 8, 9, and 11 are also found in the Outer-Management Zone.**

<b>PPS#</b>	<b>PPS Code</b>	<b>Description</b>
10.	T03	State Route 122
15.	B23	wrecker and road service shop (closed)
16.	B23	business district
17.	T03	State Route 38
18.	T03	U.S. Routes 82 & 84

**Well #2****Control Zone:**

15 foot radius

No potential pollution sources present.

**Inner-Management Zone:**

250 foot radius

PPS#	PPS Code	Description
1.	O04	electrical transformers
2.	O07	utility poles
3.	O08	vehicle parking areas
4.	S05	sewer lines
5.	T01	access and secondary roads
6.	F01	above ground storage tanks - gas and diesel
7.	F05	removed underground storage tank (facility ID #1510036)
8.	I10	storm water runoff
9.	W13	dumpsters
12.	B23	city maintenance yard

**Outer-Management Zone:**

1041 foot radius

Note: PPS's #1, 2, 3, 4, 5, 8, and 9 are also found in the Outer-Management Zone.

PPS#	PPS Code	Description
10.	T03	State Route 122
11.	T03	Norfolk Southern Railroad
13.	B23	city fire department maintenance yard
14.	B23	fire extinguisher refurbishing business
15.	B23	wrecker and road service shop (closed)
16.	B23	business district
17.	T03	State Route 38
18.	T03	U.S. Routes 62 & 64

**Well #3****Control Zone:**

15 foot radius

No potential pollution sources present.

**Management Zone:**

100 foot radius

PPS#	PPS Code	Description
1.	O04	electrical transformers
2.	O07	utility poles
3.	O08	vehicle parking areas
4.	S05	sewer lines
5.	T01	access and secondary roads
17.	T03	State Route 38

### **Part 3: MANAGEMENT PLAN**

#### **Local Wellhead Protection Ordinance**

No

#### **Responsibilities of the Georgia Environmental Protection Division (EPD)**

Within the Inner- and Outer-Management Zones EPD shall:

- not issue any new permits for municipal solid waste, industrial waste and construction/demolition waste landfills;
- not issue any new permits for the land disposal of hazardous wastes;
- require all new facilities permitted to handle, treat, store or dispose of hazardous waste or hazardous materials perform such operations on an impermeable pad having a spill and leak collection system;
- require all new agricultural waste impoundments have an impermeable synthetic liner;
- not issue any new permits for land application of waste water or sludge;
- not issue any new permits for underground injection wells;
- not issue permits for any new quarries or underground mines unless a hydrogeological investigation is completed;
- require all new underground storage tanks meet the highest standards applicable under the UST Act; and,
- require all new waste water treatment basins to have an impermeable synthetic liner.

#### **Recommendations to Local Governments from the Georgia Environmental Protection Division (EPD)**

EPD recommends that the local government develop and adopt a local Wellhead Protection Ordinance.

**PPS #1. PPS code O04 electrical transformers**

The City of Waycross should periodically check electrical transformers for cracks and leaks in the event of accidental or storm damage. Damaged transformers should be reported to the local utility provider.

**PPS #2. PPS code O07 utility poles**

The City of Waycross should be aware that telephone and utility poles are treated with coal tar, creosote, or other wood preservatives.

**PPS #3. PPS code O08 vehicle parking areas**

The City of Waycross should recommend that all vehicle and equipment parking be restricted to paved areas where available.

**PPS #4. PPS code S05 sewer lines**

The City of Waycross should properly maintain sewer lines and repair all sewer line breaks and leaks. Any sewer line break or leak should be reported to the Georgia Environmental Protection Division, Water Protection Branch, Municipal Permitting Program, 4244 International Parkway, Suite 110, Atlanta, Georgia 30354, (404) 362-2680.

**PPS #5. PPS code T01 access and secondary roads**

The City of Waycross should report all hazardous waste and petroleum product spills or releases occurring within the wellhead protection area to the Department of Natural Resources at 1-800-241-4133.

**Recommendations to Local Governments from the Georgia Environmental Protection Division (EPD)**

**PPS #6. PPS code F01 above ground storage tanks**

The City of Waycross should periodically check the spill containment system for cracks and leaks. All petroleum product spills or releases should be reported to the Department of Natural Resources at 1-800-241-4133. For more information concerning above ground fuel storage tanks, contact the State of Georgia Office of the Commissioner of Insurance, State Fire Marshall, Hazardous Materials, (404) 656-9798.

**PPS #7. PPS code F05 removed underground storage tank**

Historical information.

**PPS #8. PPS code I10 storm water runoff**

The City of Waycross should be aware that storm water runoff from parking areas may contain volatile organic compounds. Storm water runoff from residential areas may contain pesticides and fertilizers.

**PPS #9. PPS code W13 dumpsters**

The City of Waycross should recommend that solid waste collected in dumpsters be disposed of properly. For more information, contact the Solid Waste Management Program at (404) 362-2680.

**PPS #10. PPS code T03 State Route 122**

The City of Waycross should report all hazardous waste and petroleum product spills or releases occurring within the wellhead protection area to the Department of Natural Resources at 1-800-241-4133.

**PPS #11. PPS code T03 Norfolk Southern Railroad**

The City of Waycross should report all hazardous waste and petroleum product spills or releases occurring within the wellhead protection area to the Department of Natural Resources at 1-800-241-4133.

**PPS #12. PPS code B23 city maintenance yard**

The City of Waycross should employ best management practices in the operation of their facilities. Used oils and fluids should be disposed of properly. A list of educational materials on water quality issues can be obtained from the Georgia Environmental Protection Division, Watershed Planning and Monitoring Program, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, (404) 675-6236.

**PPS #13. PPS code B23 fire department maintenance garage**

The City of Waycross should employ best management practices in the operation of their facilities. Used oils and fluids should be disposed of properly. A list of educational materials on water quality issues can be obtained from the Georgia Environmental Protection Division, Watershed Planning and Monitoring Program, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, (404) 675-6236.

**PPS #14. PPS code B23 fire extinguisher refurbishing business**

The City of Waycross should recommend that business owners employ best management practices in the operation of their facilities. Used chemicals, oils and fluids should be disposed of properly. A list of educational materials on water quality issues can be obtained from the Georgia Environmental Protection Division, Watershed Planning and Monitoring Program, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, (404) 675-6236.

**Recommendations to Local Governments from the Georgia Environmental Protection Division (EPD)**

- PPS #15.      PPS code B23 wrecker and road service shop (closed)  
Historical information
- PPS #16.      PPS code B23 business district  
The City of Waycross should recommend that business owners employ best management practices in the operation of their businesses. A list of educational materials on water quality issues can be obtained from the Georgia Environmental Protection Division, Watershed Planning & Monitoring Program, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, (404) 675-6236.
- PPS #17.      PPS code T03 State Route 38  
The City of Waycross should report all hazardous waste and petroleum product spills or releases occurring within the wellhead protection area to the Department of Natural Resources at 1-800-241-4133.
- PPS #18.      PPS code T03 U.S. Routes 82 & 84  
The City of Waycross should report all hazardous waste and petroleum product spills or releases occurring within the wellhead protection area to the Department of Natural Resources at 1-800-241-4133.

**General Recommendations**

- The Control Zone should be protected from uses other than those directly dealing with the care and maintenance of the well.
- The Control Zone should be enclosed by a fence to limit access to the well.
- Access to the Control Zone should only be through a locking gate (or equivalent).
- Only those chemicals used for water treatment should be stored in the Control Zone; motor fuels, oil, motor vehicles or portable equipment powered by an internal combustion engine should not be stored in the Control Zone.
- Auxiliary power on site fuel storage should have a spill containment system for the entire volume of fuel.
- Wellhead Protection Areas should be protected from future potential pollution sources.
- The City of Waycross should post a notice in a public place notifying residents that a Wellhead Protection Plan is available for review.

***Part 4: CONTINGENCY PLAN***

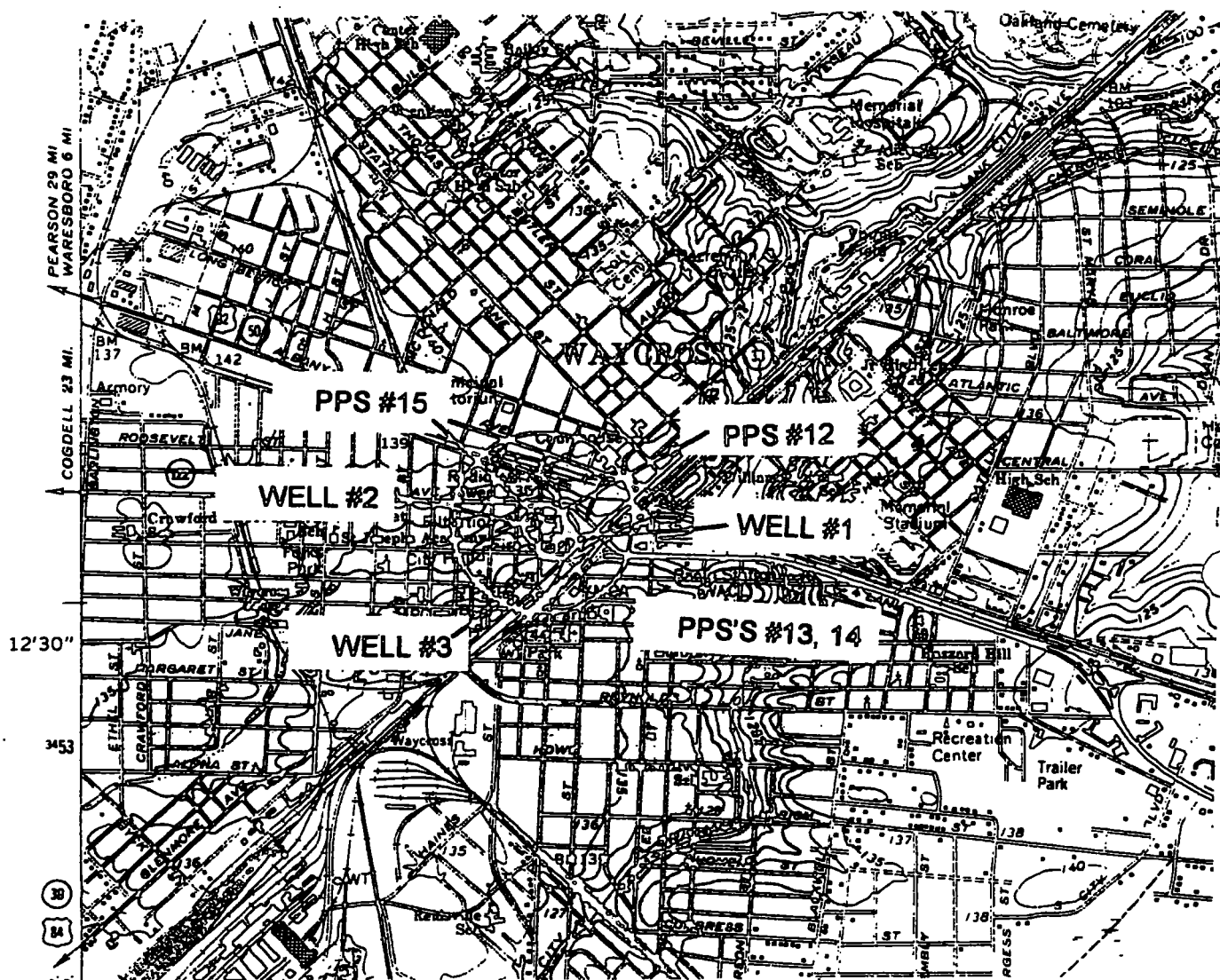
The City of Waycross Water System consists of three wells. Should one well become inoperable, the other wells would serve the city's water needs until the first well was again operational or a new water source found.

The City of Waycross should prepare a formal contingency plan stating how the city's water needs will be met in the event the current water source becomes inoperable.



# CITY OF WAYCROSS WELLS #1, 2 & 3 WELLHEAD PROTECTION AREAS

Datum NAD27



	WELL #1	WELL #2	WELL #3
<b>Quadrangle:</b>	Waycross East	Waycross East	Waycross East
<b>Longitude:</b>	82°21'28.089"W	82°21'28.142"W	82°21'31.443"W
<b>Latitude:</b>	31°12'42.441"N	31°12'44.588"N	31°12'35.975"N
<b>Control Zone:</b>	15 foot radius	15 foot radius	15 foot radius
<b>Inner-Management Zone:</b>	250 foot radius	250 foot radius	
<b>Outer-Management Zone:</b>	825 foot radius	1041 foot radius	
<b>Management Zone:</b>			100 foot radius

All Potential Pollution Sources (PPS's) are listed on Pages 3, 4 & 5.

**APPENDIX A**  
**INVENTORY OF POTENTIAL POLLUTION SOURCES**

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**AGRICULTURE**

A01 Agricultural Fields  
A02 Agriculture Waste Impoundments  
A03 Animal Burials  
A04 Animal Feed Lots  
A05 Commercial Animal Enclosures  
A06 Fertilizer/Pesticide Storage  
A07 Grain Storage Bins  
A08 Irrigation Wells  
A09 Pesticide Mixing Areas  
A10 Other

**BUSINESS AND INDUSTRY**

B01 Asphalt Plant  
B02 Auto Repair/Body Shop/Salvage Washes  
B03 Auto/Truck/Boat/Equipment Dealers  
B04 Business using Solvents/Paints  
B05 Car Wash  
B06 Chemical Production/Mixing/Storage  
B07 Deicing Applications  
B08 Electroplaters/Metal Finishers  
B09 Fleet Service Facility  
B10 Gasoline Station Service Bay  
B11 Golf Courses/Nurseries  
B12 Industrial Facilities  
B13 Laundromats/Dry Cleaners  
B14 Machine Shops  
B15 Photo Processors  
B16 Power Generating Facilities  
B17 Printers  
B18 Refineries  
B19 Refinishing  
B20 Salvage Operations  
B21 Stockpiles  
B22 Wood Chemical Treatment Facilities  
B23 Other

**FUEL STORAGE**

F01 Above Ground Storage Tanks  
F02 Fuel Storage Facility  
F03 Oil/Gas Pipeline  
F04 Underground Storage Tanks  
F05 Other

**HAZARDOUS MATERIALS**

H01 Facilities Handling Hazardous Waste  
H02 Hazardous Waste Disposal  
H03 Hazardous Waste Management Units  
H04 Radioactive Disposal and Storage  
H05 Other

**INJECTION AND INFILTRATION**

I01 Abandoned Wells  
I02 Domestic Wells  
I03 Drainage Canals  
I04 Holding Pond/Lagoon  
I05 Infiltration Galleries  
I06 Injection Wells  
I07 Neighboring Polluted Wells  
I08 Salt Water Intrusion/Upconing  
I09 Sinkholes Modified/Natural  
I10 Storm Water Runoff/Infiltration  
I11 Swamps/Wetlands/Flood plain  
I12 Urban Runoff  
I13 Other

**KNOWN POLLUTION**

P01 Accident Spill Locations  
P02 Hazardous Waste Sites  
P03 Other

**LANDFILLS**

L01 Construction Waste Landfills  
L02 Industrial Waste Landfills  
L03 Municipal Solid Waste Landfills  
L04 Others, Active or Abandoned

**MINING AND CONSTRUCTION**

M01 Borrow Pits  
M02 Construction Excavations  
M03 Detonation Sites  
M04 Mining Operations  
M05 Quarries/Underground Mines  
M06 Other

**SEWAGE AND WATER TREATMENT**

S01 Domestic Septic Systems  
S02 Lift Station  
S03 Non-Domestic Septic Systems  
S04 Sewage Treatment Plant  
S05 Sewer Lines  
S06 Treatment Lagoons/Ponds  
S07 Waste Water Treatment Basin  
S08 Water Treatment Facilities  
S09 Other

**TRANSPORTATION**

T01 Access and Secondary Roads  
T02 Airports  
T03 Major Highways and Railroads  
T04 Transportation Corridors  
T05 Other

**WASTE DISPOSAL SITES**

W01 Abandoned Disposal Site  
W02 Abandoned Drums  
W03 Cesspools  
W04 Drum Storage/Disposal/Recycling  
W05 Dumps  
W06 Garbage Transfer Stations  
W07 Land Application Systems  
W08 Open Pit Burning  
W09 Recycling Facilities  
W10 Sludge Application  
W11 Sludge Producing Facility  
W12 Waste Piles  
W13 Other

**OTHER**

O01 Atmospheric Pollution Percolation  
O02 Abandoned Cars/Vehicles  
O03 Cemeteries  
O04 Electrical Transformers  
O05 Military Base/Depot  
O06 Utility Corridors  
O07 Utility Poles  
O08 Vehicle Parking Areas  
O09 Other

## REFERENCE 44

**RECORD OF TELEPHONIC CONVERSATION  
HAZARDOUS WASTE MANAGEMENT PROGRAM**

**DATE:** June 20, 2006

**TIME:** 10:22 am

**FILE:** Seven Out LLC

**SPOKE WITH:** Mr. Larry Altman

**TITLE:** Owner, Larry Altman Drilling

**ADDRESS:**

**CITY:** Blackshear

**STATE/ZIP:** GA

**TELEPHONE NUMBER:**

912/285-2824 (office)

**SUBJECT:** Knowledge of well drilling in the Waycross downtown area

**SUMMARY OF CALL:**

Called Mr. Altman to obtain information from him pertaining to wells that he had installed or was aware of within a 4-mile radius of Francis Street in Waycross, GA. Mr. Altman stated that the residential wells that they install in that area are approximately 300 feet deep in the Pliocene combined aquifers and occasionally in a Miocene aquifer. Business wells are in the 600'-deep Floridan (Principal Artesian Aquifer). He did state that he was aware of some shallow (20-40' wells) in the area. He had serviced pumps on two wells within the 4-mile radius recently: Mr. Ray Harris (801 Elizabeth Street, 912/285-9998), which is about 900 feet north (2 blocks) of the Seven Out site; and Irene Crawford (2786 Seminole Trail), which is near the 4-mile radius to the east.

**ACTION REQUIRED:**

None

**FOLLOW-UP RESPONSES/ADDITIONAL COMMENTS:**

None at this time.

**SIGNATURE:**



## REFERENCE 45

**RECORD OF TELEPHONIC CONVERSATION  
HAZARDOUS WASTE MANAGEMENT PROGRAM**

**DATE:** June 20, 2006

**TIME:** 11:43 am

**FILE:** Seven Out LLC

**SPOKE WITH:** Mr. Mock

**TITLE:** Owner, Mock Well Drilling Co., Inc.

**CITY:** Waycross

**STATE/ZIP:** GA

**TELEPHONE NUMBER:**

912/283-0530

**SUBJECT:** Information on depth of wells within 4-mile radius of downtown Waycross

**SUMMARY OF CALL:**

Mr. Mock stated that the wells in the downtown Waycross area fall within 3 distinct classes. Shallow wells are 40-60 feet deep and are no longer drilled. There are, however, many wells still in use in that category. Wells that are now being installed are either in the 300'-depth or 550 '-depth ranges. The 300' wells are generally in unconsolidated sediments. The 550' wells are in the upper Floridan aquifer limestone. Mr. Mock said he has been installing wells in the area for 47 years and has put in over 5,000 wells in his career.

**ACTION REQUIRED:**

None

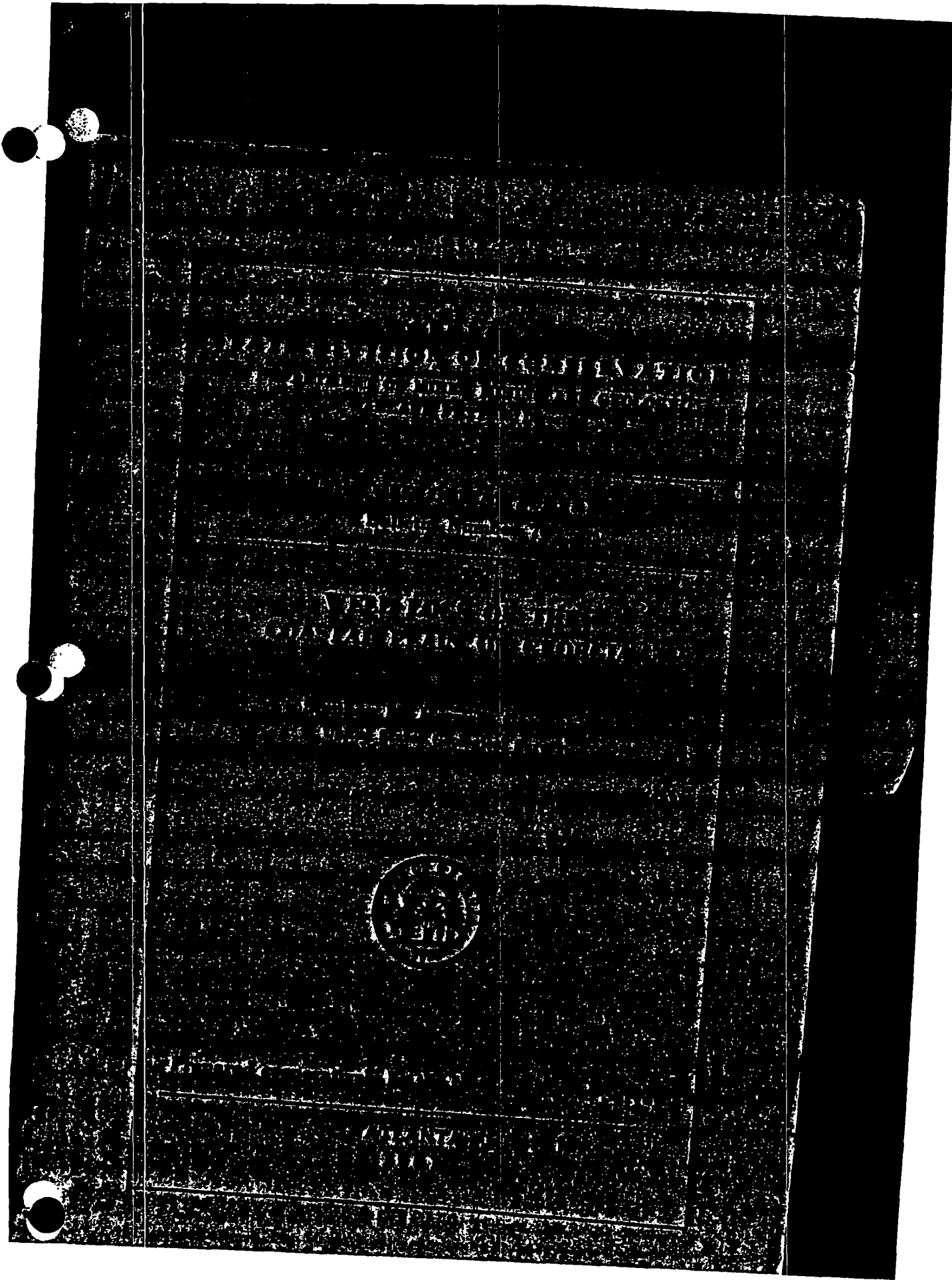
**FOLLOW-UP RESPONSES/ADDITIONAL COMMENTS:**

None at this time.

**SIGNATURE:**

*Edna L. Allen*

## REFERENCE 46





	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained, phosphatic.....	50	377
Sand: as above; interbedded limestone, white, sandy; clay, dark-green, sandy, phosphatic.....	68	440
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic .....	50	490
<b>Oligocene (Undifferentiated):</b>		
Limestone: light-gray, dense (much calcitized), nodular, fos- silliferous (some Foraminifera).....	8	498
<i>Dietyoconus</i> <sup>1</sup> sp. at 490-498.		
<b>Upper Eocene: Jackson Group: Ocala Limestone:</b>		
Limestone: cream, much calcitized, saccharoidal, fossiliferous (Foraminifera) .....	123	621
<i>Gypsinia globula</i> , <i>Operculinoides floridensis</i> at 550-560.		
<i>Asterocyclina nassauensis</i> at 570-580.		
<b>Summary:</b>		
Pliocene to Recent (undifferentiated).....	62	62
Miocene (undifferentiated) .....	428	490
Oligocene (undifferentiated) .....	8	498
Upper Eocene (Ocala limestone).....	123	621
<b>Potential Water-Bearing Zones:</b>		
Sand: fine to coarse-grained.....	50	377
Limestone .....	131	621

## WARE COUNTY

Location: In City of Waycross  
Owner: No. 3 City of Waycross  
Driller: Layne-Atlantic Company

Well No.: GGS 366  
Elev.: 140

31° 12' 38" N / 82° 21' 40" W	Thickness (feet)	Depth (feet)
<b>Pliocene to Recent (Undifferentiated):</b>		
Sand: fine to medium-grained, finely disseminated phosphatic grains and scattered kaolin inclusions.....	10	10
Sand: fine to coarse-grained, arkosic, rounded; clay, light- gray to red (mottled), sandy.....	15	25
Clay: pale-green to purple (mottled), sandy.....	15	40
Sand: fine to coarse-grained, arkosic, rounded.....	25	65

	Thickness (feet)	Depth (feet)
<b>Miocene (Undifferentiated):</b>		
Clay: dark-green, sandy; interbedded sand, fine to coarse- grained, phosphatic .....	135	200
Sand: fine to coarse-grained, phosphatic.....	50	250
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; interbedded limestone, white, sandy; sand, fine to coarse-grained, phosphatic .....	90	340
Clay: light-gray, calcareous.....	20	360
Dolomitic limestone: light-brown, saccharoidal, sandy, phos- phatic; interbedded limestone, white, sandy; sand, fine to coarse-grained, phosphatic .....	70	430
Limestone: white, dense (much calcitized), sandy, phosphatic, fossiliferous (fragments and molds of megafossils).....	60	490
<b>Oligocene (Undifferentiated):</b>		
Limestone: light-gray, dense (much calcitized), nodular, fos- silliferous (some Foraminifera).....	20	510
<i>Dietyoconus</i> <sup>1</sup> sp., <i>Quinqueloculina</i> sp. at 490-500.		
<b>Upper Eocene: Jackson Group: Ocala Limestone:</b>		
Limestone: white, dense (much calcitized), fossiliferous (For- aminifera) .....	265	775
<i>Gypsinia globula</i> at 510-520.		
<i>Asterocyclina nassauensis</i> , <i>Operculinoides</i> sp. at 550-560.		
<i>Amphistegina pinarensis</i> var. at 680-690.		

## Summary:

Pliocene to Recent (undifferentiated).....	65	65
Miocene (undifferentiated) .....	425	490
Oligocene (undifferentiated) .....	20	510
Upper Eocene (Ocala limestone).....	265	775

## Potential Water-Bearing Zones:

Sand: fine to coarse-grained.....	50	250
Limestone .....	265	775

	Thickness (feet)	Depth (feet)
<b>Oligocene (Undifferentiated):</b>		
Limestone: light-gray to cream at depth, rather massive, somewhat nodular, fossiliferous (bryozoan remains and some Foraminifera) .....	62	475
<i>Quinqueloculina</i> sp., <i>Rotalia mexicana</i> var. at 413-423.		
<i>Dictyoconus</i> <sup>1</sup> sp., <i>Quinqueloculina</i> sp. at 423-434.		
<i>Gypsina globula</i> <sup>1</sup> at 465-475.		
No samples .....	9	484
<b>In Upper Eocene: Jackson Group: Ocala Limestone:</b>		
Limestone: cream, relatively soft and porous, calcitized, granular, fossiliferous (bryozoan remains and some Foraminifera) .....	114	598
<i>Operculinoides</i> sp. at 484-495.		
<i>Asterocyclina</i> sp., <i>Operculinoides</i> sp. at 505-516.		
<b>Summary:</b>		
Pliocene to Recent (undifferentiated) .....	85	85
Miocene (undifferentiated) .....	328	413
Oligocene (undifferentiated) .....	62	475
No samples .....	9	484
In upper Eocene (Ocala limestone) .....	114	598
<b>Potential Water-Bearing Zones:</b>		
Limestone .....	114	598

## WASHINGTON COUNTY

Location: 1.4 mi. southwest of junction of Highways 15 and 24 in Sandersville, near east side of Highway 15 near concrete reservoir  
 Owner: City of Sandersville well no. 5  
 Driller: Layne-Atlantic Company  
 Drilled: June 1944

Well No.: GGS 94  
 Elev.: 465

	Thickness (feet)	Depth (feet)
<b>Miocene: Hawthorn Formation:</b>		
Clay: bluish-green to red (mottled), light-gray at depth, blocky, sandy, limonitic .....	50	50
<b>Upper Eocene: Jackson Group: Barnwell Formation:</b>		
Sand: fine to medium-grained, angular, somewhat indurated .....	5	55

<sup>1</sup>Reworked fossil of middle Eocene age.

	Thickness (feet)	Depth (feet)
<b>Limestone<sup>1</sup>: white, dense, somewhat saccharoidal (calcitized), sandy, much sandier at depth, cherty, coarsely but sparsely glauconitic, fossiliferous (echinoid and bryozoan remains and Ostracods) .....</b>		
	62	117
<b>Sand: fine to coarse-grained, subangular .....</b>	13	130
<b>Marl: light-gray, silty, blocky, fossiliferous (echinoid and bryozoan remains, macroshells, Ostracods, and Foraminifera) .....</b>	23	153
<i>Elphidium</i> sp., <i>Nonion advena</i> , <i>Nonion inaequatus</i> , <i>Valvulineria jacksonensis</i> at 132-134.		
<b>Limestone (or coquina): gray, dense, somewhat saccharoidal, very sandy, fossiliferous (fragments and casts and molds of megafossils) .....</b>	13	166
<b>Marl: light-gray, somewhat indurated, fissile, silty, progressively sandier at depth, carbonaceous, fossiliferous (echinoid and bryozoan remains, Ostracods, and Foraminifera) .....</b>	16	182
<b>Limestone (or coquina): gray to cream, crystalline to saccharoidal, very sandy, fossiliferous (fragments and molds of megafossils) .....</b>	5	187
<b>Marl: light-brown, somewhat indurated, fissile, carbonaceous, sandy .....</b>	10	197
<b>Sand: fine to coarse-grained, angular .....</b>	5	202
<b>Marl: gray, somewhat indurated, fissile, carbonaceous, sandy .....</b>	5	207
<b>Limestone (or coquina): greenish-gray, dense, very sandy, phosphatic (finely disseminated), fossiliferous (casts and molds of megafossils and bryozoan remains) .....</b>	53	260

## Upper Cretaceous: Tuscaloosa Formation:

Sand: fine to coarse-grained, angular, limonitic; some clay (or kaolin), gray to red (mottled), micaceous; limestone, "cave" from above .....	6	266
Kaolin: gray, blocky, micaceous, somewhat sandy .....	5	271
Kaolin: white, micaceous, somewhat sandy .....	71	342
Clay: gray to dark-brown, lignitic .....	20	362
Sand: fine to coarse-grained; interbedded thin stringers of clay, as above .....	81	443

<sup>1</sup>Probable Sandersville limestone.

## REFERENCE 47

**Record of Telecommunication**

<b>Date: April 27, 2005</b>	<b>Contact: Gene Thomas with the City of Waycross Public Works</b>	<b>Telephone # 912/287-2940</b>	<b>By: Eddie Williams with the Georgia Hazardous Waste Management Branch</b>
<b>Subject:</b> <b>Production Rates for the five operating wells within the Public Works were provided as follows:</b>  <b>City of Waycross #1 – 10,000 gallons/month</b> <b>City of Waycross #2 – 9,125,000 gallons/month</b> <b>City of Waycross #3 - 57,791,667 gallons/month</b> <b>Waycross/Ware County Industrial Park #1 – 8,060,417 gallons/month</b> <b>Waycross/Ware County Industrial Park #2 – 5,322,917 gallons/month</b>  <b>All wells are blended within the system. All system wells are backed up by the Satilla Regional Water and Sewer Authority wells through valves that can be opened or closed on demand.</b>			

*Eddie Williams*

## REFERENCE 48

### Record of Telecommunication

<b>Date: April 27, 2005</b>	<b>Contact: Derrell McDaniel with the Satilla Regional Water and Sewer Authority</b>	<b>Telephone # 912/287-4366</b>	<b>By: Eddie Williams with the Georgia Hazardous Waste Management Branch</b>
<b>Subject:</b> <b>Production Rates for the four operating wells within the Authority were provided as follows:</b>  <b>Monroe Street Well - 10,023,000 gallons/month</b> <b>Emerson Park Well - 5,144,000 gallons/month</b> <b>Driggers Road Well - 7,365,000 gallons/month</b> <b>Swamp Road Well - 1,542,000 gallons/month</b> <b>Waresboro Well - 8,042,000 gallons/month</b>  <b>All wells are blended within the system. All system wells are backed up by the City of Waycross wells through valves that can be opened or closed on demand.</b>			

*Eddie Williams*

## REFERENCE 49

# **WATER USE IN GEORGIA BY COUNTY FOR 2000 AND WATER-USE TRENDS FOR 1980–2000**

by Julia L. Fanning  
U.S. GEOLOGICAL SURVEY

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
Lonice Barrett, Commissioner

ENVIRONMENTAL PROTECTION DIVISION  
Harold F. Reheis, Director

GEORGIA GEOLOGIC SURVEY  
William H. McLemore, State Geologist

Prepared in cooperation with the  
U.S. GEOLOGICAL SURVEY

Atlanta, Georgia  
2003

**INFORMATION CIRCULAR 106**



# WARE COUNTY

Population: 35,483

Population served by public supply: 30,005

Acres irrigated: 4,710

Hydroelectric use (Mgal/d): 0.00



## 2000 WITHDRAWALS, IN MILLION GALLONS PER DAY

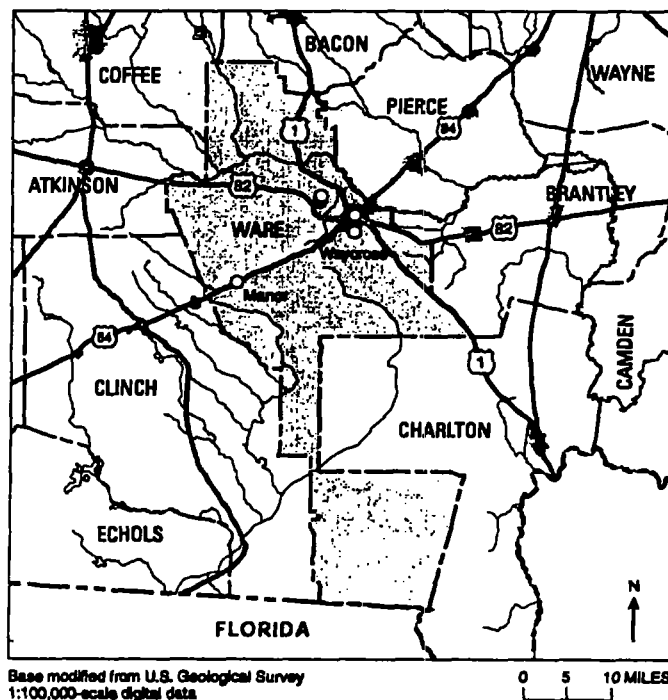
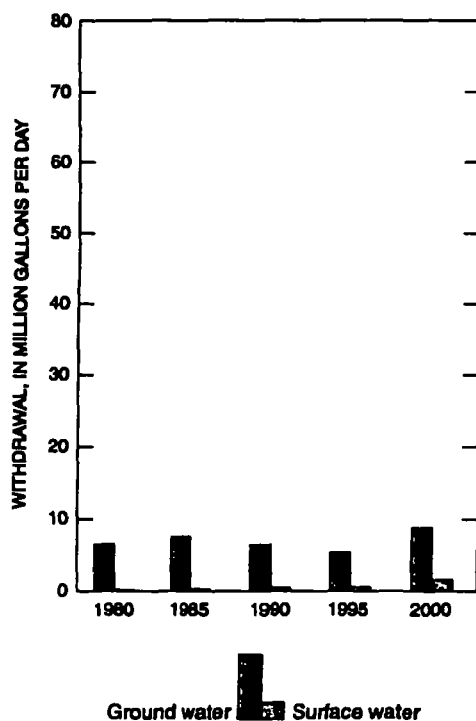
	Public Supply	Domestic & Commercial	Industrial & Mining	Irrigation	Livestock	Thermo- electric	TOTALS
Ground Water	3.85	1.21	0.81	2.97	0.01	0.00	8.85
Surface Water	0.00	0.00	0.00	1.55	0.08	0.00	1.63
TOTALS	3.85	1.21	0.81	4.52	0.09	0.00	10.48

### Withdrawals by Major Public Suppliers (Mgal/d):

NAME	GW	SW
City of Manor	0.37	0.00
Ware County Water System	1.36	0.00
City of Waycross	2.10	0.00

### Withdrawals by Major Industrial Groups (Mgal/d):

SIC	GW	SW
30-Rubber	0.59	0.00



WITHDRAWAL LOCATION  
FOR MAJOR USER  
○ Ground water

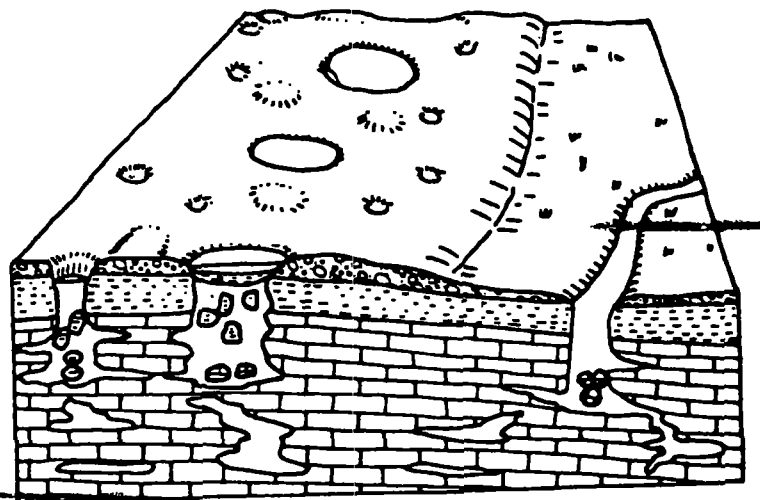
## REFERENCE 50

# GROUND-WATER POLLUTION SUSCEPTIBILITY MAP OF GEORGIA

by

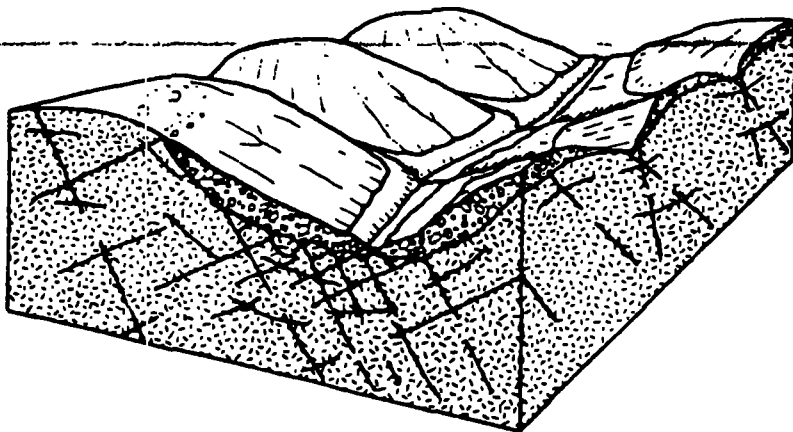
Victoria P. Trent

The preparation of this atlas was financed in part through a grant from the U.S. Environmental Protection Agency under the provisions of Section 106 of the Federal Water Pollution Control Act of 1972, as amended.



**HYDROGEOLOGY OF THE  
PIEDMONT AND BLUE RIDGE**

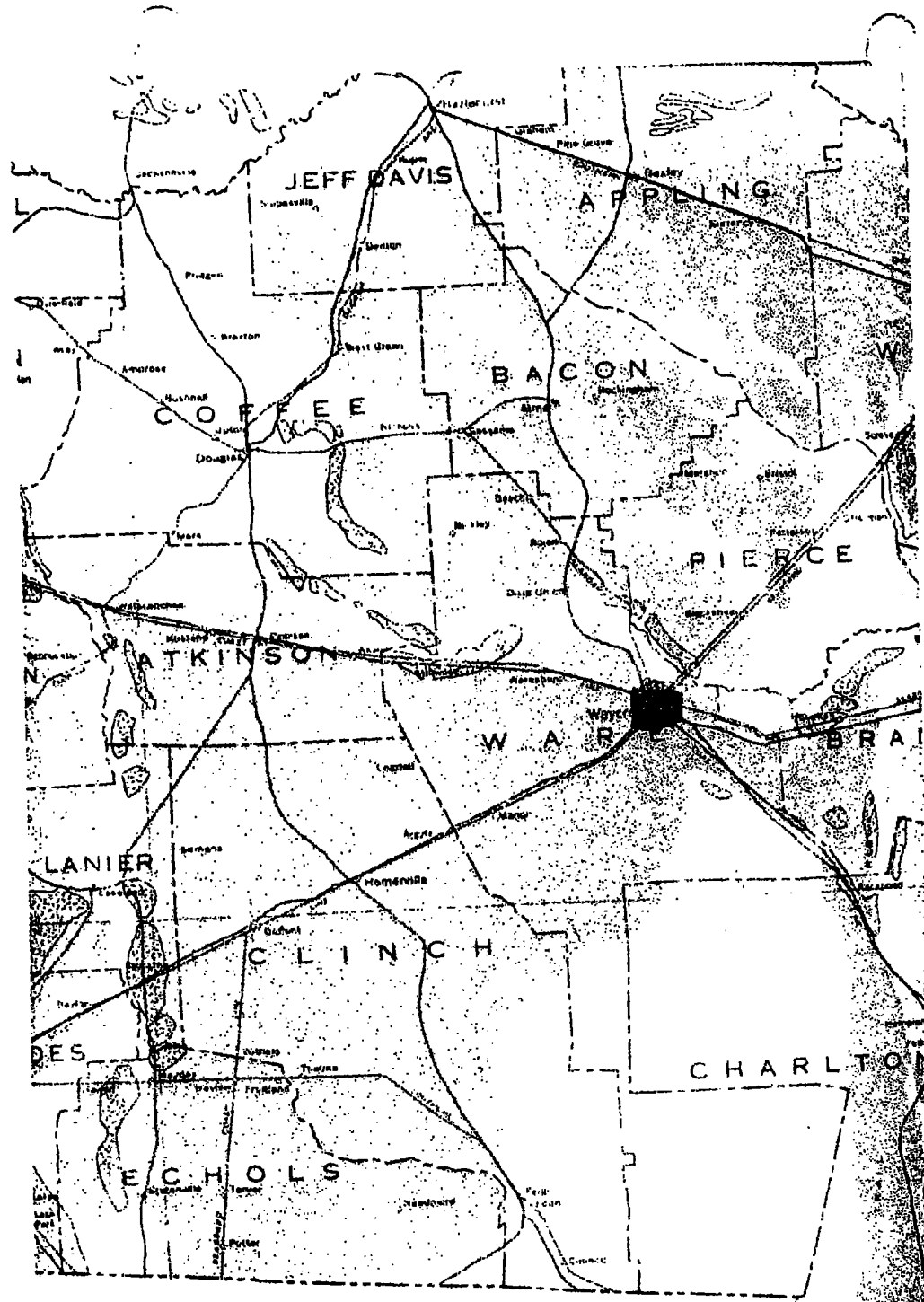
**HYDROGEOLOGY OF THE  
SOUTHEASTERN COASTAL PLAIN**










Department of Natural Resources  
Joe D. Tanner, Commissioner  
Environmental Protection Division  
Harold F. Rehels, Director  
Georgia Geologic Survey  
William H. McLemore, State Geologist

ATLANTA

1982



# EXPLANATION

-  HIGHER SUSCEPTIBILITY AREAS  
(DRASTIC RATING >181)
-  AVERAGE SUSCEPTIBILITY AREAS  
(DRASTIC RATING OF 141-181)
-  LOWER SUSCEPTIBILITY AREAS  
(DRASTIC RATING <141)
-  MAJOR WATER BODIES
-  MOST SIGNIFICANT GROUND-WATER RECHARGE  
AREAS OF GEORGIA, HYDROLOGIC ATLAS 18,  
1989, SCALE 1:500,000
-  STREAMS AND LAKES  
STATE OF GEORGIA HYDROLOGY BASE MAP,  
1986, SOURCE: USGS, SCALE 1:500,000
-  MAJOR HIGHWAYS AND ROADS  
STATE OF GEORGIA ROADS BASE MAP, 1974,  
SOURCE: NCIC, SCALE 1:2,000,000

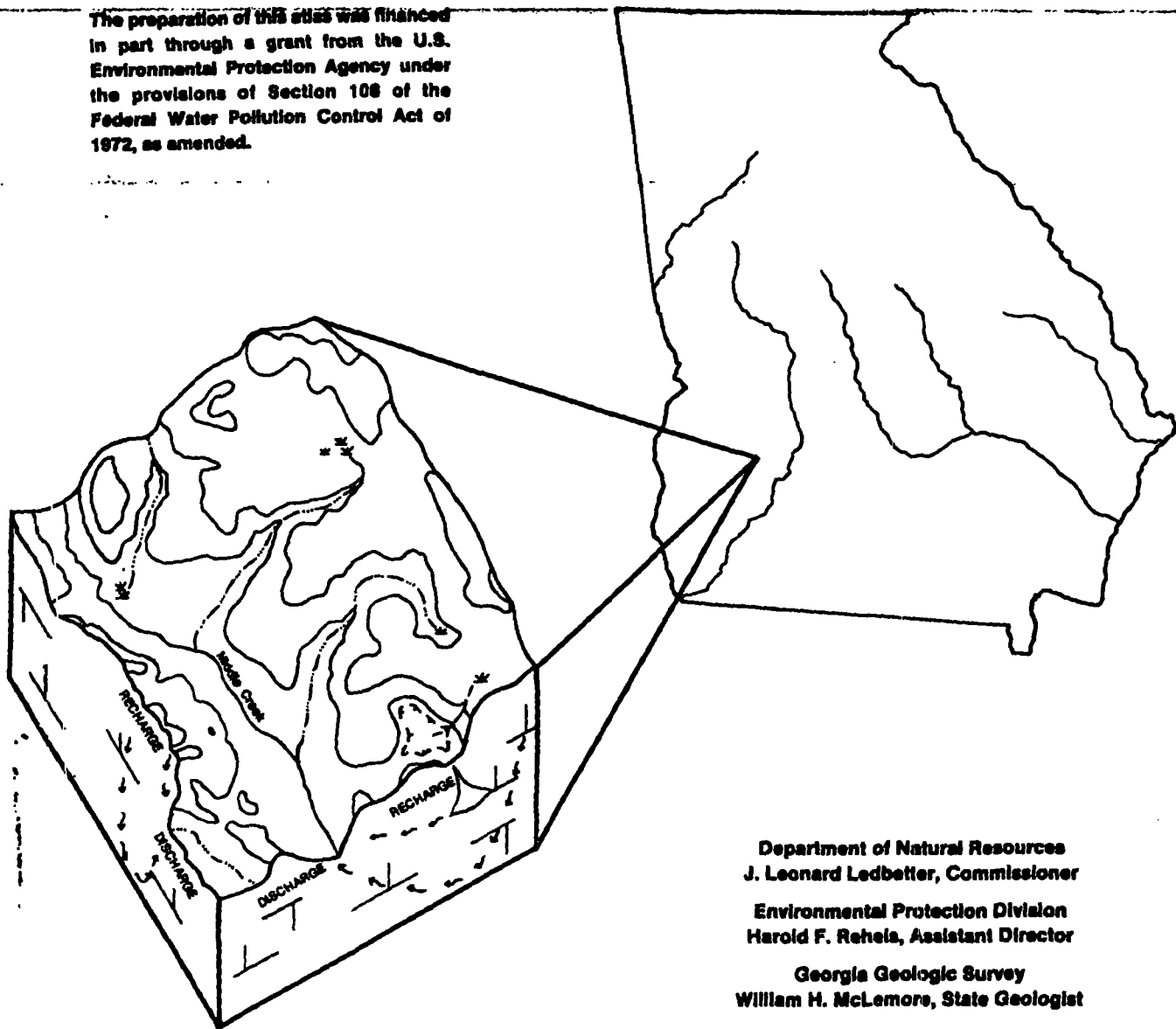
## REFERENCE 51

# **MOST SIGNIFICANT GROUND-WATER RECHARGE AREAS OF GEORGIA**

by

**Kenneth R. Davis, John C. Donahue, Robert H. Hutcheson, and Deborah L. Waldrop**

The preparation of this atlas was financed in part through a grant from the U.S. Environmental Protection Agency under the provisions of Section 108 of the Federal Water Pollution Control Act of 1972, as amended.

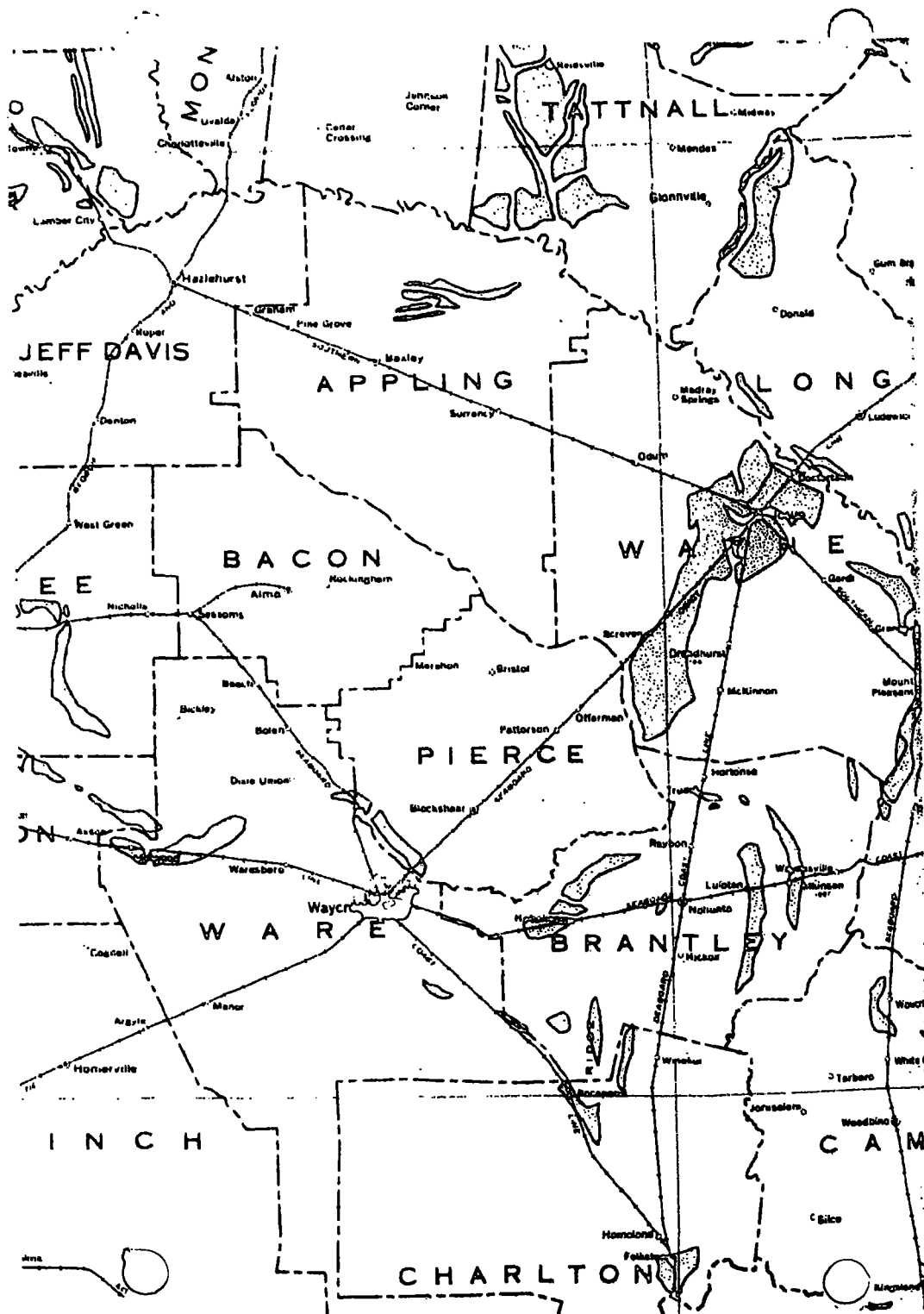


Department of Natural Resources  
J. Leonard Ledbetter, Commissioner  
Environmental Protection Division  
Harold F. Rehels, Assistant Director

Georgia Geologic Survey  
William H. McLemore, State Geologist






ATLANTA

1989



## RECHARGE AREAS FOR:

### COASTAL PLAIN PROVINCE

-  MIOCENE/PLIOCENE-RECENT UNCONFINED AQUIFERS
-  FLORIDAN/JACKSONIAN AQUIFER SYSTEM
-  CLAIBORNE AQUIFER SYSTEM
-  CLAYTON AQUIFER SYSTEM
-  CRETACEOUS-TERTIARY AQUIFER SYSTEM

### RIDGE AND VALLEY PROVINCE

-  UNCONFINED AQUIFERS

### PIEDMONT PROVINCE

-  PROBABLE AREAS OF THICK SOILS (may be significant recharge areas)

## REFERENCE 52



**RECORD OF TELEPHONIC CONVERSATION  
HAZARDOUS WASTE MANAGEMENT PROGRAM**

**DATE:** August 18, 2006

**TIME:** 9:20 am

**FILE:** Seven Out LLC

**SPOKE WITH:** Mr. Ray Harris

**TITLE:** Owner, Residence

**ADDRESS:** 810 Elizabeth Street

**CITY:** Waycross

**STATE/ZIP:** GA 31503-3703

**TELEPHONE NUMBER:**

912/285-9998

**SUBJECT:** Information on shallow well on his property

**SUMMARY OF CALL:**

Called Mr. Harris to discuss his well. He informed me that the well is only used for outdoor uses: watering lawn and garden and washing fruit from his trees. He stated that a company from Blackshear came out and collected a sample of water from the well for analysis and reported back to him that the well water was clean. Mr. Harris said that he would try to locate a copy of the analyses for me and I told him that I would pay him a visit when I was down there. Mr. Harris stated that the water he used in the house is cit water and that the well is not even plumbed into the house. It had been inoperational when he acquired the house a few years ago and he had had the pump hooked up again and serviced. He also stated that he did not know of anybody else in the area that had a shallow well that they were using as their primary water supply.

**ACTION REQUIRED:**

Pay him a visit while in the area.

**FOLLOW-UP RESPONSES/ADDITIONAL COMMENTS:**

None at this time.

**SIGNATURE:**



## REFERENCE 53

**Seven Out Corporation  
Waycross, Ware County**

LAT 31° 12' 28"N / LONG 82° 21' 50"W

RAD	Population		Households		Households		Households		Population		Population	
	Ring	Total	Ring	Total	Ring	Total	Ring	Total	Ring	Total	Ring	Total
0.25	310	310	131	131	0	0	131	131	0	0	310	310
0.50	870	1180	366	498	1	1	366	497	2	2	868	1178
1.00	3556	4737	1411	1909	7	8	1404	1901	20	22	3536	4714
2.00	9521	14258	3684	5593	104	112	3579	5481	271	293	9251	13965
3.00	6215	20473	2330	7922	307	419	2022	7503	842	1135	5373	19338
4.00	3692	24164	1281	9203	295	714	986	8489	895	2030	2797	22135

Source: Census of Populaton and Housing, 1990: Summary Tape File 3 on CD-ROM Georgia [machine-readable data files] / prepared by the Bureau of the Census. -Washington: The Bureau [producer and distributor], 1992.

**Seven Out Corporation  
Waycross, Ware County**

**LAT 31° 12' 28"N / LONG 82° 21' 50"W**

**Population                      Households**

<b>Rad</b>	<b>Ring</b>	<b>Total</b>	<b>Ring</b>	<b>Total</b>
<b>.25</b>	<b>167</b>	<b>167</b>	<b>66</b>	<b>66</b>
<b>.5</b>	<b>1241</b>	<b>1408</b>	<b>454</b>	<b>520</b>
<b>1</b>	<b>4090</b>	<b>5498</b>	<b>1619</b>	<b>2139</b>
<b>2</b>	<b>9644</b>	<b>15142</b>	<b>3956</b>	<b>6095</b>
<b>3</b>	<b>7195</b>	<b>22337</b>	<b>2943</b>	<b>9038</b>
<b>4</b>	<b>2995</b>	<b>25333</b>	<b>1175</b>	<b>10212</b>

Source: Census of Populaton and Housing, 2000: Summary Tape File 3 on CD-ROM Georgia  
[machine-readable data files] / prepared by the Bureau of the Census. -Washington: The  
Bureau [producer and distributor], 2002.

Table - Groundwater Supply Wells within a 4-mile Radius of the Seven-Out LLC Property at 901 Francis Street

Provider	ID #	Well #	Depth	Flow	Capacity	Location	Notes	Contact #	Capacity
Satilla Regional Water & Sewer Authority	GA2990001	Monroe St. Well*	Floridan NA	2-3	9415	North of Site	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-4366 Derrell McDaniel	120,276,000
Satilla Regional Water & Sewer Authority	GA2990001	Off Nevada Avenue in Emerson Park Well*	Floridan 806'	2-3	Combined with above	Southwest of Site, 1285 Nevada Avenue	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-4366 Derrell McDaniel	61,728,000
Satilla Regional Water & Sewer Authority	GA2990051	Driggers Road Well*	Floridan 806'	>4	3305	Southeast of Site, 3955 Driggers Road	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-4366 Derrell McDaniel	88,380,000
Satilla Regional Water & Sewer Authority	GA2990051	Swamp Road Well*	Floridan 800'	1-2	Combined with above	South of Site, 2380 Swamp Road	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-4366 Derrell McDaniel	18,504,000
City of Waycross	GA2990002	Well #1*	Floridan 700'	1/4-1/2	16900	Northeast of Site	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-2940 Gene Thomas	120,000
City of Waycross	GA2990002	Well #2*	Floridan 762'	1/4-1/2	Combined with above	Northeast of Site	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-2940 Gene Thomas	109,500,000

Provider	ID #	Well #	Aquifer/ Depth	Radius (miles)	Population Served	Location	Blended	Contact #	Call Area (508)
City of Waycross	GA2990003	Well #3	Floridan 773'	1/4-1/2	Combined with above	Northeast of Site	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-2940 Gene Thomas	693,500,000

Waycross-Ware County Industrial Park	GA2990019	Well #1 <sup>o</sup> Fulford Road	Floridan NA	>4	2500	Fulford Road, Northwest of Site	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-2940 Gene Thomas	96,725,000
Waycross - Ware County Industrial Park	GA2990019	Well #2 <sup>o</sup> Harris Road	Floridan NA	3-4	Combined with Above	Harris Road, Northwest of Site	Yes with wells in Satilla Reg. W & S, City of Waycross, and Industrial Park	912/287-2940 Gene Thomas	63,875,000

Baptist Village	GA2990016	Linen Lane #1	Floridan 632'	3-4	313	Southwest of Site	Yes, with Linen Lane #2	912/283-2912 Mr. Sharpton	NA
Baptist Village	GA2990016	Linen Lane #2	Floridan 650'	3-4	Combined with Above	Southwest of Site	Yes, with Linen Lane #1	912/283-2912 Mr. Sharpton	NA

Resident	NA	Private Well	NA	2-3	NA	West of Site, 715 Village Lake Drive	No	912/283-6711	NA
Resident	NA	Private Well	NA	3-4	NA	Northwest of Site, 3124 Cherokee Street	No	NA	NA
Resident	NA	Private Well	NA	3-4	NA	Northwest of Site, 3146 Cherokee Street	No	912/285-1530 (disconnectee)	NA

Provider	ID #	Well #	Aquifer	Radius	Population	Location	Blended	Contact	Gallons
Resident	NA	Private Well	Miocene? 280'	3-4	NA	Northwest of Site, 3150 Cherokee St.	No	912/285-2600	NA
Resident	NA	Private Well	Unknown	3-4	NA	Northwest of Site, 3148 Cherokee St.	No	912/283-3607	NA

Population Data from Census Data for 1990

Residents	NA	Private Wells	Unknown	0-1/4	0	Unknown	No	NA	NA
Residents	NA	Private Wells	Unknown	1/4-1/2	2	Unknown	No	NA	NA
Residents	NA	Private Wells	Unknown	1/2-1	20	Unknown	No	NA	NA
Residents	NA	Private Wells	Unknown	1-2	271	Unknown	No	NA	NA
Residents	NA	Private Wells	Unknown	2-3	842	Unknown	No	NA	NA
Residents	NA	Private Wells	Unknown	3-4	895	Unknown	No	NA	NA

Reference Bo's 1990 Census Data, Telecommunications with Sharpton, McDaniel, Thomas, and Drinking Water Program Files.

## REFERENCE 54



WARE	GA2990000 MANOR	101 WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/13/1999
WARE	GA2990001 SATILLA REGIONAL WATER & SEWER AUTH.	101 MONROE STREET WELL	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 11/01/2004
WARE	GA2990001 SATILLA REGIONAL WATER & SEWER AUTH.	102 OFF NAVADA AVE- EMERSON PARK WELL	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 11/01/2004
WARE	GA2990001 SATILLA REGIONAL WATER & SEWER AUTH.	103 OFF ALBANY AVE - WARESBORO WELL	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 11/01/2004
WARE	GA2990001 SATILLA REGIONAL WATER & SEWER AUTH.	106 WAYCROSS WATER SYSTEM		GA2990002 PURCHASE CONNECTION GROUNDWATER	ACTIVE EMERGENCY/BACK-UP 04/30/2002
WARE	GA2990002 WAYCROSS	101 WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/13/1999
WARE	GA2990002 WAYCROSS	102 WELL #2	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/13/1999
WARE	GA2990002 WAYCROSS	103 WELL #3	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/13/1999
WARE	GA2990013 DNR-LAURA S. WALKER STATE PARK	101 LAURA WALKER RD WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/27/2004
WARE	GA2990013 DNR-LAURA S. WALKER STATE PARK	102 LAURA WALKER RD-CAMPGROUND WELL	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/27/2004
WARE	GA2990016 BAPTIST VILLAGE	101 LINEN LANE WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 06/22/2004
WARE	GA2990016 BAPTIST VILLAGE	102 LINEN LANE WELL #2	WELL	GROUNDWATER	ACTIVE EMERGENCY/BACK-UP 06/22/2004
WARE	GA2990019 WAYCROSS-WARE COUNTY IND. PARK	101 WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/13/1999
WARE	GA2990019 WAYCROSS-WARE COUNTY IND. PARK	102 WELL #2	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/13/1999
WARE	GA2990040 OKEFENOKEE SWAMP ASSOC. INC.	101 5700 OKEFENOKEE SWAMP PART RD WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 01/31/2005
WARE	GA2990040 OKEFENOKEE SWAMP ASSOC. INC.	102 5700 OKEFENOKEE SWAMP PARK RD WELL #2	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 01/31/2005
WARE	GA2990046 GA. LIONS CAMP FOR THE BLIND	101 WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/13/1999
WARE	GA2990051 SATILLA REGIONAL WATER & SEWER AUTH-EAST	101 OFF DRIGGERS ROAD WELL	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 11/01/2004
WARE	GA2990051 SATILLA REGIONAL WATER & SEWER AUTH-EAST	102 OFF SWAMP RD/GILCHRIST PARK WELL	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 11/01/2004
WARE	GA2990051 SATILLA REGIONAL WATER & SEWER AUTH-EAST	103 WAYCROSS WATER SYSTEM		GA2990002 PURCHASE CONNECTION GROUNDWATER	ACTIVE EMERGENCY/BACK-UP 07/10/2002
WARE	GA2990052 DNR-L S WALKER SP GOLF COURSE	101 LAURA WALKER RD WELL #1	WELL	GROUNDWATER	ACTIVE FULL TIME/REGULAR 10/27/2004

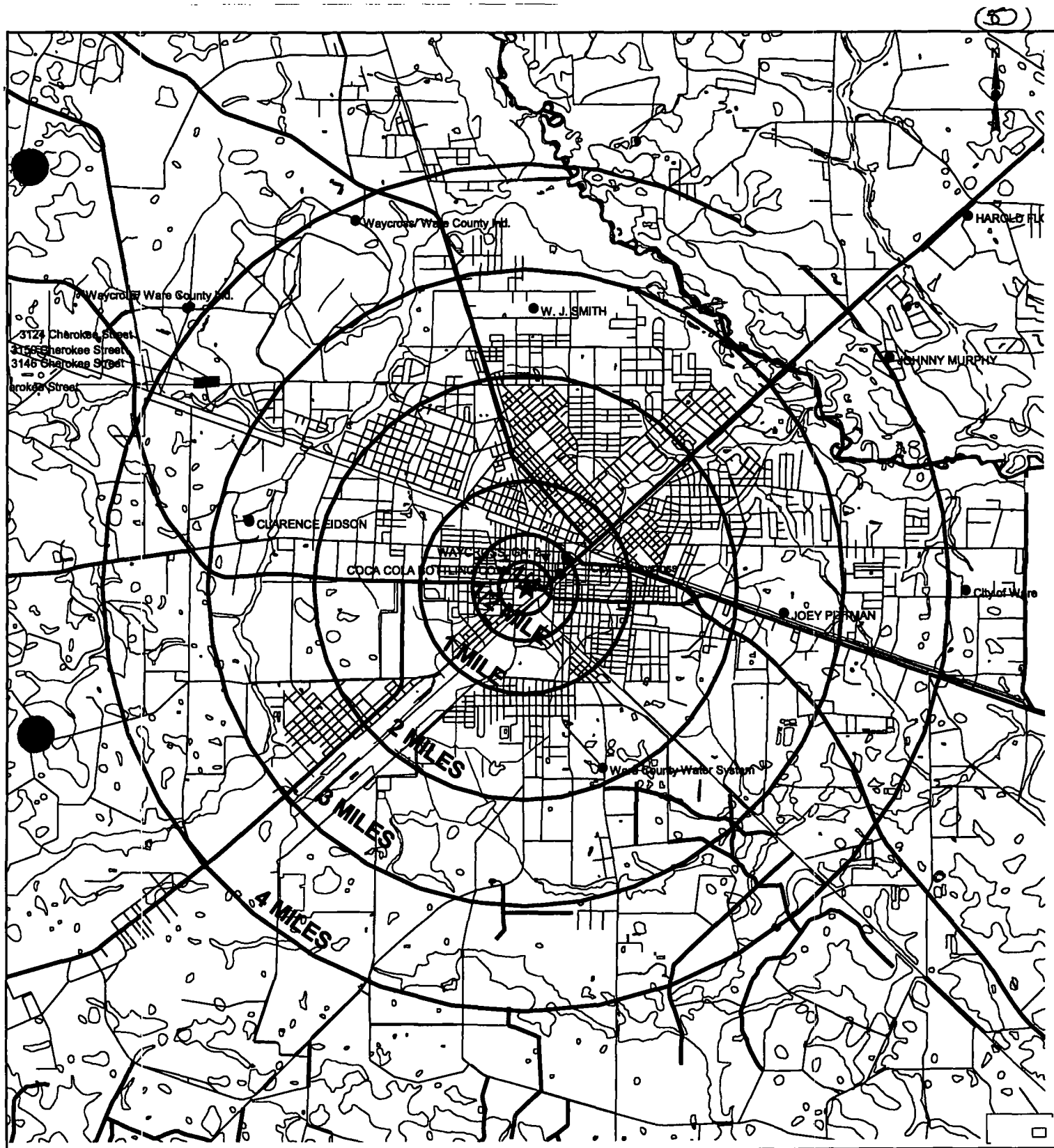
# SDMS

Sexes Out etc

\_\_\_\_\_

**\*Please contact the appropriate Records Center to view the material.\***

## REFERENCE 55



- |  |   |  |               |
|--|---|--|---------------|
|  | Roads                                       |  | HOUSEHOLD     |
|  | State and US Highways                       |  | Public Supply |
|  | Interstate Highways                         |  | INDUSTRIAL    |
|  | Rivers/Streams                              |  | Unknown       |
|  | Lake/Pond                                   |  |               |
|  | Swamp/Marsh                                 |  |               |
|  | Census Block Group Boundaries               |  |               |
|  | Census Block Group with >zero domestic well |  |               |

**Seven Out Property**  
**901 Francis Street**  
**Waycross, Ware County**

**Scale: 1 inch = 1 mile**

**31 12' 26" 82 21' 51"**

Sources: Wells from USGS GWSI (1999); EPD WRB Non-Municipal Wells (1997);  
 EPD HWMB field surveys (1999); Surface Water Intakes from EPD GSB DR98-27(1996);  
 Roads, Rivers, Wetlands from Georgia DOT (1993); Census data from U.S. Bureau of Census (1990)

## REFERENCE 56

U.S.G.S. 7.5' Topographic Maps (1:24000) for Waycross West (1967, photorevised 1988), Waycross East (1967, photorevised 1988), Hoboken West (1967, photorevised 1988), Dixie (1971, photorevised 1988), and Blackshear West (1971, photorevised 1988) are included in Figure 3 in the Figures section of this report.

## REFERENCE 57

**RECORD OF PERSONAL CONVERSATION  
HAZARDOUS WASTE MANAGEMENT PROGRAM**

**DATE:** June 16, 2006

**TIME:** 9:30 am

**FILE:** Seven Out LLC

**SPOKE WITH:** Manager of Coca Cola Distribution Plant

**TITLE:** Manager *TERRY MURRAY*

**ADDRESS:**

**CITY:** Waycross

**STATE/ZIP:** GA

**TELEPHONE NUMBER:**

912/283-3525

**SUBJECT:** Knowledge of date Coca Cola left the 901 Francis Street location and moved to current location and status of Coca Cola' water supply well.

**SUMMARY OF CALL:**

The manager stated that the Coca Cola facility relocated to its current address around 1955. He also stated that they no longer use the well on the property. He suspected that the well caved in, but had no knowledge as to whether it had been properly plugged and abandoned. The well is not used nor is there any interest in using water from the well in the future.

**ACTION REQUIRED:**

None

**FOLLOW-UP RESPONSES/ADDITIONAL COMMENTS:**

None at this time.

**SIGNATURE:**

*Edwin A. Willis*



## REFERENCE 58

With Elevation In Feet\*\*

Base Flood Elevation in Feet (EL 987)  
Where Uniform Within Zone\*\*

Elevation Reference Mark RM7<sub>x</sub>

River Mile • M1.5

\*\*Referenced to the National Geodetic Vertical Datum of 1929

### \*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

#### NOTES TO USER

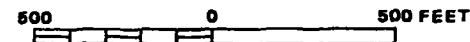
Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

## FIRM FLOOD INSURANCE RATE MAP

CITY OF  
**WAYCROSS, GEORGIA**  
WARE COUNTY

PANEL 3 OF 4  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
130186 0003 B

EFFECTIVE DATE:  
AUGUST 3, 1981

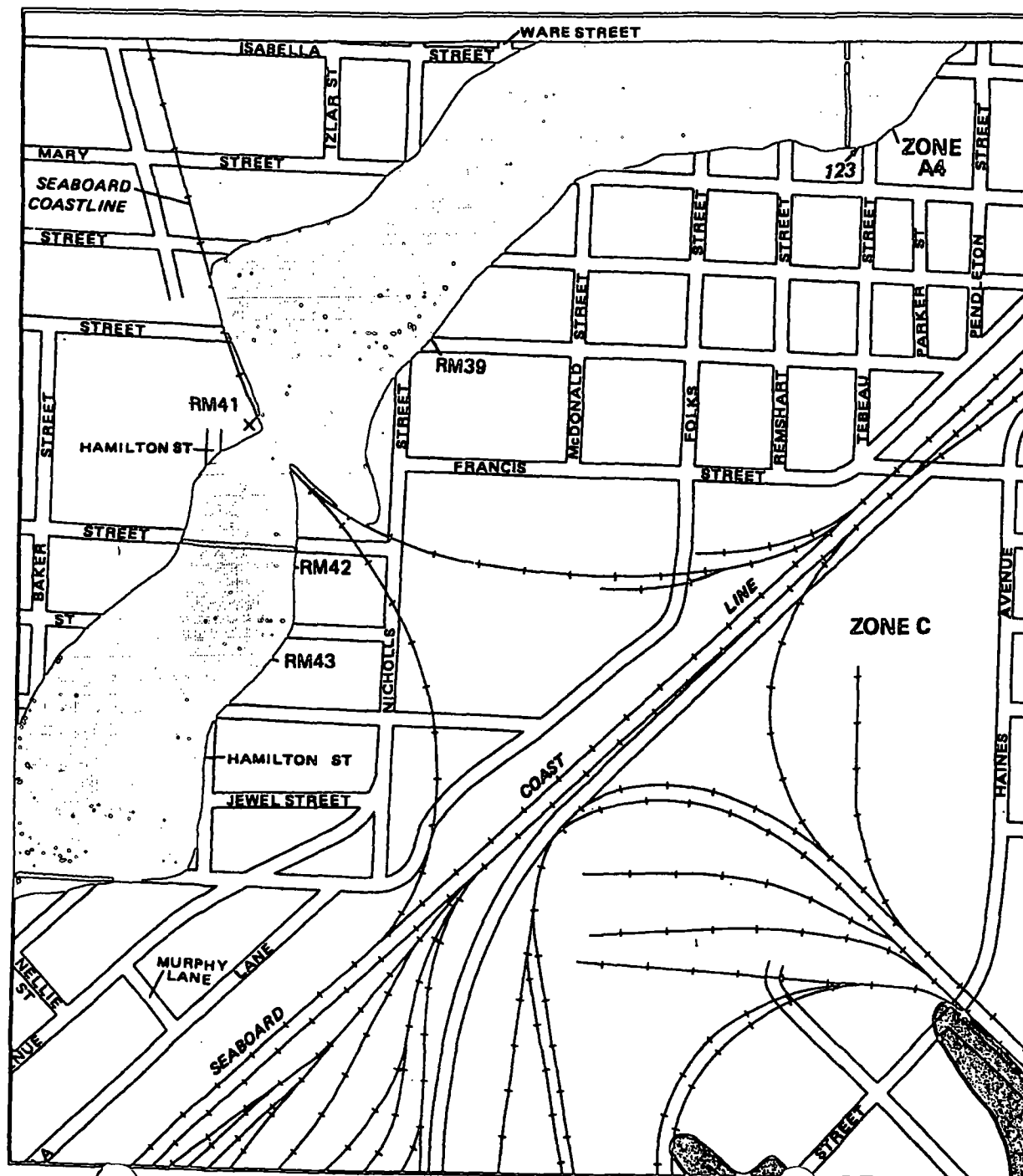
 federal emergency management agency  
federal insurance administration

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.mec.fema.gov](http://www.mec.fema.gov)

CORPORATE LIMITS

ZONE C

SHOWN AS INSET A ON PANEL 130186 0003 B



APPROXIMATE SCALE

500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY OF  
WAYCROSS, GEORGIA  
WARE COUNTY

PANEL 3 OF 4  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
130100 0030 B

EFFECTIVE DATE:  
AUGUST 3, 1981



Federal emergency management agency  
federal insurance administration

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.mca.fema.gov](http://www.mca.fema.gov)

## REFERENCE 59

U.S.G.S. 7.5' Topographic Maps (1:24000) for Waycross West (1967, photorevised 1988), Waycross East (1967, photorevised 1988), Hoboken West (1967, photorevised 1988), Dixie (1971, photorevised 1988), and Blackshear West (1971, photorevised 1988) are included in Figure 5 in the Figures section of this report.

## REFERENCE 60

U.S.G.S. 7.5' Wetland Inventory Maps (1:24,000) for Waycross East (1980) and Hoboken West (1980), included in Figure 6 in the Figures section of this report

## REFERENCE 61





Water Resources

Data Category:

Site Information

Geographic Area:

Georgia

## Site Map for Georgia

Times for Georgia stations are shown as Eastern Standard Time. If your clock is set to Eastern Daylight Saving Time, add one hour to the time shown on the Web page to compare to your clock time.

Additional information may be found on the [USGS Water Resources of Georgia](#) page, including [low-flow statistics](#) and [flood-frequency information](#) for selected stations.

### USGS 02226500 SATILLA RIVER NEAR WAYCROSS, GA

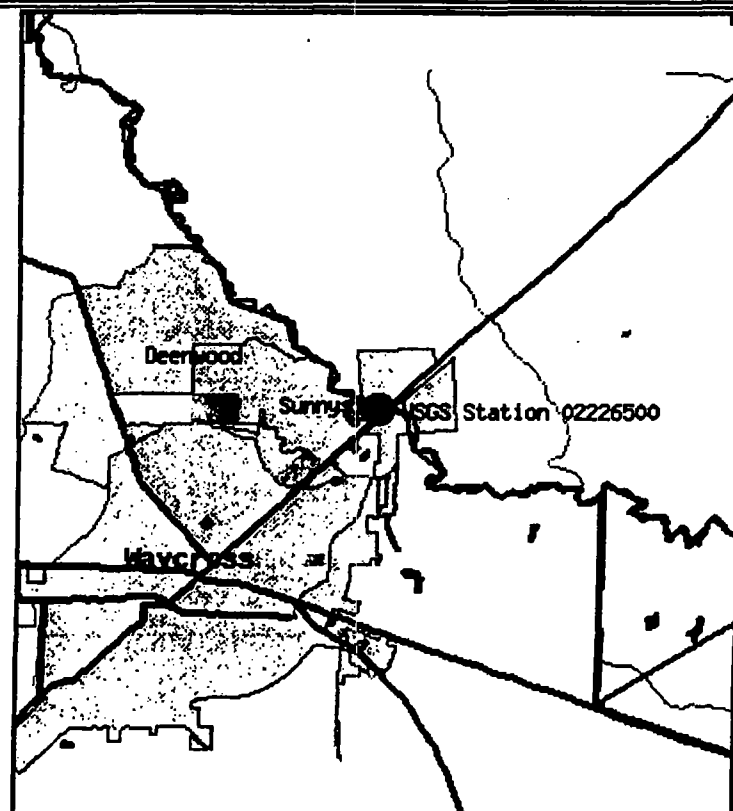
Available data for this site 

Ware County, Georgia  
Hydrologic Unit Code 03070201  
Latitude 31°14'17", Longitude 82°19'29" NAD27  
Drainage area 1,200 square miles  
Contributing drainage area 1,200 square miles  
Elevation datum 66.43 feet above sea level NGVD29

Location of the site in Georgia.



Site map.



---

**ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X.**

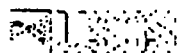
---

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**Maps are generated by US Census Bureau TIGER Mapping Service.**

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**Questions about data**      **[Georgia NWISWeb Data Inquiries](#)****Feedback on this website**      **[Georgia NWISWeb Maintainer](#)****[Top](#)**  
**[Explanation of terms](#)****NWIS Site Inventory for Georgia: Site Map****<http://waterdata.usgs.gov/ga/nwis/nwismap?>****Retrieved on 2005-07-06 11:21:12 EDT****[Department of the Interior, U.S. Geological Survey](#)****[USGS Water Resources of Georgia](#)****[Privacy Statement](#) || [Disclaimer](#) || [Accessibility](#) || [FOIA](#)****1.01 0.74 va**



Water Resources

Data Category:

Surface Water

Geographic Area:

Georgia

# Calendar Year Streamflow Statistics for Georgia

Times for Georgia stations are shown as Eastern Standard Time. If your clock is set to Eastern Daylight Saving Time, add one hour to the time shown on the Web page to compare to your clock time.

Additional information may be found on the [USGS Water Resources of Georgia](#) page, including [low-flow statistics](#) and [flood-frequency information](#) for selected stations.

## USGS 02226500 SATILLA RIVER NEAR WAYCROSS, GA

Available data for this site

Surface-water: Annual streamflow statistics



Ware County, Georgia  
Hydrologic Unit Code 03070201  
Latitude 31°14'17", Longitude 82°19'29" NAD27  
Drainage area 1,200 square miles  
Contributing drainage area 1,200 square miles  
Gage datum 66.43 feet above sea level NGVD29

### Output formats

[HTML table of all data](#)
[Tab-separated data](#)
[Reselect output format](#)

Year	Annual mean streamflow, in ft <sup>3</sup> /s	Year	Annual mean streamflow, in ft <sup>3</sup> /s	Year	Annual mean streamflow, in ft <sup>3</sup> /s	Year	Annual mean streamflow, in ft <sup>3</sup> /s
1938	410	1955	200	1972	1,140	1988	748
1939	842	1956	502	1973	1,865	1989	282
1940	447	1957	729	1974	943	1990	581
1941	289	1958	1,224	1975	1,586	1991	2,298
1942	1,044	1959	1,368	1976	1,717	1992	1,466
1943	503	1960	1,266	1977	1,197	1993	1,048
1944	1,784	1961	947	1978	975	1994	1,635
1945	969	1962	578	1979	1,242	1995	1,061
1946	1,043	1963	798	1980	1,080	1996	333
1947	2,016	1964	2,589	1981	118	1997	1,394
1948	1,880	1965	1,320	1982	913	1998	1,639
1949	1,216	1966	1,269	1983	1,986	1999	166
1950	520	1967	745	1984	1,841	2000	256
1951	691	1968	216	1985	602	2001	423

1952	464	1969	1,019	1986	1,316	2002	228
1953	1,100	1970	1,242	1987	1,412	2003	1,737
1954	232	1971	1,227				

Questions about data [Georgia NWISWeb Data Inquiries](#)  
Feedback on this website [Georgia NWISWeb Maintainer](#)  
Surface Water data for Georgia: Calendar Year Streamflow Statistics  
[http://waterdata.usgs.gov/ga/nwis/annual/calendar\\_year?](http://waterdata.usgs.gov/ga/nwis/annual/calendar_year?)

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0.97 0.93 nadww01

## REFERENCE 62

**T H E  
SATILLA  
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## Introduction & Overview

### Terminology

- "BMPs" refers to Best Management Practices
- "Best Management Practices" as used in this document refers to the Environmental Protection Agency definition as A practice or combination of practices determined to be the most practicable means of preventing or reducing, to a level compatible with water quality goals, the amount of pollution generated by nonpoint sources. BMPs are selected on the basis of site-specific conditions that reflect natural background conditions and political, social, economic, and technical feasibility.
- "CWA" refers to the Clean Water Act
- "Clean Water Act" as used in this document refers to the Environmental Protection Agency definition as The Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 96-483 and Public Law 97-117, 33 U.S.C. 1251 et seq. The Act that sets the basic structure for regulating discharges of pollutants to surface waters of the United States. The Clean Water Act imposes contaminant limitations or guidelines for all discharges of wastewater into the nation's waterways.
- "Debris" as used in this document refers to bottles, cigarette butts, food packaging, sporting equipment, etc. Also referred to as "trash".
- "Designated uses" as used in this document refers to the Environmental Protection Agency definition as those water uses identified in state water quality standards that must be achieved and maintained as required under the Clean Water Act. Uses can include cold water fisheries, public water supply, and irrigation.
- "EPA" refers to the United States Environmental Protection Agency
- "MS4s" as used in this document refers to a municipal separate storm sewer system, such as roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, storm drains and are owned or operated by a state, city, town, borough, county, parish, district, association, or other public body having

jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes; Designed or used for collecting or conveying stormwater; Which is not a combined sewer; and Which is not part of a publicly owned treatment works.

- "NPDES" refers to the National Pollution Discharge Elimination System
- "National Pollution Discharge Elimination System" as used in this document refers to the Environmental Protection Agency definition as the national program for controlling discharges of pollutants from point sources (e.g., municipal sewage treatment plants, industrial facilities) into the waters of the United States.
- "Nonpoint sources" as used in this document refers to the Environmental Protection Agency definition as source of pollution in which wastes are not released at one specific, identifiable point but from a number of points that are spread out and difficult to identify and control; Large land area such as crop fields and urban areas that discharge pollutant into surface and underground water over a large area.
- "Point sources" as used in this document refers to the Environmental Protection Agency definition as any discernible confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.
- "Pollutant" as used in this document refers to the Environmental Protection Agency definition as a contaminant in a concentration or amount that adversely alters the physical, chemical, or biological properties of the environment. The term includes pathogens, toxic metals, carcinogens, oxygen-demanding materials, and all other harmful substances. With reference to nonpoint sources, the term is sometimes used to apply to contaminants released in low concentrations from many activities that collectively degrade water quality. As defined in the federal Clean Water Act, pollutant means dredged spoil; solid waste; incinerator residue; sewage; garbage; sewage sludge; munitions; chemical wastes; biological materials; radioactive materials; heat; wrecked or discarded equipment; rock; sand; cellar dirt; and industrial, municipal, and agricultural waste discharged into water.
- "P E & O" as used in this document refers to Public Education & Outreach
- "Stakeholders" as used in this document refers to the Environmental Protection Agency definition as any entities involved in or affected by watershed management activities within a watershed; covers a broad range of people and organizations, including government agencies, nongovernmental organizations, businesses, agricultural entities, the public, and the regulated community.



- "Stormwater" as used in this document refers to the Environmental Protection Agency definition as stormwater runoff, snow melt runoff, and surface runoff and drainage; rainfall that does not infiltrate the ground or evaporate because of anthropogenic land use causing impervious surfaces or other geomorphic changes. The flow of stormwater runoff onto adjacent land, through watercourses or drain/sewer systems may transport pollutants.
- "SMPs" refers to Stormwater Management Practices
- "Watershed" as used in this document refers to the Environmental Protection Agency definition as the area of land from which rainfall (and/or snow melt) drains into a stream or other water body. Watersheds are also sometimes referred to as drainage basins or drainage areas.
- "Watershed management" as used in this document refers to the Environmental Agency definition as a holistic approach applied within an area defined by hydrological, not political, boundaries, integrating the water quality impacts from both point and nonpoint sources. Watershed management has a premise that many water quality and ecosystem problems are better solved at the watershed scale rather than by examining the individual waterbodies or dischargers.

## **Abstract**

Generally, stormwater occurs when rain runs off roads, yards and roofs and down gutters into stormwater grates. Stormwater picks up silt, contaminants, and even large solid waste as it runs over these surfaces. The stormwater runs untreated into bodies of water, causing pollution and contamination.

Problems with stormwater in the city of Waycross have led to pollution of the Satilla River and local sewage spills. After heavy rains excess water drains into sewage manholes and causes the manholes to overflow. The overflow water picks up large pieces of solid waste consisting of "low hanging fruit" (i.e. basketballs, bats, etc.), litter (i.e. bottles, cigarette butts, etc.), and medical waste (i.e. syringes, vials, etc.), carrying the waste into canals, the canals then carrying the waste into the river. The stormwater has also caused sewage spills, which have damaged homes and buildings in the Waycross area.

As the Satilla River becomes more polluted with each rainfall, the health and ecological risks correspondingly increase. Waste in the river jeopardizes the safety of fish consumption and may

cause the river to fall short of its designated use requirements. Likewise, the polluted waters degrade the Satilla's habitat. In light of these threats, concerned Waycross citizens and local government has requested legal research assistance and affordable solutions for the town's stormwater management problems.

Ultimately this project will recommend stormwater/litter solutions to local decision-makers, and will provide community education about how locals can help alleviate the Satilla Watershed pollution problem.

## Listening to Stakeholders

Taking into consideration the needs, comments, and concerns of the stakeholders listed below, the Satilla Stormwater Team devised a scheme to address these concerns through a community Public Education and Outreach strategy via K-12 education, legal avenues, and the Internet.

<b>James H. "Skip" Nalley, Jr.</b> Waycross City Manager Office Phone: (912) 287-2912 Fax: (912) 287-2990	<b>Fred Carpenter and Alan Mazza</b> <a href="mailto:fecsegardc@accessatc.net">fecsegardc@accessatc.net</a> Southeast Georgia Regional Development Center 1725 South Georgia Parkway, West Waycross, Georgia 31503 Phone: (912)285-6097 Fax: (912) 285-6126	<b>Jill Huntington</b> Georgia DNR Coastal Resources Division Coastal Management Specialist <a href="mailto:jill_huntington@dnr.state.ga.us">jill_huntington@dnr.state.ga.us</a> Phone: (912) 262-3053 Fax: (912) 262-3143
<b>Eddie Murray</b> Network Administrator City of Waycross <a href="mailto:emurray@waycrossga.com">emurray@waycrossga.com</a>	<b>Julie Van</b> GA EPD 912-264-7284	<b>Jack T. Sandow, Jr.</b> Environmental advocate 912-458-2256 <a href="mailto:itsandow@btonline.net">itsandow@btonline.net</a>
<b>Dr. Richard A. Brantley</b> Ware County Superintendent 1301 Bailey St.	<b>Paul Burks</b> Executive Director Georgia Environmental Facilities Authority	<b>Frank Quinby</b> Future President Satilla Riverkeepers? <a href="mailto:frankquinby@bellsouth.net">frankquinby@bellsouth.net</a>

Waycross, GA 31501 (912) 283-8656 <a href="mailto:rbrantle@doe.k12.ga.us">rbrantle@doe.k12.ga.us</a>	(GEFA) <a href="mailto:paul@gefa.ga.gov">paul@gefa.ga.gov</a> Phone: 404-656-0939	
<b>Gloria Taylor</b> Save-our-Satilla (SOS) Riverhaven Road 3 Box 497-b Hortense, GA 31543-9733 <a href="mailto:gtaylor_sos@msn.com">gtaylor_sos@msn.com</a>	<b>Reid Jackson</b> Department of Natural Resources Coastal Nonpoint Source Program 1 Conservation Way Brunswick, GA 31520 <a href="mailto:RJackson@dnr.state.ga.us">RJackson@dnr.state.ga.us</a>	

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## Situational Analysis & Best Management Practices Research

### Context

In 1972, the National Pollutant Discharge Elimination System (NPDES) program was established by the Clean Water Act (CWA).<sup>1</sup> Congress amended the CWA in 1987 to require the EPA to implement a NPDES Stormwater Permit Program for municipal discharges. Based on these amendments phase I of the NPDES Stormwater program was established in 1990, requiring larger municipalities (population 100,000 or greater) to get a NPDES permit. Phase II of the program began in 1999, requiring certain smaller communities to come into the permit program. These smaller communities are known as small municipal separate storm sewer systems (MS4s) and they become part of the phase II program in one of three ways: (1) automatic designation when defined as an “Urbanized Area” by the U.S. Census Bureau, (2) state designation which will be detailed below, and (3) petitioning if there is a significant water concern in the community.

Georgia can designate municipalities under the phase II program to require a NPDES permit. Under the federal regulations, the state’s designation criteria must at least be applied to all “Outside Urbanized Areas,” any area that has a population of 10,000 or more and a density of 1,000 people per square mile. The designation criteria

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<sup>1</sup> 33 U.S.C. § 1251 et seq..

must include a balanced consideration of: (1) Discharge to sensitive waters, (2) High population growth or growth potential, (3) High population density, (4) Contiguity to an Urbanized Area, (5) Significant contributor of pollutants, and (6) Ineffective protection by other programs.<sup>2</sup> Georgia's designation criteria focus primarily on growth rate and the presence of impaired waters identified on Georgia's 303(d) list. Currently, Cordele is the only Georgia city outside an urbanized area required to obtain permit coverage based on designation criteria. On August 22, 2002 Georgia identified 57 cities and 29 counties needing NPDES permit coverage under the phase II stormwater rule, they are listed in Appendix A.

The City of Waycross has not been required by the state of Georgia to get a phase II NPDES permit. However, the City is considered an "Outside Urbanized Area" given its population size and density and may be required to meet federal standards in the future. The Satilla watershed currently contains 3 rivers that are on the CWA § 303(d) list (Hog Creek and 2 segments of the Seventeen Mile River) requiring Total Maximum Daily Loads to be established. Several other waterways are not meeting their designated uses in the watershed, including the Waycross City Drainage Canal.

The deterioration of the Satilla Watershed around Waycross is a cause of serious local concern, and the community must get involved in order to preserve the health of the surrounding environment. Because stormwater pollution caused by various activities, regulation can only go so far to control the problem. Education and outreach are "key components to any successful stormwater program."<sup>3</sup> Should the City of Waycross

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<sup>2</sup> 40 C.F.R. § 123.35(b)(1)(ii).

<sup>3</sup> EPA Year of Clean Water, <<http://www.epa.gov/ow/yearofcleanwater>>.

implement a comprehensive stormwater management plan in the future, or become a regulated municipality, the educational groundwork will already be in place.

### **Current Stormwater Practices in Waycross**

The Waycross and Ware County Development Authority constitutes a complete codification of the ordinances of Waycross, Georgia. It contains 37 chapters and several appendices for the purpose of developing and promoting the public good and the welfare of the County of Ware and the City of Waycross and their inhabitants.

There are several ordinances that deal specifically with the issues of stormwater and waste management. Most types of urban development involve the construction of buildings and paved surfaces, which lead to an increase in stormwater runoff. In order to minimize the impact from stormwater runoff caused by development, the city adopted its first storm drainage ordinance in 2000. The City also has regulations dealing with trash collection, solid waste management, littering, sewer use, and industrial waste regulations.

Excessive soil erosion and resulting sedimentation can take place during land-disturbing activities, resulting in damage to water quality. Measures shall be installed to prevent or control erosion and sedimentation pollution during all stages of any land-disturbing activity in accordance with the City of Waycross Soil Erosion and Sedimentation Control Ordinance of 1996.

### **Best Management Practices Research**

One key aspect identified by the Environmental Protection Agency is to incorporate practices that have been determined to be the most practicable means of

preventing or reducing water pollution. One of these practices is a community education and outreach strategy. In summary, the most successful Public Education & Outreach campaigns incorporate: this needs a footnote that some of it is modified from the Toronto thing- not finished

- "In person" contact and outreach;
- Incentives, such as free or rebated materials;
- Reaching people with the message many times in many different ways;
- Separate and specific campaigns for each different behavior to be changed;
- Flexibility in approach: different groups and sectors need to be targeted and reached in different ways (e.g., small businesses need a different approach than residents);
- Positive approaches rather than those that condemn past practices;
- Partnerships between government, the private sector and NGOs to provide expertise, services or in-kind donations; and,
- Strategies to focus public attention on the issue so businesses and other groups want to get involved.

By incorporating these stormwater P E & O best practices approaches into the Public Education & Outreach Strategy for the stormwater management plan, the City of Waycross and its residents will achieve the greatest stormwater improvements in the most effective way possible. In these stages of our P E & O strategy we have initiated contact with different members of the Waycross community, including educators, municipal officials and environmental advocates. Public focus is aimed at the issue via educational brochures, posters, and the website, each with specific campaigns for the different

stakeholders. All of these have the same brand image that helps provide identity to the campaign.

One aim of the Waycross P E & O strategy is to introduce environmentally friendly life style plans to the community, with much of the campaign aimed at the school-age children. Its is more effective to influence those, such as children, who have not fully developed their life style practices and habits. The P E & O strategy we are implementing for Waycross uses education to teach practices that promote practical means of reducing stormwater pollution, rather than criticize current practices. With this approach our goal is to develop and foster an interest in the environment within the community.

### **EPA Guidelines**

Regulated small MS4 communities are required to develop, implement and enforce a program to reduce the discharge of pollutants to the maximum extent practicable (MEP). The program must include six minimum control measures as well as evaluation/assessment efforts and proper record keeping. The six minimum control measures are:

- Public Education and Outreach
- Public Involvement / Participation
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Storm Water Management in New and Redevelopment
- Pollution Prevention / Good Housekeeping for Municipal Operations



Each minimum control measure should include best management practices, measurable goals, time and frequency of actions, and a list of responsible persons.

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## **Education & Awareness**

### **EPA Recommendations for Public Education & Outreach on Stormwater Impacts**

The federal government requires regulated MS4 municipalities to implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.<sup>4</sup>

The public education program should inform individuals and households about steps they can take to reduce storm water pollution. EPA recommends that the program inform the community how to become involved in local stream and watershed conservation activities, as well as coordinate activities involving youth groups, conservation corps, or other citizen groups. It is recommended that the public education program be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. EPA also suggests that some of the materials or outreach programs be geared towards groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. The program should be tailored to address the different viewpoints and concerns within the local community, particularly minorities and children.

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<sup>4</sup> 40 C.F.R. § 122.34(b)(1).

**Umbrella Approach** needs footer here too- not finished

In order to achieve maximum effectiveness, the Public Education & Outreach strategy should have an umbrella approach that provides consistent verbal and visual cues to the targeted audiences. This umbrella approach will:

- provide an overall campaign identity;
- provide necessary repetition for campaign tag lines and identifying 'brands' without adding additional advertising or branding costs;
- provide a City-wide theme for the campaign, especially important when used in support of a localized activity;
- help reach the audience several times with the same message through the use of different messengers;
- allow partners to 'co-brand' their targeted outreach efforts; and,
- be conducive to modular and flexible components – new elements and new projects that can be added and adapted over the five year life of the strategy.

Additionally, research supports the value of a 'problem first, solutions second' approach, which means the overall campaign identity should focus first on increasing awareness about the problem, or issue, the stormwater management plan is designed to resolve. Water quality, the Satilla River and river pollution are the 'problem end' of the problem-solution equation, and should be a primary focus.

The campaign uses a multi-tiered educational approach that begins with teaching the youth in the community about stormwater pollution and includes outreach to the adults through a website, brochures and other resources. Binders have been put together that are a compilation of educational and legal documents for schools and municipalities.

All of these channels of education and outreach are united by a similar theme and a brand image that includes the "Waycross Watershed Fish" and The Satilla Initiative logo, which are repeated throughout the different components of the campaign. These visual cues will aid in identification of our campaign for all of the targeted audiences.

### **Target Areas & Audiences**

- **General Community:** The Waycross's Watershed website, designed by the Stormwater Management Team, will target the general community. It is tailored to be informative to all Waycross locals; it can be useful to educators and school age children (grades K-12), as well as other interested individuals looking for ways to get involved in the Satilla Watershed
- **Fishermen and Hunters:** Targeting fishermen and hunters is necessary because they understand that the river must be clean to make it safe to consume the fish caught there and that the watershed must be healthy to support biota. The community as a whole can appreciate this message because it is a non-aggressive approach that raises a legitimate concern. This message is especially important to convey in less environmentally conscious communities like Waycross.
- **Educators/Students:** Education is an essential means for the successful conveyance of issues surrounding the Satilla Watershed. Teachers should incorporate more stormwater/watershed information in their lesson plans to raise awareness among the children, and among the teachers as well. Further, children will discuss these environmental lessons learned at school with their parents, another audience that could potentially be impacted by the message. The Public Education and Outreach

strategy for Waycross specifically targets elementary and high school age children with different campaigns using the same message.

- **Municipal Authorities:** The Stormwater Management Team has created a binder for the municipal authorities to reference. The binder is a compilation of scientific and educational data specific to Waycross, the Satilla Watershed and legal information concerning Best Management Practices and Stormwater Management Plans.

### **Recommended Next Steps**

According to the U.S. Environmental Protection Agency, nonpoint source pollution is the number one cause of the nation's water pollution. Diffuse sources of water runoff from the landscape that carries pollutants such as sediment, pesticides and salts, heavy metals and nutrients, constitute nonpoint source pollution.

This type of pollution results from a wide variety of activities over a wide area. The best way to reduce nonpoint source pollution is through a coordinated approach working in partnership with the watershed community. Watershed-based management is the most effective way to enhance water quality and natural resources, protect critical wildlife habitat, prevent soil erosion, and sustain economic activities while managing the pressures of an urbanizing landscape.

Stormwater management practices (SMPs) are the basic mitigation measures used in the stormwater quality management plans to control pollutants within the City. In most cases it is much easier and less costly to prevent the pollutants from entering the drainage system than trying to control pollutants with structural SMPs. The non-structural SMPs should be the first line of defense in protecting the receiving streams. If used properly, the non-structural SMPs can be very effective in controlling pollutants and

greatly reduce the need for structural SMPs. In addition, non-structural SMPs tend to be less costly, easier to design and implement and easier to maintain than structural SMPs. Structural SMPs would include extended detention/retention ponds, constructed wetlands, infiltration trenches, and filter strips.

Non-structural SMPs normally do not have technical or engineering designs associated with them but are measures that the City or other agencies or groups might require or implement to assist in the management water quality and the control of pollutants within the City. A brief outline of non-structural SMPs that can be used within a stormwater quality management plan for different portions of the City follows.<sup>5</sup>

Public education/ participation is not so much a stormwater management practice as it is a method by which to implement SMPs. Public education/ participation are vital components of many of the individual source control SMPs. A public education and participation plan provides the City with a strategy for educating its employees, the public, and businesses about the importance of protecting stormwater from improper use, storage, and disposal of pollutants.

City employees must be trained, especially those that work in departments not directly related to stormwater but whose actions affect stormwater. Residents must become aware that a variety of hazardous products are used in the home and that their improper use and disposal can pollute stormwater and groundwater supplies. Businesses, particularly smaller ones that may not be regulated by Federal, State, or local regulations, must be informed of ways to reduce their potential to pollute stormwater.

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<sup>5</sup> Griffin Stormwater Manual, <<http://www.griffinstorm.com>>.

**Suggested public education and outreach SMPs for year one:**

	<i>Description</i>	<i>Target Audience</i>	<i>Goals</i>	<i>Schedule</i>	<i>Rationale</i>
<b>SMP #1</b>	Waycross & Ware County School District will educate school children through the use of the "Water Source" book	School children from K-12	Educate young people about their unique environment, and make them more involved in protecting the watershed	Yearly, in accordance with the state curriculum... Specifically grades 2, 7, 8, and high school biology	Not only will the children gain a vested interest in their local community, parents are included in the process and may learn from their kids
<b>SMP #2</b>	Disseminate all relevant community news and watershed information on the Waycross's Watershed website	General Population	City (perhaps in conjunction with the local college) takes control of website from Satilla Initiative, becomes legitimate source of information within the community	Update the website quarterly	Websites are inexpensive and relatively easy to maintain, broad impact
<b>SMP #3</b>	Distribute information flyers in utility bills	General Population	Mail flyers to all Waycross residents... educate the community at large	Yearly	Good reminder to all homeowners and business owners... can be easily customized for different target groups
<b>SMP #4</b>	Publish an annual report to all citizens on scientific state of the Satilla Watershed plus new developments	General Population	Publish on the website and in the Waycross Journal-Herald... educate the community at-large	Yearly	Good reminder about the importance of the health of the Satilla... catches large segment of the community

<b>SMP #5</b>	Maintain brochures in the local government offices, library, etc.	General Population	Educate the community at-large	New brochure yearly... must maintain a good supply at all times	Educates people about stormwater issues while they are conducting other business
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## Moving Forward

### Practical Solutions

The Stormwater Management Team has researched possible solutions to the stormwater debris problem that are economically and environmentally beneficial to the community. One obstruction to finding practical solutions that was encountered, however, arose from the uncertainty of the sources of trash. It has been determined via information from local stakeholders that much of the trash is washing into the local storm drains through the canal system. The trash is dropped along roadsides where it is washed and/or blown into the gutters and transported through the canal system into the Satilla River. Other debris is washed over the land by storm events or is directly dumped in or near the river. Because there are several different identified means of access for trash to enter the river, there is no one solution that would retard the flow of trash into the river.

There is not much that can be done to prevent people from dumping trash illegally into the water body, besides impractical constant monitoring of all access points from the road to the river and the enforcement of current ordinances and laws against illegal dumping. This is costly in the number of people and hours that must be employed to monitor dumping sites.

However, two further recommendation for future consideration and possible implementation include erecting signage stating laws and fees for dumping and guardrails along roads and highways located adjacent to the Satilla river. Guardrails would

eliminate much of the illegal dumping that is occurring. By eliminating off road access to the river, it would be more difficult to purposefully dump trash into the Satilla.

As to the trash accessing the river via the canal, there are several measures that can be taken to reduce or eliminate this entryway. One such means is constructing grates that would be placed on existing stormwater drains. Many of the stormwater drains in Waycross are lacking any preventative measures for blocking or capturing trash during storm events. Stormwater runoff picks up silt, contaminants and trash as it runs along the surfaces of roads, yards and gutters. The stormwater then enters in the drainage pipes where it is discharged into bodies of water, including the Satilla River. This causes unnecessary pollution and contamination of the river and can lead to health and ecological risks. Erecting grates on the drains would prevent most of the trash from entering the pipes and subsequently, the river. Another possible solution is to install a system that removes trash from stormwater at the first stage. The first stage occurs where trash and stormwater enter sewer lines. At this point debris can be separated out from the stormwater via vortex motion. This technology cannot be employed once the debris and stormwater have entered the river, as the system cannot distinguish between biological matter and targeted pollutants.

Technology such as dams and weirs are not recommended by the Stormwater Management Team due to the indiscrimination between natural and unnatural matter, sedimentation and downstream scouring associated with them.

The Stormwater Management Team recommends a future study or survey to determine the sources and the entryways of trash into the Satilla River. Once this is complete, the proper technology can be implemented. It is possible that such a

technology would only have to be used during periods of high-energy storms and heavy rainfall. These months have historically occurred during the summer months. Installation of the proper technology and use of historical average monthly rainfall data could save the city money and manpower.

### Community Involvement

Though not an exhaustive list, the following paragraph suggests some means through which Waycross locals can get involved in their Satilla Watershed.

- **River Clean Ups:** A river cleanup is a fantastic way to keep your watershed clean. In fact, the Waycross Garden Club Council and the Oleander District Garden Club of Georgia already organize a cleanup. Likewise, in coordination with Rivers Alive, the annual volunteer Satilla River cleanup occurs every October. [www.riversalive.org](http://www.riversalive.org).
- **Georgia's Adopt-a-Stream:** This organization is Georgia's volunteer water quality monitoring program. The registration form and the watershed survey data forms may be found in the introductory manual for Georgia Adopt-A-Stream, called "Getting To Know Your Watershed". This organization is coordinated through the Georgia Department of Natural Resources, Environmental Protection Division.  
<http://www.riversalive.org/aas.htm>
- **Satilla Riverwatch Alliance Inc. (SRWA):** This organization encourages and supports the development of the Satilla Riverkeepers program. Frank Quinby at [frankquinby@bellsouth.net](mailto:frankquinby@bellsouth.net) may be contacted for further information or to get involved.

- **Recycling Programs:** Another way that Waycross locals can be proactive in Watershed protection is by recycling. The website, [www.earth911.org](http://www.earth911.org), allows users to search for recycling centers by zip code. Community members may find locations where they can take various types of hazardous materials along with normal household items as well to be recycled.
- **Satilla Day:** This is an idea for the future that will expand on the community efforts above. Satilla Day should be timed with Earth Day in April every year, and should involve a cleanup of the river, some educational activities, as well as other related events. Ideally this type of environmental awareness day would encourage maximum community participation, providing a means through which local schools, scouting groups, 4-H clubs, and concerned citizens could all get involved.

### **Other City PE & O Initiatives**

#### **Material Disposal And Recycling**

Material storage control is used to prevent or reduce the discharge of pollutants to stormwater from material delivery and storage by minimizing the storage of hazardous materials onsite, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors. Vehicle use reduction is used to reduce the discharge of pollutants to stormwater from vehicle use by high-lighting the stormwater impacts, promoting the benefits to stormwater of alternative transportation, and integrating initiatives with existing or emerging regulations and programs.

There are three major SMPs included in this category:

- **Storm Drain System Signs**

Stenciling of the storm drain system (inlets, catch basins, channels, and creeks) with prohibitive language/ graphic icons discourages the illegal dumping of unwanted materials. Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets.

- **Household Hazardous Waste Collection**

Household hazardous wastes are defined as waste materials which are typically found in homes or similar sources, which exhibit characteristics such as: corrosivity, ignitability, reactivity, and/ or toxicity, or are listed as hazardous materials by the EPA. Household hazardous waste collection programs are a preventative rather than curative measure and may reduce the need for more elaborate treatment controls. Programs can be a combination of permanent collection centers, mobile collection centers, curbside collection, recycling, reuse, and source reduction.

- **Used Oil Collection**

Used oil recycling is a responsible alternative to improper disposal practices such as dumping oil in the sanitary sewer or storm drain system, applying oil to roads for dust control, placing used oil and filters in the trash for disposal to landfill, or simply pouring used oil on the ground. Commonly used oil collection alternatives are a temporary "drop off" site on designated collection days or the use of private collectors such as automobile service stations, quick oil change centers and auto parts stores.

### **Street/ Storm Drain Maintenance**

There are seven major SMPs included in this category:

- **Roadway Cleaning**

Roadway cleaning may help reduce the discharge of pollutants to stormwater from street surfaces by conducting cleaning on a regular basis. However, cleaning often removes the larger sizes of pollutants but not the smaller sizes. Most pollutants are deposited within three feet of the curb which is where the roadway cleaning should be concentrated.

- **Catch Basin Cleaning**

Catch basin cleaning on a regular basis also helps reduce pollutants in the storm drain system, reduces high pollutant concentrations during the first flush of storms, prevents clogging of the downstream conveyance system and restores the catch basins' sediment trapping capacity.

- **Vegetation Controls**

Vegetation control typically involves a combination of chemical (herbicide) application and mechanical methods. Mechanical vegetation control includes leaving existing vegetation, cutting less frequently, hand cutting, planting low maintenance vegetation, mulching, collecting and properly disposing of clippings and cuttings, and educating employees.

- **Storm Drain Flushing**

Storm drains can be "flushed" with water to suspend and remove deposited materials. Flushing is particularly beneficial for storm drain pipes with grades too flat to be self cleansing and helps ensure pipes convey design flow and removes pollutants from the storm drain system. However, flushing will only push the pollutants into downstream receiving waters unless the discharge from the flushing is captured and removed from the drainage system. Jet-Vac trucks should be employed to remove debris from this process.

- **Roadway/ Bridge Maintenance**

Roadway/ bridge maintenance is used to prevent or reduce the discharge of pollutants to stormwater by paving as little as possible, designing bridges to collect and convey stormwater to proper locations, using measure to prevent runoff from entering the drainage system, properly disposing of maintenance wastes, and training employees.

- **Detention/ Infiltration Device/Drainage Channel/ Creek Maintenance**

Proper maintenance and siltation removal is required on both a routine and corrective basis to promote effective stormwater pollutant removal efficiency for wet and dry detention ponds and infiltration devices. Also, regularly removing illegally dumped items and material from storm drainage channels and creeks will reduce pollutant levels.

## **Implementation of Stormwater Management Plan**

### **Appendix A:**

**Georgia Cities & Counties Needing Phase II NPDES Permit Coverage**

### **Appendix B:**

**Population for Storm Water Entities as Defined by the 2000 Census**

### **Appendix C:**

**Satilla River Basin Management Plan 2002**

### **Appendix D:**

**Georgia Phase II Storm Water Permitting Strategy**

### **Appendix E:**

**Draft Model Post-Development Stormwater Management Ordinance**

## **Information for Funding**

### **EPA Environmental Education Grants Program<sup>6</sup>**

EPA's environmental education grants, authorized by the National Environmental

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<sup>6</sup> <<http://www.epa.gov/enviroed/grants.html>>.

Education Act (NEEA) of 1990, are awarded to carry out environmental education projects. The EPA Environmental Education Grants Program is designed to stimulate the development of environmental education projects at the community level by local schools and environmental organizations, and to facilitate environmental education partnerships between governmental agencies, educational institutions, non-profit organizations, and the private sector. Projects are intended to motivate the public to be more environmentally conscious and make responsible and balanced decisions to protect the environment.

The U.S. Environmental Protection Agency Region 4 awarded 19 grants totaling approximately \$200,000 as a result of the 2003 competition for environmental education grants.

#### **Clean Water State Revolving Loan Fund (CWSRF)<sup>7</sup>**

The Clean Water State Revolving Loan Fund (CWSRF) is a Federal fund administered by the Georgia Environmental Facilities Authority (GEFA) for waste water projects.

#### **Water and Wastewater System Financing<sup>8</sup>**

Low interest rate loans are available under several loan programs. GEFA and EPD have worked together to finance over \$1 billion in improvements since 1984. GEFA loans bridge the gap between local environmental infrastructure needs and the financial resources to pay for them.

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<sup>7</sup> <<http://www.gefa.org/cwsrf.html>>.

<sup>8</sup> <[http://www.gefa.org/water\\_and\\_sewer.html](http://www.gefa.org/water_and_sewer.html)>.



# THE SATILLA INITIATIVE



## Case Studies

### Medical Waste

Because dumpsters used by the Satilla Regional Medical Center were located on ground above canals, medical waste, such as syringes and vials, was carried by the canals to the Satilla River during periods of wind or heavy rains. When the medical waste was found during a cleanup of the Satilla River, the problem was identified and brought to the attention of officials at Satilla Regional Medical Center. The problem was ultimately solved by the simple relocation of the dumpster.

### River Clean-ups

Various different groups sponsor yearly or seasonal Satilla River clean-ups. A clean-up sponsored by Waycross Garden Club Council, and the Oleander District Garden Club of Georgia involved 40 participants who cumulatively worked 150 hours in the river's "crud zone," where much of the trash in the river washes. The garbage collected filled a roll away dumpster and its total weight was 1400 lbs. Another recent clean-up in the same area yielded 2,175 lbs of trash. footnote this too? (ask aharon)

Below are some of the clean-ups that have occurred in the Satilla River over the past few years.

possibly put this table as an appendix??

Association	Participants	hours	# of bags	Dump Trucks	Lbs Garbage	Miles Cleaned	Most common Item	Most Unusual Item	Success	Suggestions	Effectiveness	Support
Save Our Satilla	24	98	78	—	—	3	Beer cans and bottles	Cue ball	Very much. This is a river community who throw their trash on the roads, ditches, and near boat landings, also visitor to the river. The children are our only hope. SOS has a junior membership and they promise to respect the river and pick out the litter.	Tee shirts are incredible. The posters were so good they kept taking them. Start later in the day, we started at 9 am and should start at 10 or 11.	Handed out water use paper and encouraged and educated all participants as well as cars driving by.	We have no budget. We only had water and a prize for the most bags. Everything else SOS members donated 25 dollars.

Waycross Garden Club Council	40	150		One roll- away dump ster	1400	4		Ladies' gold evening shoes, gigantic plastic football , 65 lb stereo speaker	We considered it a great success! Everyone was enthusiastic and enjoyed themselves. I was overwhelmed by the generosity of some of the companies (Kroger and Coca-cola) and by the fine people who gave up their Saturday morning to help.	1) Start sooner in planning. 2) Get a team to help more. 3) Check several sites to see which is most accessible and which needs cleaning the most.	The other co- chair and I have had overwhelming ly positive feedback from everyone who spoke to us about the project. Every person had a smile on their face, and this event really brought out the cream of the crop in good people to help. My husband is an avid lifelong fisherman and has many friends who are as well, and I asked them to come. Every one of them I asked came!	Wal-Mart - \$25 shopping card, Kroger - 6 dozen donuts, many cakes and pies, balloons, and all the trash bags we needed. They even went for more when we ran out. Their supervisor helped with the cleanup. Southland Waste Systems - free use of dumpster, Peacock Septic Systems - 1/2 off on Port-o-let.
Let's Fill The Pavillion River Clean-up Campaign	29	116	145	---	2175	2	Mountai n Dew 20 oz bottles	Pack of unopen ed oreo cookies and 350 block to a car	yes	---	The community as a whole donated all prizes and food. We made it a social event also. Everyone who donated items last year, doubled their donation this year.	We had 6 gift certificates valued at \$25 each and various other items donated plus Boston butts, rolls, bbq sauce, plates, napkins, etc. from out local grocery store. The community as a whole is really behind this project.
Bellsouth Pioneers	5	25	12	---	180	1	Beer bottles	---	Yes	---	---	---

changes still to be made:

fix tables..... some need to be in landscape mode, maybe as appendices?

conclusion

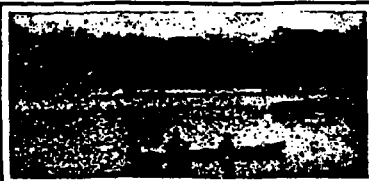
some things need to still be footnoted!!! (cleanup and add info), campaigns, etc

## REFERENCE 63



# Environmental Protection Division

## Georgia Department of Natural Resources

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## Georgia 305(b)/303(d) List Documents

### DRAFT Georgia 2006 305(b)/303(d) List Documents \*new\*

The Georgia 2006 305(b)/303(d) draft list of waters was prepared as a part of the Georgia 2004-2005 assessment of water quality prepared in accordance with Sections 305(b) and 303(d) of the Federal Clean Water Act and guidance from the U.S. Environmental Protection Agency. Assessed waterbodies are classified according to a comparison of water quality monitoring results to water quality standards and other pertinent information. The comment period on the draft list runs from March 29, 2006 to May 15, 2006. You may review or obtain a copy of any portion of the draft list documents by contacting the Watershed Protection Branch at (404) 675-6236.

- [Public Notice - March 29, 2006](#)
- [Transmittal Letter to USEPA - March 29, 2006](#)
- [Georgia's 2006 305\(b\)/303\(d\) Listing Methodology](#)
- [Summary of a Comparison of the Georgia Draft 2006 305\(b\)/303\(d\) List to the Georgia 2004 305\(b\)/303\(d\) List](#)
- **Draft Georgia 2006 305(b)/303(d) List Documents**
  - [Data Source Code/Key for Abbreviations](#)
  - [2006 Rivers/Streams Not Fully Supporting Designated Uses](#)
  - [2006 Lakes/Reservoirs Not Fully Supporting Designated Uses](#)
  - [2006 Estuarine Waters Not Fully Supporting Designated Uses](#)
  - [USEPA added waters to the Georgia EPD's 305\(b\)/303\(d\) List](#)

### Georgia 2004 305(b)/303(d) List Documents (Final)

The Georgia 2004 305(b)/303(d) list of waters was prepared as a part of the Georgia 2002-2003 assessment of water quality prepared in accordance with Sections 305(b) and 303(d) of the Federal Clean Water Act and guidance from the U.S. Environmental Protection Agency. Assessed waterbodies are classified as supporting, partially supporting, or not supporting designated water uses according to a comparison of water quality monitoring results to water quality standards and other pertinent

Outreach
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information.

- Transmittal Letter to USEPA - April 5, 2004
- **Georgia 2004 305(b)/303(d) List Documents**
  - Data Source Code/Key for Abbreviations
  - 2004 Rivers/Streams Partially Supporting Designated Uses (4/5/04)
  - 2004 Rivers/Streams Not Supporting Designated Uses (4/5/04)
  - 2004 Lakes/Reservoirs Not Fully Supporting Designated Uses (4/5/04)
  - 2004 Estuarine Waters Not Fully Supporting Designated Uses (4/5/04)
  - USEPA Letter of August 29, 2003 providing a revised and composite list of waters added to the Georgia EPD's 305(b)/303(d) List

### Georgia 2002 305(b) Report (Final)

A comprehensive evaluation of Georgia's surface water quality is presented in this report to the US Environmental Protection Agency.

#### Water Quality in Georgia, 2000-2001

### Georgia 2002 305(b)/303(d) List Documents (Final)

The Georgia 2002 305(b)/303(d) list of waters was prepared as a part of the Georgia 2000-2001 assessment of water quality prepared in accordance with Sections 305(b) and 303(d) of the Federal Clean Water Act and guidance from the U.S. Environmental Protection Agency. Assessed waterbodies are classified as supporting, partially supporting, or not supporting designated water uses according to a comparison of water quality monitoring results to water quality standards and other pertinent information.

- Transmittal Letter to USEPA - March 27, 2002
- **Georgia 2002 305(b)/303(d) List Documents**
  - Data Source Code/Key for Abbreviations
  - 2002 Rivers/Streams Partially Supporting Designated Uses
  - 2002 Rivers/Streams Not Supporting Designated Uses
  - 2002 Lakes/Reservoirs Not Fully Supporting Designated Uses
  - 2002 Estuarine Waters Not Fully Supporting Designated Uses
  - USEPA added waters to the Georgia EPD's 305(b)/303(d) List
  - USEPA Approval Letter

Georgia 2002 305(b)/303(d) List Map Products Based on April, 2002 List. The spatial data and corresponding map represent the State of Georgia's 2000-2001 assessment of water quality and resulting 2002 305(b)/303(d) list of waters.

- [Download Georgia 305\(b\)/303\(d\) GIS Database and Map \[Revised July 2002\]](#) Based on April 2002 list
- [Preview Georgia 305\(b\)/303\(d\) Map \[Revised July 2002\]](#) Based on April 2002 list

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**Georgia Environmental Protection Division**  
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# 2006 305(b)/303(d) Rivers/Streams Not Fully Supporting Designated Uses

## Satilla Basin Streams

Reach Name / Data Source	Reach Location / County	Evaluation / Use	Criterion Violated	Potential Causes	Actions to Alleviate	303(d)	Priority	Extent
Big Creek	South Prong Big Cr. to Satilla River	Partially Supporting	DO	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2	5 miles
55	Brantley	Fishing						
Big Satilla Creek	Headwaters near Hazlehurst to Sweetwater Cr. near Baxley	Not Supporting	DO, FC	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3,3	2	34 miles
10,52,55	Jeff Davis/ Appling	Fishing						
Boggy Creek	Headwaters to Lake Lindsay Grace	Partially Supporting	DO	NP	EPD will address nonpoint sources through a watershed protection plan.	X	2	10 miles
55	Wayne	Fishing						
Broxton Creek	Seven Cr. to Seventeen Mile River near Broxton	Partially Supporting	DO	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2	6 miles
10	Coffee	Fishing						
Buffalo Creek	Little Buffalo Cr. to Satilla River	Not Supporting	FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	X	3	6 miles
55	Brantley	Fishing						
City Drainage Canal	Trib. to Satilla River, Waycross	Not Supporting	FC	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	3	3 miles
2	Ware	Fishing						
Colemans Creek	Dry Branch S. of Surrency to Big Satilla Cr. near Screven	Not Supporting	FC	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	3	17 miles
55	Appling/ Wayne	Fishing						

# 2006 305(b)/303(d) Rivers/Streams Not Fully Supporting Designated Uses

## Satilla Basin Streams

Reach Name / Data Source	Reach Location / County	Evaluation / Use	Criterion Violated	Potential Causes	Actions to Alleviate	303(d) Priority	Extent
Dry Creek	Headwaters to Boggy Creek	Partially Supporting	DO, FC	NP	EPD will address nonpoint sources through a watershed protection strategy.	X 2	11 miles
55	Wayne	Fishing					
Hog Creek	Downstream CR185 to Hurricane Cr. near Nicholls	Partially Supporting	FC	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3 3	10 miles
1,10	Coffee	Fishing					
Hog Creek	Hurricane Cr. to Satilla River S. of Nicholls near Bickley	Partially Supporting	DO	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3 2	15 miles
10	Coffee/ Ware	Fishing					
Hurricane Creek	Downstream Little Cr. to Ten Mile Cr. near Alma	Not Supporting	FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3 3	20 miles
10	Bacon	Fishing					
Little Hurricane Creek	Ga. Hwy. 32 to Hurricane Cr.	Not Supporting	DO, FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3,3 2	22 miles
10	Bacon/ Ware/ Pierce	Fishing					
Little Red Bluff Creek	Headwaters to Red Bluff Creek	Not Supporting	DO	NP, M	EPD will address nonpoint sources through a watershed protection strategy. The permit for the Pearson WPCP will be reissued based on the results of any applicable TMDLs.	X 2	8 miles
55	Atkinson	Fishing					
Little Satilla Creek	Dry Branch to Boggy Creek (Dry Creek)	Partially Supporting	DO, FC	NP	EPD will address nonpoint source through a watershed protection strategy.	X 2	9 miles
55	Wayne	Fishing					
Little Satilla Creek	Keene Bay Branch to Dry Branch near Odum	Partially Supporting	FC	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3 3	10 miles
10	Wayne	Fishing					



# 2006 305(b)/303(d) Rivers/Streams Not Fully Supporting Designated Uses

## Satilla Basin Streams

Reach Name / Data Source	Reach Location / County	Evaluation / Use	Criterion Violated	Potential Causes	Actions to Alleviate	303(d) Priority	Extent
Little Satilla Creek	Boggy Cr. to Little Satilla River near Screven	Not Supporting	DO, FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3,X	2 3 miles
55	Wayne	Fishing					
Little Satilla River	Big Satilla Cr. to Sixty Foot Branch	Partially Supporting	DO, FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2 10 miles
55	Pierce/ Wayne/ Brantley	Fishing					
Pudding Creek	Park Bay to Satilla River N. of Pearson	Not Supporting	DO, FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2 9 miles
10	Atkinson	Fishing					
Roses Creek	Upstream Ga. Hwy. 206 to Seventeen Mile River near Broxton	Not Supporting	FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	3 9 miles
10	Coffee	Fishing					
Satilla Creek	Hunters Cr. E. of Oclilla to Satilla River	Partially Supporting	DO	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2 7 miles
10	Irwin/Coffee	Fishing					
Satilla River	Rose Cr. to White Oak Cr.	Not Supporting	DO	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2 19 miles
1,55	Camden	Fishing					
Satilla River	Six miles d/s of Ga. Hwy. 15 to Bullhead Bluff	Partially Supporting	TWR	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution. Trophic-Weighted Residue of mercury in fish tissue exceeded 0.3 mg/kg.	3	3 76 miles
1,9	Pierce/ Brantley/ Camden	Fishing					

# 2006 305(b)/303(d) Rivers/Streams Not Fully Supporting Designated Uses

## Satilla Basin Streams

Reach Name / Data Source	Reach Location / County	Evaluation / Use	Criterion Violated	Potential Causes	Actions to Alleviate	303(d) Priority	Extent
Satilla River	Pudding Cr. to Smut Br. near Pearson	Partially Supporting	FC	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	3 miles
10	Atkinson	Fishing					
Satilla River	Satilla Cr. to Reedy Cr. near Douglas	Not Supporting	DO	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2 miles
10	Coffee	Fishing					
Satilla River	U.S. Highway 84/Ga. Hwy. 38 to 6 miles downstream Hwy 15/121	Partially Supporting	TWR	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution. Trophic-Weighted Residue of mercury in fish tissue exceeded 0.3 mg/kg.	3	3 miles
1	Ware/ Pierce/ Brantley	Fishing					
Seventeen Mile River	Twentynine Mile Cr. to Satilla River	Not Supporting	DO	NP	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2 miles
55	Coffee/ Atkinson/ Ware	Fishing					
Seventeen Mile River	Twenty Mile Cr. N. of Douglas to Otter Cr. downstream Gen. Coffee St. Park	Not Supporting	DO, FC	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3	2 miles
55	Coffee	Fishing					
Sweetwater Creek	Black Water Creek to Big Satilla Cr. near Baxley	Not Supporting	DO, FC	UR	Impairment will be addressed by implementing a locally developed plan that includes the remedial actions necessary for problem resolution.	3,3	2 miles
10	Appling	Fishing					
Yellow Bluff Creek	Headwaters to approximately 1 mile d/s US Hwy 25.	partially supporting	DO, FC	NP	EPD will address nonpoint source through a watershed protection strategy. Phase II General NPDES Stormwater Permit issued to Glynn Co. 12/9/02.	X	2 miles
55	Glynn	Fishing					

### Data Source Code/ Key for Abbreviations

#### State Agencies

1	=	DNR-EPD, Watershed Planning & Monitoring Program
2	=	DNR-EPD, Permitting Comp. & Enf. Program (Municipal)
3	=	DNR-EPD, Permitting Comp. & Enf. Program (Industrial)
55	=	DNR-EPD, Brunswick Coastal District
56	=	DNR-EPD, Hazardous Waste Mgmt. Branch
4	=	DNR, Wildlife Resources Division
5	=	DNR, Coastal Resources Division
6	=	State University of West Georgia
7	=	Gainesville College
8	=	Georgia Institute of Technology
31	=	South Carolina DHEC
33	=	Alabama DEM
35	=	Kennesaw State University
36	=	University of Georgia

#### Federal Agencies

9	=	U.S. Environmental Protection Agency
10	=	U.S. Geological Survey
11	=	U.S. Army Corps of Engineers
12	=	U.S. Forest Service
13	=	Tennessee Valley Authority

#### Local Agencies

14	=	Cobb County
15	=	Dekalb County
16	=	Douglas County Water & Sewer Authority
17	=	Fulton County
18	=	Gwinnett County
19	=	City of Clayton
20	=	City of Gainesville
21	=	City of LaGrange
22	=	Georgia Mountains R.D.C.
23	=	City of Conyers
34	=	City of College Park
37	=	Columbus Water Works
38	=	Columbus Unified Government
40	=	Town of Trion
41	=	Cherokee County
42	=	Clayton County Water Authority
43	=	City of Atlanta
44	=	City of Cartersville
50	=	Chatham County
51	=	City of Savannah
53	=	City of Augusta

#### Contracted Clean Lakes Studies

24	=	Lake Allatoona (Kennesaw State University)
25	=	Lake Blackshear (Lake Blackshear Watershed Association)
26	=	Lake Lanier (University of Georgia)
27	=	West Point (LaGrange College/ Auburn University)

#### Other

28	=	Georgia Power Company
29	=	Oglethorpe Power Company
30	=	South Carolina Electric & Gas Company
32	=	Jones Ecological Research Center
39	=	St. Johns River Water Mgmt. District
45	=	Georgia Ports Authority
46	=	Chattahoochee/Flint RDC
47	=	Upper Etowah Adopt-A-Stream
48	=	Middle Flint RDC
49	=	Central Savannah RDC
52	=	Heart of Georgia RDC
54	=	Southwire Company
57	=	Ellijay High School

#### Criterion Violated Codes

As	=	Arsenic
Bio	=	Biota Impacted
Cd	=	Cadmium
CN	=	Cyanide
Cr	=	Chromium
Cu	=	Copper
DO	=	Dissolved Oxygen
CFB	=	Commercial Fishing Ban
FC	=	Fecal Coliform Bacteria
FCG	=	Fish Consumption Guidance
Hg	=	Mercury
Ni	=	Nickel
Pb	=	Lead
SB	=	Shellfishing Ban
Se	=	Selenium
Temp	=	Temperature
Tox	=	Toxicity Indicated
TWR	=	Trophic-Weighted Residue Value of mercury in fish tissue exceeding the EPD human health standard of 0.3 mg/kg.
Zn	=	Zinc

#### Potential Cause Codes

CSO	=	Combined Sewer Overflow
I1	=	Industrial Facility
I2	=	Residual from Industrial Source
MA	=	Marina
M	=	Municipal Facility
NP	=	Nonpoint Sources/Unknown Sources
UR	=	Urban Runoff/Urban Effects
SB	=	Shellfish Ban

## REFERENCE 64

**Oostanaula River (Floyd/Gordon Counties)****Coosa River Basin**

Species	Site Tested	Recommendation	Chemical
Smallmouth Buffalo	Ga. Hwy 156, Calhoun	1 meal/week	PCBs, Mercury
Bluegill Sunfish	See Above	No Restrictions	
Spotted Bass	Ga. Hwy 140	1 meal/week	Mercury
Bluegill Sunfish	See Above	No Restrictions	
Largemouth Bass	See Above	1 meal/week	PCBs
Smallmouth Buffalo	See Above	1 meal/week	PCBs, Mercury
Channel Catfish	See Above	1 meal/week	PCBs

**Patsillga Creek (Upstream of Beaver Creek, Taylor Co.)****Flint River Basin**

Species	Site Tested	Recommendation	Chemical
Largemouth Bass	From McCants Millpond to Ga. Hwy 208	No Restrictions	
Spotted Sucker		No Restrictions	
Chain Pickerel	See Above	1 meal/week	Mercury

**Patsillga Creek (Downstream of Beaver Creek)****Flint River Basin**

Species	Site Tested	Recommendation	Chemical
Bass Spp. *	Taylor County	1 meal/month	Mercury
Sucker Spp. *	See Above	1 meal/week	Mercury

\*Bass: Largemouth & Shoal; Suckers: Grayfin Redhorse, Spotted & Greater Jumprock

**Pipe Makers Canal (Near Savannah, Georgia)****Savannah River Basin**

Species	Site Tested	Recommendation	Chemical
Largemouth Bass	Chatham County	1 meal/week	Mercury

**Ponder Branch (Walker County, Villanow)****Coosa River Basin**

Species	Site Tested	Recommendation	Chemical
Redeye Bass	Ga. Hwy 136	No Restrictions	

**Proctor Creek, Near Acworth, Cobb County****Coosa River Basin**

Species	Site Tested	Recommendation	Chemical
Green Sunfish	Ga. Hwy 293, Old US 41	No Restrictions	

**Satilla River (Near Waycross, Ware/Brantley Co.s)****Satilla River Basin**

Species	Site Tested	Recommendation	Chemical
Largemouth Bass	U.S. Hwy 84	1 meal/month	Mercury
Redbreast Sunfish	See Above	1 meal/week	Mercury
Channel Catfish	U.S. Hwy 301	1 meal/week	Mercury

**Satilla River (Folkston, Burnt Fort, Charlton/Camden Co.s)****Satilla River Basin**

Species	Site Tested	Recommendation	Chemical
Largemouth Bass	Ga. Hwy. 252	1 meal/month	Mercury
Redbreast Sunfish	See Above	1 meal/month	Mercury

**Savannah River (Below Clarks Hill Dam, Columbia County) Savannah River Basin**

Species	Site Tested	Recommendation	Chemical
Largemouth Bass	Above New Savannah Bluff Lock & Dam	1 meal/week	Mercury
Spotted Sucker	See Above	1 meal/week	Mercury
Redear Sunfish	Above Stevens Cr. Dam	No Restrictions	
Redbreast Sunfish	Below Stevens Cr. Dam	No Restrictions	

**Savannah River (Richmond/Burke Counties)****Savannah River Basin**

Species	Site Tested	Recommendation	Chemical
Largemouth Bass	Below New Savannah Bluff Lock & Dam	1 meal/week	Mercury
Sucker	See Above	No Restrictions	

Specific consumption guidelines have not been issued for the radionuclides cesium-137 & strontium-90, in the Savannah River (Burke/Screven Co.s), adjacent to the Savannah River Site (SRS). Guidance on mercury were evaluated and deemed to be protective.

**Savannah River (Screven County)****Savannah River Basin**

Species	Site Tested	Recommendation	Chemical
Largemouth Bass	U.S. Hwy 301	1 meal/week	Mercury
Redear Sunfish	See Above	No Restrictions	
Channel Catfish	See Above	No Restrictions	

Specific consumption guidelines have not been issued for the radionuclides cesium-137 & strontium-90, in the Savannah River (Burke/Screven Co.s), adjacent to the Savannah River Site (SRS). Guidance on mercury were evaluated and deemed to be protective.

## REFERENCE 65

## REFERENCE 66

**RECORD OF PERSONAL CONVERSATION  
HAZARDOUS WASTE MANAGEMENT PROGRAM**

**DATE:** June 15, 2006

**TIME:** 7:15 pm

**FILE:** Seven Out LLC

**SPOKE WITH:** Mr. Inman

**TITLE:** Resident

**ADDRESS:** 320 Pineview Drive

**CITY:** Waycross

**STATE/ZIP:** GA

**TELEPHONE NUMBER:**

**SUBJECT:** Knowledge of fishing and fish consumption along City of Waycross Drainage Canal behind his residence

**SUMMARY OF CALL:**

After eating at Capt. Joe's Restaurant, I walked behind the business to look at the Waycross Drainage Canal which ran behind the restaurant. I observed several bream and a bass swimming through the shallow water of the canal. A dog on the other side of the canal started barking in my direction. An elderly gentleman headed in the direction of the canal to see what the dog was barking at. I conversed with him from one bank to the other about the fishing in the canal. He stated that nobody ever ate fish out of the canal because they were no good because of the contamination in the canal from all the runoff in Waycross. He stated that his grandchildren would fish in the canal, but they never eat any of the fish. He did state that the condition of the canal had improved a great deal in the last ten years or so.

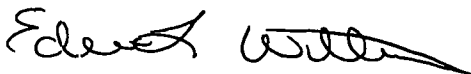
**ACTION REQUIRED:**

None

**FOLLOW-UP RESPONSES/ADDITIONAL COMMENTS:**

None at this time.

**SIGNATURE:**





## REFERENCE 67

**RECORD OF TELEPHONIC CONVERSATION  
HAZARDOUS WASTE MANAGEMENT PROGRAM**

**DATE:** June 15, 2005

**TIME:** 9:30 am

**FILE:** Seven Out LLC

**SPOKE WITH:** Ms. Shirley Carter  
**TITLE:** Employee, Wings Bait and Tackle.  
**ADDRESS:** 427 Memorial Drive  
**CITY:** Waycross  
**STATE/ZIP:** GA 31501

**TELEPHONE NUMBER:**  
912/283-9400 (Store)

**SUBJECT:** Fisheries.

**SUMMARY OF CALL:**

Called Wings Bait and Tackle Store to identify which streams in the area are fished. The store is approximately 1600 feet from the City Drainage Canal. Ms. Shirley Carter stated that children sometimes fish in the City Drainage Canal, however most fishing is done in the Satilla River. This information is the same as information given by another employee of the store during the Site Investigation.

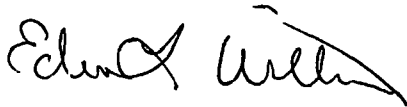
**ACTION REQUIRED:**

None

**SIGNATURE:**

**FOLLOW-UP RESPONSES/ADDITIONAL COMMENTS:**

**SIGNATURE:**



## REFERENCE 68

# Protected Plants of Georgia

AN INFORMATION MANUAL ON PLANTS DESIGNATED BY THE STATE OF  
GEORGIA AS ENDANGERED, THREATENED, RARE, OR UNUSUAL

Thomas S. Patrick  
James R. Allison  
Gregory A. Krakow

1995

Georgia Department of Natural Resources  
Lonice C. Barrett, Commissioner  
Wildlife Resources Division  
David Waller, Director  
Georgia Natural Heritage Program  
John R. Bozeman, Program Manager

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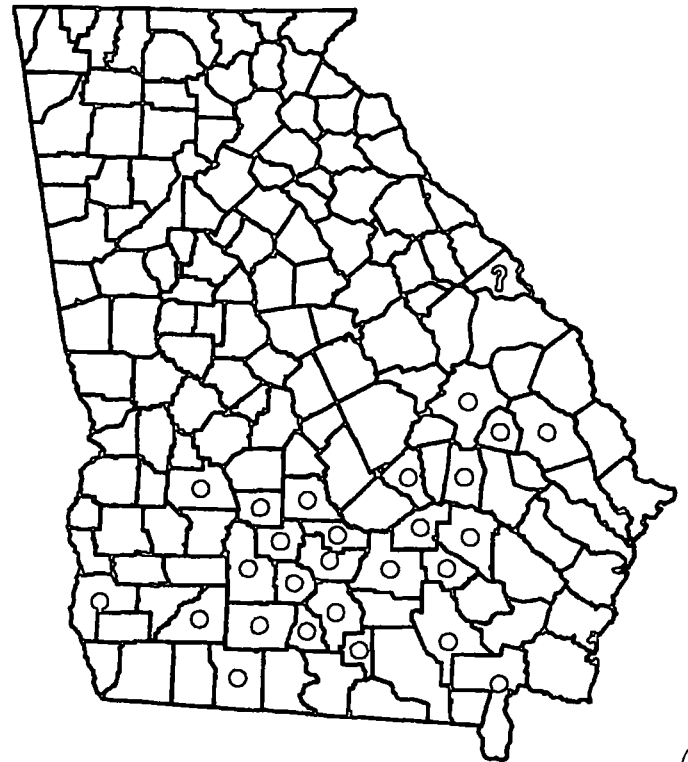
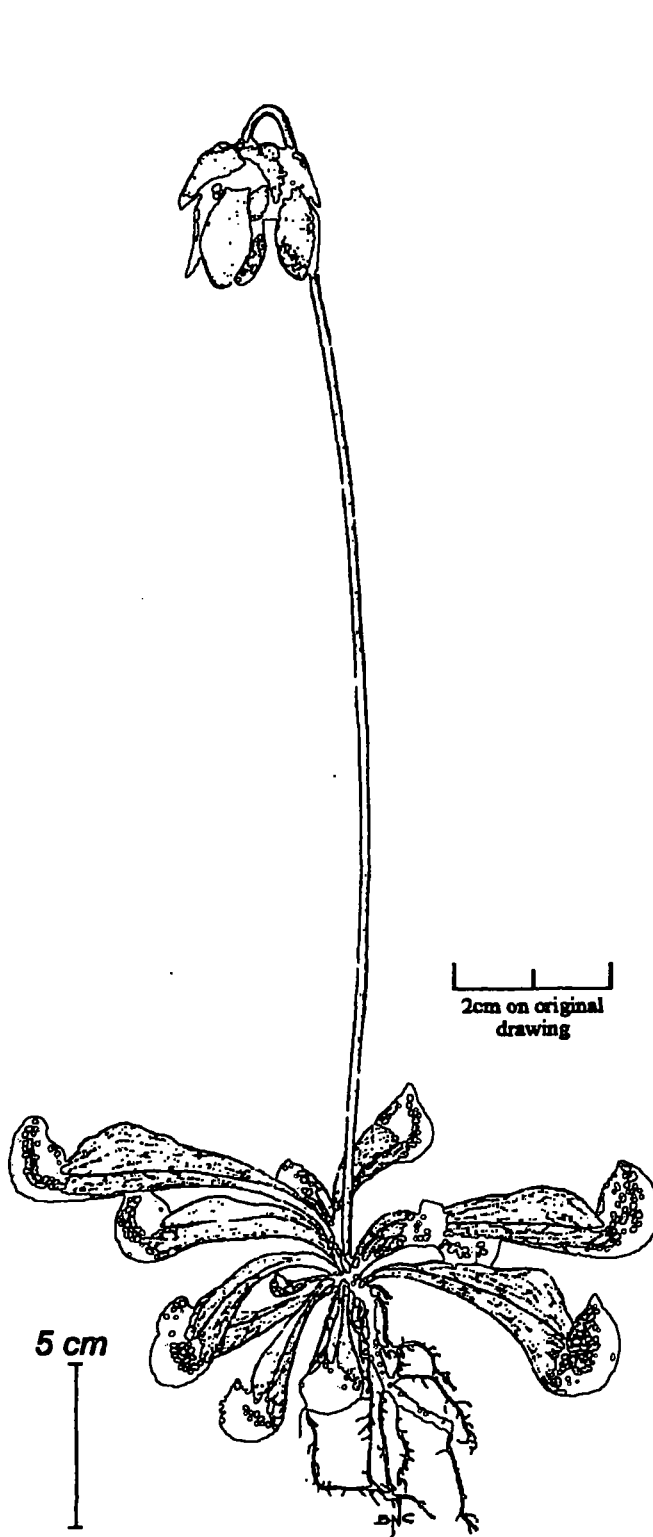
*Partial funding for this publication was provided through the Forest Stewardship Program under Title XII, Subtitle A, Section 1215 of the Food, Agriculture, Conservation and Trade Act of 1990, in cooperation with the Georgia Forestry Commission.*

*Additional funding was made available through Section 6 of the Endangered Species Act of 1973, as part of a grant in federal aid from the U.S. Fish and Wildlife Service.*

The opinions expressed in this book are those of the authors and do not necessarily reflect the policies of the Georgia Department of Natural Resources.

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**LEGAL STATUS:**

State: THREATENED

Federal: None

**SYNONYMY:** None in current usage.

**RANGE:** Coastal Plain of northeastern Florida and southern Georgia, west to southeastern Louisiana. Recorded from 27 counties in Georgia, including an ambiguous report from the Augusta area (see Remarks), perhaps from Richmond County (see map).

**ILLUSTRATION:** Plant habit, with reclining leaves, 0.4x. Source: McDaniel (1971), drawn by Barbara Culbertson and used with permission.

**DESCRIPTION:** Perennial herb. This plant is one of the smaller members of this genus, often overlooked. The hollow leaves (pitchers) recline on the ground, in a basal rosette. They are 9-28 cm long, 1.0-1.3 cm wide at the orifice, green at the base, red-veined toward the top, broadest and prominently winged in the upper half. The hood is rounded into a hollow chamber; both it and the adjoining leaf area have translucent "windows." The flowers appear with the leaves, and are nodding and solitary on long (to about 35 cm), leafless stalks that rise well above the leaves. The five sepals are green and maroon, 1.5-2.5 cm long, and persist at base of fruit. The five petals are maroon, 2.0-4.5 cm in diameter, broadest

near the apex, and quickly fall off. A distinctive feature of the pitcherplant flower is the umbrella-shaped style (style-disk), which is 1.8-2.6 cm in diameter in this species. The fruit is a globose capsule about 1 cm in diameter, with numerous seeds. **Flowering period:** March to May; **fruiting period:** June to July, or later. **Best search time:** during flowering, since leaves are usually hidden in vegetation.

**HABITAT:** Found in acidic soils of open bogs, wet savannas, and low areas in pine flatwoods.

**SPECIAL IDENTIFICATION FEATURES:** The mature leaves or pitchers are reclined, prominently winged, with translucent "windows" near the apex, and with hoods rounded. The petal color is maroon.

**MANAGEMENT RECOMMENDATIONS:** Avoid drainage of site. Control encroachment of woody vegetation through prescribed burning. Hand thinning in the vicinity of the plants, if done carefully, may be beneficial to this light-loving plant. Of horticultural interest: protect from removal by irresponsible persons.

**REMARKS:** André Michaux described this species in 1803. Typical of the collections of that era, his specimen label has a general statement of the known range, "from the city of Augusta, Georgia, to Florida," rather than the precise collection site. Both the scientific and common names of this species refer to a fancied resemblance of the pitcher, when viewed in profile, to a parrot's head. Unlike those of the hooded pitcherplant (*Sarracenia minor*), the pitchers of this species are decorated with "windows" over the whole of the (head-like) hood. In view of the supposed function of the windows in the capture of prey, as described for *S. minor*, this may be an adaptation related to the near-horizontal position that the pitchers assume in this species. Unlike most of its kin, *S. psittacina* is often found in areas that are subject to periodic flooding, and its pitchers are specially modified for capture of aquatic(!) prey. *Sarracenia psittacina* has sustained significant habitat loss due to fire suppression or draining of its habitat. Like the other pitcherplants, it is vulnerable to excessive digging by nurserymen and gardeners.

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## REFERENCE 69

## Locations of Special Concern Animals, Plants and Natural Communities by Quarter Quad Names Starting with (W)

"US" indicates species with federal status (Protected, Candidate or Partial Status). Species that are federally protected in Georgia are also state protected.

"GA" indicates Georgia protected species.

Find details for the species below on our special concern lists for [animals](#) and [plants](#).

Date of information - 10/22/2004

### WADLEY, GA (SE)

GA · *Sarracenia flava* Yellow Flytrap

### WALESKA, GA (NE)

· *Etheostoma rupestre* Rock Darter

US · *Etheostoma scotti* Cherokee Darter

· *Macrhybopsis* sp. 1

· *Phenacobius catostomus* Riffle Minnow

### WALESKA, GA (NW)

· *Etheostoma rupestre* Rock Darter

US · *Etheostoma scotti* Cherokee Darter

· *Lygodium palmatum* Climbing Fern

GA · *Lysimachia fraseri* Fraser's Loosestrife

· *Macrhybopsis* sp. 1

· *Phenacobius catostomus* Riffle Minnow

### WALESKA, GA (SE)

· *Etheostoma rupestre* Rock Darter

US · *Etheostoma scotti* Cherokee Darter

· *Ichthyomyzon gagei* Southern Brook Lamprey

· *Macrhybopsis* sp. 1

· *Phenacobius catostomus* Riffle Minnow

GA · *Xerophyllum asphodeloides* Eastern Turkeybeard

### WALESKA, GA (SW)

· *Etheostoma coosae* Coosa Darter

· *Etheostoma rupestre* Rock Darter

US · *Etheostoma scotti* Cherokee Darter

· *Ichthyomyzon gagei* Southern Brook Lamprey



- GA · *Clemmys guttata* Spotted Turtle
- US · *Gopherus polyphemus* Gopher Tortoise
  - *Quercus chapmanii* Chapman Oak
  - *Sideroxylon sp. 1* Ohoopee Bumelia

**WAYCROSS SE, GA (NE)**

- GA · *Clemmys guttata* Spotted Turtle
- US · *Gopherus polyphemus* Gopher Tortoise
  - *Quercus chapmanii* Chapman Oak
- GA · *Sarracenia psittacina* Parrot Pitcherplant
  - *Scutellaria arenicola* Sandhill Skullcap
  - *Sideroxylon sp. 1* Ohoopee Bumelia

**WAYCROSS SE, GA (NE)**

- US · *Ambystoma cingulatum* Flatwoods Salamander
- GA · *Epidendrum conopseum* Green-fly Orchid
- GA · *Neofiber alleni* Round-tailed Muskrat
- US · *Picoides borealis* Red-cockaded Woodpecker
- GA · *Sarracenia minor* Hooded Pitcherplant
  - *Scirpus etuberculatus* Canby's Club-rush

**WAYCROSS SE, GA (NW)**

- GA · *Neofiber alleni* Round-tailed Muskrat
- US · *Picoides borealis* Red-cockaded Woodpecker



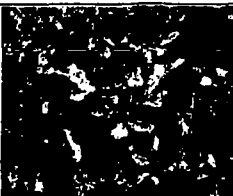


**WAYCROSS SE, GA (SE)**


- US · *Ambystoma cingulatum* Flatwoods Salamander
- GA · *Epidendrum conopseum* Green-fly Orchid
- GA · *Neofiber alleni* Round-tailed Muskrat
  - *Nerodia floridana* Florida Green Water Snake
- US · *Picoides borealis* Red-cockaded Woodpecker
- GA · *Sarracenia minor* Hooded Pitcherplant
  - *Scirpus etuberculatus* Canby's Club-rush

**WAYCROSS SE, GA (SW)**

- GA · *Neofiber alleni* Round-tailed Muskrat

**Endangered, Threatened and Special Concern Plants and Animals of the NW Quadrant of the Waycross East 7.5' Topographical Map**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Protective Status</b>	<b>Habitat in Georgia</b>	<b>Photo</b>
<i>Clemmys guttata</i>	Spotted Turtle	GA Unusual Species	Heavily vegetated swamps, marshes, bogs, and small ponds, nest and possibly hibernate in surrounding uplands	
<i>Gopherus polyphemus</i>	Gopher Tortoise	US Partial Status/listed as threatened Georgia Threatened	Sandhills, dry hammocks; longleaf pine-turkey oak woods; old fields	
<i>Quercus chapmanii</i>	Chapman Oak	GA Special Concern	Sandridges, dunes, oak-pine scrub	
<i>Sarracenia psittacina</i>	Parrot Pitcherplant	GA Threatened	Wet savannas, pitcherplant bogs	
<i>Scutellaria arenicola</i>	Sandhill Skullcap	GA Special Concern	Sandy scrub	

Scientific Name	Common Name	Protective Status	Habitat in Georgia	Photo
<i>Sideroxylon sp. 1</i>	Ohoopee Burnelia	GA Special Concern	Dry longleaf pine woods with oak understory; often hidden in wiregrass	

#### References

**APPENDIX H**  
**SCORESHEETS**

# SITE INSPECTION WORKSHEETS

		<b>CERCLIS IDENTIFICATION NUMBER</b> GAN000407811	
<b>SITE LOCATION</b>			
<b>SITE NAME: LEGAL, COMMON, OR DESCRIPTIVE NAME OF SITE</b> Seven Out LLC Tank			
<b>STREET ADDRESS, ROUTE, OR SPECIFIC LOCATION IDENTIFIER</b> 901 Francis Street			
<b>CITY</b> Waycross	<b>STATE</b> GA	<b>ZIP CODE</b> 31501	<b>TELEPHONE</b>
<b>COORDINATES: LATITUDE AND LONGITUDE</b> 31 12' 26.8" Lat. 82 21' 49.8" Long.			
<b>OWNER/OPERATOR IDENTIFICATION</b>			
<b>OWNER</b> Seven Out LLC		<b>OPERATOR</b> (SAME) Facility is closed and abandoned	
<b>OWNER ADDRESS</b> 1859 East Adams Street		<b>OPERATOR ADDRESS</b> SAME	
<b>CITY</b> Jacksonville		<b>CITY</b> SAME	
<b>STATE</b> FL	<b>ZIP CODE</b> 32202	<b>TELEPHONE</b> 904/356-3391	<b>STATE</b> SAME
			<b>ZIP CODE</b> SAME
			<b>TELEPHONE</b> SAME
<b>SITE EVALUATION</b>			
<b>AGENCY/ORGANIZATION</b> Georgia Environmental Protection Division			
<b>INVESTIGATOR</b> Edwin L. Williams			
<b>CONTACT</b> Ardy Taft			
<b>ADDRESS</b> 2 Martin Luther King, Jr. Dr., SE Floyd Towers East, Suite 1162 East			
<b>CITY</b> Atlanta		<b>STATE</b> Georgia	<b>ZIP CODE</b> 30334
<b>TELEPHONE</b> 404/656-2833			

## GENERAL INFORMATION

**Site Description and Operational History:** Provide a brief description of the site and its operation history. State the site name, owner, operator, type of facility and operations, size of property, active or inactive status, and years of waste generation. Summarize waste treatment, storage, or disposal activities that have or may have occurred at the site; note whether these activities are documented or alleged. Identify all source types and prior spills, floods, or fires. Summarize highlights of the PA and other investigations. Cite references.

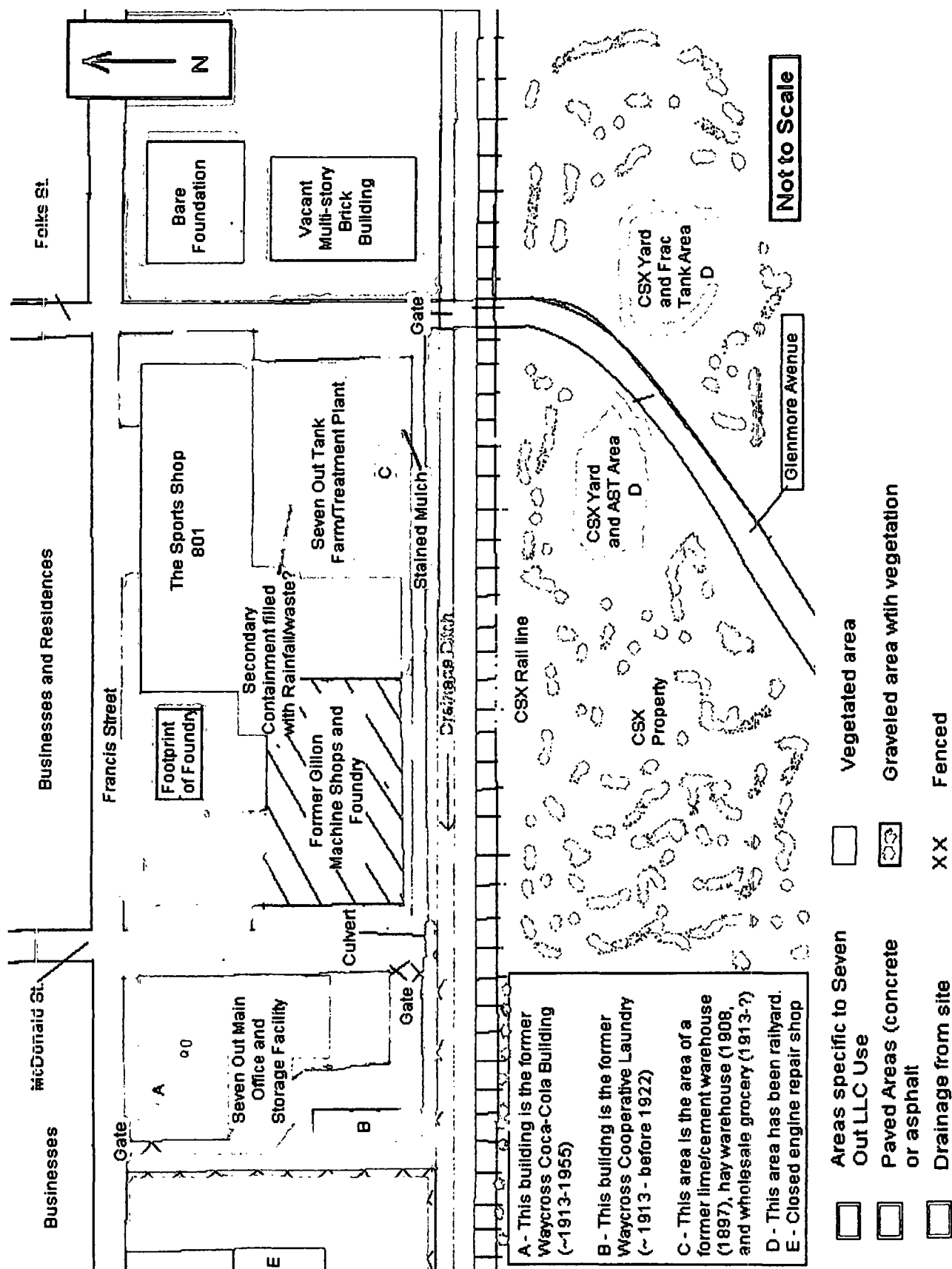
The site is no longer in operation (Reference 4). Property records indicate the site consists of four (4) (Reference 8). Additional adjacent CSX Transportation property was used to storage waste chemicals in frac/Baker tanks. (Reference 4). The site includes an office and storage building, the waste treatment area or tank farm [which includes more than thirty (30) tanks for waste or product storage], and paved parking/loading areas. Located at 901 Francis Street is the building Seven Out LLC formerly used for office and warehouse storage and a separate multi-vehicle bay building. Part of the storage building is just a shell of a brick building without a roof. At the time of the inspection these buildings were deserted and locked, where possible (Reference 4). The facility was surrounded by a secured and locked fencing. The tank farm (at the Folks Street address) is approximately 180 feet by 100 feet and has inadequate secondary containment in place (Reference 4). It is accessible to the public via Folks Street, Francis Street, or McDonald Street and lacks fencing. The property south of the site on Glenmore Avenue is owned by CSX Railroad. This area originally was a staging area for four frac/Baker tanks that were full of chemical wastes. The tanks had been removed at the time of the inspection (References 3 and 4). The immediate area is a mixed-use area including commercial, industrial, and residential property. The nearest residential property is located at 103 Folks Street approximately 220 feet from the tank farm area (Reference 4). Sanborn Fire Insurance Maps (SFIM) indicate that the 901 Francis Street site was previously occupied by the Coca Cola Bottling Company and the Waycross Cooperative Laundry (References 9 and 10). SFIM indicate that the 0/3 Folks Street site was previously occupied by a lime and cement warehouse (Reference 9), a hay storage warehouse (Reference 10), the W.N. Gramling Wholesale Grocer Warehouse (Reference 11) and the John D. Hopkins Hay and Grain facility (Reference 12). In 1930, a grocery was added to the John D. Hopkins Hay and Grain (Reference 13). Maps covering the time after 1947 could not be located. Aerial photographs as recent as 1999 show the buildings as shown on the 1922 SFIM still in place (Reference 15). These buildings no longer exist and have been partially replaced by the tank farm/treatment plant (Reference 4). SFIM indicate that the J.H. Gillon and Companies Machine Shop and Foundry occupied the vacant area between 901 Francis Street, 801 Francis Street, and 0/3 Folks Street.

The Seven Out LLC Tank site was constructed to be an industrial wastewater processing facility (Reference 16). A request for a GAEPD/USEPA identification number for a used oil processor was received by GAEPD, on behalf of BCX Waycross, on December 11, 2001, and number GAR000030007 was assigned (Reference 17). The facility was permitted by the City of Waycross to discharge non-domestic pre-treated wastewater to the sewer for processing by the POTW (Reference 18). A representative of EPD performed a Used Oil processor compliance evaluation inspection on April 22, 2003. At the time of this inspection the facility had not received any used oil for processing (Reference 19). The facility apparently began operation shortly after the above inspection because the City of Waycross issued eight (8) formal Notices of Violation for the months of May 2003 through January 2004 (Reference 20). These violations of the facility's discharge permit resulted in a Consent Order issued by the City on January 27, 2004 (Reference 21). This Consent Order was not signed by BCX, Inc., however a letter to the City dated March 3, 2004 stated that the facility was ceasing discharge to the City POTW (Reference 22). EPD conducted another inspection on April 6, 2004. At this time it was observed that the facility had ceased accepting industrial wastewater and stopped discharging to the Waycross POTW (Reference 23). On April 23, 2004, EPD issued a Notice of Violation to the facility for failing to determine the contents of 27 tanks located in the facility's tank farm and in the four flocculation box tanks (frac tanks) (Reference 24). On June 2, 2004 a release of approximately 4000-5000 gallons of unknown liquid from a 10,000-gallon frac tank belonging to the facility occurred on the CSX property (Reference 25). EPD inspected the site and took soil samples from the spill area on June 23, 2004 (Reference 26). EPD sent a proposed Consent Order to the facility on July 20, 2004 for violations observed during the inspections conducted on April 6 and June 23, 2004, namely storing hazardous waste and unidentified wastewaters (Reference 27). EPD received responses from representatives of the facility, however the Consent Order was never signed by the facility (Reference 28). EPD requested assistance from EPA with sampling at the site. Sampling of the tanks and containers was performed on August 23-26, 2004 by EPA contractor Tetra Tech EM, Inc. Constituents detected in the tanks included metals, volatile organics, and semi-volatile organics (References 16 and 29).

EPD requested assistance from EPA with the remediation of the facility by letter dated January 21, 2005 (Reference 30). The EPA initiated removal operations at the facility on January 28, 2005 (Reference 31) and removal activities continued until EPA left the site on June 10, 2005 (References 32 and 33). A total of 338,250 gallons of pumpable liquid wastes were removed during the removal activities. Of those amounts, 1,650 gallons was manifested as hazardous waste (Reference 34). Additionally, CSX Transportation (CSXT) completed a removal of the tanks, 6,350 gallons on non-hazardous wastes, and about 56 tons of solid waste from their property. In 2005 (Reference 35).

# GENERAL INFORMATION (Continued)

**Site Sketch:** Provide a sketch of the site. Indicate all pertinent features of the site and nearby environments including sources of wastes, areas of visible and buried wastes, buildings, residences, access roads, parking areas, fences, fields, drainage patterns, water bodies, vegetation, wells, sensitive environments, and other features.



## GENERAL INFORMATION (continued)

**Source Descriptions:** Describe all sources at the site. Identify source type and relate to waste disposal operations. Provide source dimensions and the best available waste quantity information. Describe the condition of sources and all containment structures. Cite references.

### SOURCE TYPES

**Landfill:** A man-made (by excavation or construction) or natural hole in the ground into which wastes have come to be disposed by backfilling, or by contemporaneous soil deposition with waste disposal.

**Surface Impoundment:** A natural topographic depression, man-made excavation, or diked area, primarily formed from earthen materials (lined or unlined) and designed to hold an accumulation of liquid wastes, wastes containing free liquids, or sludges not backfilled or otherwise covered; depression may be wet with exposed liquid or dry if deposited liquid has evaporated, volatilized or leached; structures that may be described as lagoon, pond, aeration pit, settling pond, tailings pond, sludge pit; also a surface impoundment that has been covered with soil after the final deposition of waste materials (i.e., buried or backfilled).

**Drum:** A portable container designed to hold a standard 55-gallon volume of wastes.

**Tank and Non-Drum Container:** Any device, other than a drum, designed to contain an accumulation of waste that provides structural support and is constructed primarily of fabricated materials (such as wood, concrete, steel, or plastic); any portable or mobile device in which waste is stored or otherwise handled.

**Contaminated Soil:** An area or volume of soil onto which hazardous substances have been spilled, spread, disposed, or deposited.

**Pile:** Any non-containerized accumulation above the ground surface of solid, non-flowing wastes; includes open dumps. Some types of waste piles are:

- **Chemical Waste Pile:** A pile consisting primarily of discarded chemical products, by-products, radioactive wastes, or used or unused feedstocks.
- **Scrap Metal or Junk Pile:** A pile consisting primarily of scrap metal or discarded durable goods (such as appliances, automobiles, auto parts, batteries, etc.) composed of materials containing hazardous substances.
- **Tailings Pile:** A pile consisting primarily of any combination of overburden from a mining operation and tailings from a mineral mining, beneficiation, or processing operation.
- **Trash Pile:** A pile consisting primarily of paper, garbage, or discarded non-durable goods containing hazardous substances.

**Land Treatment:** Landfarming or other method of waste management in which liquid wastes or sludges are spread over land and tilled, or liquids are injected at shallow depths into soils.

**Other:** Sources not in categories listed above.



## GENERAL INFORMATION (continued)

**Source Description:** Include description of containment per pathway for ground water (see HRS Table 3-2), surface water (HRS Table 4-2), and air (HRS Tables 6-3 and 6-9).

Sources 1-7: For the purposes of evaluating the containment of the sources at this site, the sources will be lumped into two categories. Source #1 is the contents of the tanks in the WWTP/Tank farm. Source #2 is the contaminated soils that were identified in different areas of the site. Because the site is located on four different parcels of land, Some parcels may not have contaminated soils, therefore that area will not be included. Containment for these sources for the surface water pathway is 10. Containment for these sources for the groundwater pathway is 10. Containment for these sources for the air pathway is 10.

**Hazardous Waste Quantity (HWQ) Calculation:** SI Tables 1 and 2 (See HRS Tables 2-5, 2-6, and 5-2).

Source #1 – Wastes in Tanks

131,500 gallons / 500 = 263

Source WQ = 263

Because there is documented soil contamination on all parcels, the complete acreage of the parcels will be used in calculating the WQ for Source #2

Source #2 Contaminated Soils Worst Case – All parcels add up to be 2.27 acres

2.27 acres / 0.78 = 2.91

Source WQ = 2.91

WQ (Source #1) + WQ (Source #2) = Site WQ

263 + 2.91 = 265.9

Site WQ = 266

HWQ = 100

It should be noted that the driving mechanism for the waste quantity is the remaining 131,500 gallons of waste that remains in the tanks. Removal of these wastes will cause the waste quantity to significantly drop with the HWQ dropping from 100 to 1.

HWQ = 100

**SI TABLE 1: HAZARDOUS WASTE QUANTITY (HWQ) SCORES FOR SINGLE SOURCE SITES AND FORMULAS FOR MULTIPLE SOURCE SITES**

		Single Source Sites (assigned HWQ scores)	
(Column 1)	(Column 2)	(Column 3)	(Column 4)
TIER	Source Type	HWQ = 10	HWQ = 100
<b>A</b> Hazardous Constituent Quantity	N/A	HWQ = 1 if Hazardous Constituent Quantity data are complete  HWQ = 10 if Hazardous Constituent Quantity data are not complete	>100 to 10,000 lbs
<b>B</b> Hazardous Wastestream Quantity	N/A	≤ 500,000 lbs	>500,000 to 50 million lbs
<b>C</b> Volume	Landfill	≤ 6.75 million ft <sup>3</sup> ≤ 250,000 yd <sup>3</sup>	>6.75 million to 675 million ft <sup>3</sup> >250,000 to 25 million yd <sup>3</sup>
	Surface Impoundment	≤ 6,750 ft <sup>3</sup> ≤ 250 yd <sup>3</sup>	>6,750 to 675,000 ft <sup>3</sup> >250 to 25,000 yd <sup>3</sup>
	Drums	≤ 1,000 drums	>1,000 to 100,000 drums
	Tanks and non-drum containers	≤ 50,000 gallons	>50,000 to 5 million gallons
	Contaminated soil	≤ 6.75 million ft <sup>3</sup> ≤ 250,000 yd <sup>3</sup>	>6.75 million to 675 million ft <sup>3</sup> >250,000 to 25 million yd <sup>3</sup>
	Pile	≤ 6,750 ft <sup>3</sup> ≤ 250 yd <sup>3</sup>	>6,750 to 675,000 ft <sup>3</sup> >250 to 25,000 yd <sup>3</sup>
	Other	≤ 6,750 ft <sup>3</sup> ≤ 250 yd <sup>3</sup>	>6,750 to 675,000 ft <sup>3</sup> >250 to 25,000 yd <sup>3</sup>
<b>D</b> Area	Landfill	≤ 340,000 ft <sup>2</sup> ≤ 7.8 acres	>340,000 to 34 million ft <sup>2</sup> >7.8 to 780 acres
	Surface Impoundment	≤ 1,300 ft <sup>2</sup> ≤ 0.029 acres	>1,300 to 130,000 ft <sup>2</sup> >0.029 to 2.9 acres
	Contaminated soil	≤ 3.4 million ft <sup>2</sup> ≤ 78 acres	> 3.4 million to 340 million ft <sup>2</sup> > 78 to 7,800 acres
	Pile	≤ 1,300 ft <sup>2</sup> ≤ 0.029 acres	>1,300 to 130,000 ft <sup>2</sup> >0.029 to 2.9 acres
	Land treatment	≤ 27,000 ft <sup>2</sup> ≤ 0.62 acres	>27,000 to 2.7 million ft <sup>2</sup> >0.62 to 62 acres

TABLE 1 (CONTINUED)

Single Source Sites (assigned HWQ scores)		Multiple Source Sites		
(Column 5)	(Column 6)	(Column 7) Divisors for Assigning Source WQ Values	(Column 2) Source Type	(Column 1) TIER
HWQ = 10,000	HWQ = 1,000,000			
>10,000 to 1 million lbs	> 1 million lbs	lbs + 1	N/A	<b>A</b> Hazardous Constituent Quantity
>50 million to 5 billion lbs	> 5 billion lbs	lbs + 5,000	N/A	<b>B</b> Hazardous Wastestream Quantity
>675 million to 67.5 billion ft <sup>3</sup> >25 million to 2.5 billion yd <sup>3</sup> >675,000 to 67.5 million ft <sup>3</sup> >25,000 to 2.5 million yd <sup>3</sup> >100,000 to 10 million drums >5 million to 500 million gallons	> 67.5 billion ft <sup>3</sup> > 2.5 billion yd <sup>3</sup> > 67.5 million ft <sup>3</sup> > 2.5 million yd <sup>3</sup> > 10 million drums > 500 million gallons	ft <sup>3</sup> + 67,500 yd <sup>3</sup> + 2,500 ft <sup>3</sup> + 67.5 yd <sup>3</sup> + 2.5 drums + 10 gallons + 500	Landfill Surface Impoundment Drums Tanks and non-drum containers Contaminated Soil Pile Other	<b>C</b> Volume
>34 million to 3.4 billion ft <sup>2</sup> >780 to 78,000 acres >130,000 to 13 million ft <sup>2</sup> >2.9 to 290 acres >340 million to 34 billion ft <sup>2</sup> >7,800 to 780,000 acres >130,000 to 13 million ft <sup>2</sup> >2.9 to 290 acres >2.7 million to 270 million ft <sup>2</sup> >62 to 6,200 acres	> 3.4 billion ft <sup>2</sup> >78,000 acres > 13 million ft <sup>2</sup> > 290 acres > 34 billion ft <sup>2</sup> > 780,000 acres > 13 million ft <sup>2</sup> > 290 acres > 270 million ft <sup>2</sup> > 6,200 acres	ft <sup>2</sup> + 3,400 acres + 0.078 ft <sup>2</sup> + 13 acres + 0.00029 ft <sup>2</sup> + 34,000 acres + 0.78 ft <sup>2</sup> + 13 acres + 0.00029 ft <sup>2</sup> + 270 acres + 0.0062	Landfill Surface Impoundment Contaminated Soil Pile Land Treatment	<b>D</b> Area

## HAZARDOUS WASTE QUANTITY (HWQ) CALCULATION

For each migration pathway, evaluate HWQ associated with sources that are available (i.e., incompletely contained) to migrate to that pathway. (Note: If *Actual Contamination Targets* exist for ground water, surface water, or air migration pathways, assign the calculated HWQ score or 100, whichever is greater, as the HWQ score for that pathway.) For each source, evaluate HWQ for one or more of the four tiers (SI Table 1; HRS Table 2-5) for which data exist: constituent quantity, wastestream quantity, source volume, and source area. Select the tier that gives the highest value as the source HWQ. Select the source volume HWQ rather than source area HWQ if data for both tiers are available.

Column 1 of SI Table 1 indicates the quantity tier. Column 2 lists source types for the four tiers. Columns 3, 4, 5, and 6 provide ranges of waste amount for sites with only one source, corresponding to HWQ scores at the tops of the columns. Column 7 provides formulas to obtain source waste quantity values at sites with multiple sources.

1. Identify each source type.
2. Examine all waste quantity data available for each source. Record constituent quantity and waste stream mass or volume. Record dimensions of each source.
3. Convert source measurements to appropriate units for each tier to be evaluated.
4. For each source, use the formulas in the last column of SI Table 1 to determine the waste quantity value for each tier that can be evaluated. Use the waste quantity value obtained from the highest tier as the quantity value for the source.
5. Sum the values assigned to each source to determine the total site waste quantity.
6. Assign HWQ score from SI Table 2 (HRS Table 2-6).

Note these exceptions to evaluate soil exposure pathway HWQ (see HRS Table 5-2):

- The divisor for the area (square feet) of a landfill is 34,000.
- The divisor for the area (square feet) of a pile is 34.
- Wet surface impoundments and tanks and non-drum containers are the only sources for which volume measurements are evaluated for the soil exposure pathway.

SI TABLE 2: HWQ SCORES FOR SITES

Site WQ Total	HWQ Score
0	0
1 <sup>a</sup> to 100	1 <sup>b</sup>
> 100 to 10,000	100
> 10,000 to 1 million	10,000
> 1 million	1,000,000

<sup>a</sup> If the WQ total is between 0 and 1, round it to 1.

<sup>b</sup> If the hazardous constituent quantity data are not complete, assign the score of 10.

## SI TABLE 3: WASTE CHARACTERIZATION WORKSHEET

Site Name: Seven Out LLC Tank, Waycross, GeorgiaReferences: SCDM 3/2004, Seven Out PA, 8/2005

## Sources:

- (1) Contaminated soil from the Waste Storage Facility and the former Foundry.
- (2) Contaminated soil from the area of the Frac Tank spillage behind the facility on other side of railroad tracks
- (3) Contaminated soil from the soils around the Tank Farm.
- (4) Waste documented in the containers at the Tank Farm on the back side of the facility (numerous EPA Waste Samples).

HAZARDOUS SUBSTANCE	TOX	AIR PATHWAY		GROUND WATER PATHWAY		SURFACE WATER PATHWAY										
		Air Gas Migration	Air Gas Mobility	GW Mobility (HRS Table 3-8)	Tox/ Mobility Value (HRS Table 3-9)	OVERLAND/FLOOD MIGRATION							GROUND WATER TO SURFACE WATER			
						Per (HRS Table 4-10 (a))	Tox/ Per Value (HRS Table 4- 12)	Bioac/Pot (HRS Table 4-15)	Tox/ per/ Bioac Value (HRS Table 4-16)	Ecotox/ (HRS Table 4-17)	Ecotox/ Pers (HRS Table 4-20)	Ecotox/ Per/ Bioac Value (HRS Table 4-21)	Tox/ Mob/ Pers Value (HRS Table 4-26)	Tox/ Mob/ Per/ Bioac Value (HRS Table 4-28)	Ecotox/ Mob/ Pers Value (HRS Table 4-29)	Ecotox/ Mob/ Per/ Bioac Value (HRS Table 4-30)
Antimony (4)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04		5.00E+04	1.00E+02	1.00E+02	5.00E+02	1.00E+02	5.00E+02	1	5.00E+02
Arsenic (3)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04	5.00E+03(e)	5.00E+04 (f)	1.00E+01	1.00E+01	5.00E+04(e)	1.00E+02	5.00E+02(f)	.1	5.00E+02(e)
Barium (1, 2, 3, 4)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04	5.00E+02(g)	5.00E+06	1.00E+02	1	5.00E+04	1.00E+02	5.00E+04	1	5.00E+02
Cadmium (1,4)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04	5.00E+04(e)	5.00E+07(f)	1.00E+04	1.00E+04	5.00E+08(e)	1.00E+02	5.00E+05(f)	1.00E+02	5.00E+06(e)
Chromium (1, 3, 4)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04	5.00E+02(g)	5.00E+06	1.00E+04	1.00E+04	5.00E+06	1.00E+02	5.00E+04	1.00E+02	5.00E+04
Cobalt	10	NV	NV	0.01	0.1		10	5.00E+03	5.00E+04	0	0	5.00E+03	1.00E-01	5.00E+02	0	0
Copper (1, 2, 3, 4)	0.3	NV	NV	1.00E-02	0		0	5.00E+03(e)	0	1.00E+03	1.00E+03	5.00E+06(e)	0	5.00E+03	1.00E+01	5.00E+04(e)
Lead (1, 2, 3, 4)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04	5.00E+04(g)	5.00E+04(f)	1.00E+03	1.00E+03	5.00E+07(e)	1.00E+02	5.00E+02(f)	1.00E+01	5.00E+05(e)
Manganese (1,3, 4)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04	5.00E+04	5.00E+08	0	0	0	1.00E+02	5.00E+06	0	0
Nickel (3, 4)	10000	NV	NV	1.00E-02	1.00E+02		1.00E+04	5.00E+02(e)	5.00E+03(f)	1.00E+02	1.00E+02	5.00E+04(e)	1.00E+02	5.00E+01(f)	1	5.00E+02(e)
Vanadium (4)	100	NV	NV	1.00E-02	1.00E+00		1.00E+02	5.00E+02	5.00E+04	0	0	0	1	5.00E+02	0	0
Zinc (1, 3, 4)	10	NV	NV	1.00E-02	1.00E-01		1.00E+01	5.00E+06(e)	5.00E+05(f)	1.00E+01	1.00E+01	5.00E+01(e)	1.00E-01	5.00E+03(f)	1.00E-01	5.00E+01(e)
Mercury (3, 4)	10000	17	0.2	1.00E-02	1.00E+02		1.00E+04	5.00E+04	5.00E+08	1.00E+04	1.00E+04	5.00E+08	1.00E+02	5.00E+06	1.00E+02	5.00E+06
1,2-Dichlorobenzene (4)																

Not Listed in SCDM

HAZARDOUS CONSTITUENT	TOX.	AIR PATHWAY		GROUNDWATER PATHWAY		SURFACE WATER PATHWAY										
		Air Gas Miration	Air Gas Mobility	GW Mobility (HRS Table 3-8)	Tox/ Mobility Value (HRS Table 3-9)	Overland Flood/Migration Pathway							Groundwater to Surface Water Pathway			
						Per (HRS Table 4-10 and 4-11)	Tox/ Per Value (HRS Table 4- 12)	Bioac Pot. (HRS Table 4-15)	Tox/ pers/ Bioac Value (HRS Table 4-16)	Ecotox (HRS Table 4-19)	Ecotos/P ers (HRS Table 4-20)	Ecotox/ Pers/ Bioac Value (HRS Table 4-21)	Tox/ Mob/ Pers Value (HRS Table 4-26)	Tox/ Mob/ Pers/ Bioac Value (HRS Table 4-28)	Ecotox/ Mob/ Pers Value (HRS Table 4-29)	Ecotox/ Mob/ Per/ Bioac Value (HRS Table 4-30)
1,4-Dichlorobenzene (4)	10	17	1	1	10	0.4	4	2.00E+03	2.00E+04	1.00E+03	4.00E+02	2.00E+06	4	2.00E+04	4.00E+02	2.00E+06
2-Butanone (MEK) (4)	1	17	1	1	1	0.4	0.4	0.5	0.2		0.4	0.2	0.4	0.2	0.4	0.2
4-Methyl-2-pentone (4)	NOT IN SCDM															
Acetone (4)	1	17	1	1	1	0.07	0.07	0.5	0.035	100	7	3.5	0.07	0.035	7	3.5
Benzene (4)	1000	17	1	1	1000	0.4	400	5.00E+03	2.00E+06	1.00E+03	400	2.00E+06	400	2.00E+06	400	2.00E+06
Chloroform (4)	100	17	1	1	100	0.4	40	5.00E+02(e) 5.00E+00(f)	2.00E+02(f)	1.00E+02	40	2.00E+04(e)	40	2.00E+02(f)	40	2.00E+04(e)
Isopropylbenzene (4)	NOT IN SCDM															
M, p-xylene (4) *	10	17	1	1	10	0.0007	0.007	5.00E+02	3.50E+00	1.00E+02	0.07	3.50E+01	0.007	3.50E+00	0.07	3.5E+01
Methyl tert-butyl ether (4)	1	17	1	1	1	0.4	0.4	5.00E+00	2.00E+00	1.00E+00	0.4	2.00E+00	0.4	2.00E+00	0.4	2.00E+00
O-xylene (4)	1	17	1	1	1	0.4	0.4	5.00E+01	2.00E+01	1.00E+02	40	2.00E+03	0.4	2.00E+01	40	2.00E+03
Toluene (4)	10	17	1	1	10	0.07	0.7	5.00E+03(e) 5.00E+01(f)	3.50E+01(f)	1.00E+02	7	3.50E+04(e)	0.7	3.50E+00(f)	7	3.50E+04(e)
1,1'-Biphenyl (4)	NOT IN SCDM															
2-Methylnaphthalene (4)	0	11	0.2	0.01	0	0.4	0	5.00E+04	0	1.00E+02	40	2.00E+06	0	0	0.4	40
4-Methylphenol (4)	100	11	1	0.01	1	0.0007	0.07	5.00E+00	3.50E-01	1.00E+02	0.07	3.50E-01	0.0007	3.50E-03	0.0007	3.50E-03
Bis (2-ethylhexyl) phthalate (4)	100	6	0.0002	0.0001	0.01	1	100	5.00E+04	5.00E+06	1.00E+03	1.00E+03	5.00E+07	0.01	5.00E+02	0.1	5.00E+03
Diethyl phthalate (4)	1	11	0.2	0.01	0.01	1	1	5.00E+02	5.00E+02	1.00E+01	1.00E+01	5.00E+03	0.01	5.00E+00	0.1	5.00E+01
Dimethyl phthalate (4)	NOT IN SCDM															
Di-n-butyl phthalate (4)	10	6	0.02	0.0001	0.001	1	10	5.00E+03	5.00E+04	1.00E+03	1.00E+03	5.00E+06	0.001		0.1	5.00E+02

HAZARDOUS CONSTITUENT	TOXICITY	AIR PATHWAY		GROUNDWATER PATHWAY		SURFACE WATER PATHWAY										
		Air Gas Migration	Air Gas Mobility	GW Mobility (HRS Table 3-8)	Tox/ Mobility Value (HRS Table 3-9)	Overland Flood/Migration Pathway							Groundwater to Surface Water Pathway			
						Per (HRS Table 4-10 and 4-11)	Tox/ Per Value (HRS Table 4- 12)	Bioac Pot (HRS Table 4-15)	Tox/ pers/ Bioac Value (HRS Table 4-16)	Ecotox/ (HRS Table 4-19)	Ecotox/P ers Table 4-20)	Ecotox/ Pers/ Bioac Value (HRS Table 4-21)	Tox/ Mob/ Pers Value (HRS Table 4-26)	Tox/ Mob/ Pers/ Value (HRS Table 4-28)	Ecotox/ Mob/ Pers Value (HRS Table 4-29)	Ecotox/ Mob/ Pers/ Value (HRS Table 4-30)
Acenaphthalene (3)	0	11	0.02	2.00E-05	0	0	0	5.00E-02	0	0	0	0	0	0	0	0
Anthracene (3)	10	6	0.002	2.00E-07	2.00E-06	0	4	5.00E-04	2.00E+05	1.00E+04	4.00E+03	2.00E+06	8.00E-07	4.00E-02	8.00E-04	4.00E+01
Benzo(a)anthracene (3)	1000	6	0.002	2.00E-09	2.00E-06		1000	5.00E-04	5.00E+07	10000	10000	5.00E+08	2.00E-06	1.00E-01	2.00E-05	1.00E+00
Benzo(b)fluoranthene (3)	NOT IN SCDM															
Benzo(k)fluoranthene (3)	100	6	0.0002	2.00E-09	2.00E-07		100	5.00E-04	5.00E+06	0	0	0	2.00E-07	1.00E-02	0	0
Benzo(a) pyrene (3)	10000	6	0.0002	2.00E-09	2.00E-05		10000	5.00E-04	5.00E+08	10000	10000	5.00E+08	2.00E-05	1.00E+00	2.00E-05	1.00E+00
Benzo(g,h,i)perylene (3)	0	NV	NV	2.00E-09	0		0	5.00E-04	0	0	0	0	0	0	0	0
Carbazole (3)	10	6	0.02	0.002	2.00E-02	0	4	5.00E-02	2.00E+03	1000	4.00E+02	5.00E+05	8.00E-03	4.00E+01	8.00E-01	4.00E+02
Chrysene (3)	10	6	0.0002	2.00E-09	2.00E-08		10	5.00E+03(e) 5.00E+00(f)	5.00E+01(f)	1000	1000	5.00E+05(e)	2.00E-08	1.00E-07(f)	2.00E-06	1.00E-02(e)
Dibenz(a,h)anthracene (3)	10000	NV	NV	2.00E-09	2.00E-05		10000	5.00E-04	5.00E+08	0	0	0	2.00E-05	1.00E+00	0	0
Fluorene (4)	100	11	0.02	1.00E-04	1.00E-02		100	5.00E+03(e) 5.00E+02(f)	5.00E+04(f)	1000	1000	5.00E+05(e)	1.00E-02	5.00E+00(f)	1.00E-01	5.00E+02(e)
Fluoranthene (3)	NOT IN SCDM															
Indeno (1,2,3-cd) pyrene (3)	1000	NV	NV	2.00E-09	2.00E-06		1000	5.00E-04	5.00E+07	0	0	0	2.00E-06	1.00E-01	0	0
Isophorone (4)	NOT IN SCDM															
Naphthalene (4)	1000	11	0.2	0.01	1.00E+01	0	400	5.00E-04	2.00E+07	1000	4.00E+02	2.00E+07	4.00E+00	2.00E+05	4.00E-00	2.00E+05
Phenanthrene (1,3,4)	0	11	0.02	1.00E-04	0	0	0	5.00E+04(e) 5.00E+03(f)	0	1.00E+04	4.00E+03	2.00E+08(e)	0	0	0.4	2.00E+04(e)
Phenol (4)	10	11	1		1.00E+01	0.0007	0.007	5.00E+04(e) 5.00E+01(f)	3.50E-01(f)	10000	7	5.00E+03(e)	7.00E-03	3.50E-01(f)	7.00E+00	3.50E+03(e)
Pyrene (3)	100	6	0.002	2.00E-05	2.00E-03	0	1.00E+02	5.00E-04	5.00E+06	10000	10000	5.00E+08	2.00E-03	1.00E-02	0.2	1.00E+04
Dieldrin (3)	10000	6	0.002	2.00E-05	0.2		1.00E+04	5.00E-04	5.00E+08	1.00E+04	1.00E+04	5.00E+08	0.2	1.00E+04	0.2	1.00E+04
Endosulfan Sulfate** (3,2)	100	11	0.002	0.002	0.2	0	100	5.00E+04(e) 5.00E+00(f)	5.00E+02(f)	1000	1000	5.00E+07(e)	0.2	1.00E+00(f)	2	1.00E+05(e)

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HAZARDOUS CONSTITUENT	TOXI CITY	AIR PATHWAY		GROUNDWATER PATHWAY		SURFACE WATER PATHWAY										
		Air Gas Migration	Air Gas Mobility	GW Mobility (HRS Table 3-8)	Tox/ Mobility Value (HRS Table 3-9)	Overland Flood/Migration Pathway							Groundwater to Surface Water Pathway			
						Per/ (HRS Tables 4-10 and 4-11)	Tox/ Per Value (HRS Table 4- 12)	Bioac Pot/ (HRS Table 4-15)	Tox/ per/ Bioac Value (HRS Table 4-16)	Ecotox/ (HRS Table 4-19)	Ecotox/P ers (HRS Table 4-20)	Ecotox/ Per/ Bioac Value (HRS Table 4-21)	Tox/ Mob/ Pers Value (HRS Table 4-26)	Tox/ Mob/ Per/ Bioac Value (HRS Table 4-28)	Ecotox/ Mob/ Pers Value (HRS Table 4-29)	Ecotox/ Mob/ Per/ Bioac Value (HRS Table 4-30)
Endrin (3,2)	10000	6	0.002	2.00E-05	0.2	1.00E+04	1.00E+04	5.00E+07(f)	5.00E+07(f)	1.00E+04	1.00E+04	5.00E+08(e)	0.2	1.00E+02(f)	0.2	1.00E+03(e)
Endrin Aldehyde (2)	0	6	0.002	2.00E-07	0	0	0	5.00E+03	0	0	0	0	0	0	0	0
Heptachlor (3)	1000	11	0.02	2.00E-07	2.00E-04	400	400	5.00E+04	2.00E-07	1.00E+04	4.00E+03	2.00E+08	8.00E-05	4	8.00E-04	40
Methoxychlor (3,1)	100	6	0.002	2.00E-07	2.00E-05	100	100	5.00E+04	5.00E+06	1.00E+04	1.00E+04	5.00E+08	2.00E-05	1	2.00E-03	100
Mirex (1,2,3)	NOT IN SCDM															
Gamma-Chlordane (2)	10000	6	0.002	2.00E-05	0.2	1.00E+04	1.00E+04	5.00E+08	5.00E+08	0	0	0	0.2	1.00E+04	0	0
Alpha-Chlordane	1000	11	0.02	2.00E-05	0.2	1.00E+04	1.00E+04	5.00E+08	5.00E+08	1.00E+04	1.00E+04	5.00E+08	0.2	1.00E+04	0.2	1.00E+04
4,4'-DDD (1,2,3)	100	6	0.002	2.00E-07	2.00E-05	100	100	5.00E+04	5.00E+06	1.00E+04	1.00E+04	5.00E+08	2.00E-05	1	0.002	1.00E+03
4,4'-DDE (1,2)	100	6	0.002	2.00E-07	2.00E-05	100	100	5.00E+04	5.00E+06	1.00E+04	1.00E+04	5.00E+08	2.00E-05	1	0.002	1.00E+03
4,4'-DDT (3)	1000	6	0.002	2.00E-07	2.00E-04	1.00E+03	1.00E+03	5.00E+07	5.00E+07	1.00E+04	1.00E+04	5.00E+08	2.00E-04	10	0.002	1.00E+03

(e) - bioaccumulation in freshwater environment; (f) - bioaccumulation in food; NV - no value in SCDM

\* The higher values for m-xylene or p-xylene were used.

\*\* SCDM for Endosulfan I and II used.

6-11-05



### **Ground Water Observed Release Substances Summary Table**

On SI Table 4, list the hazardous substances associated with the site detected in ground water samples for that aquifer. Include only those substances directly observed or with concentrations significantly greater than background levels. Obtain toxicity values from the Superfund Chemical Data Matrix (SCDM). Assign mobility a value of 1 for all observed release substances regardless of the aquifer being evaluated. For each substance, multiply the toxicity by the mobility to obtain the toxicity/mobility factor value; enter the highest toxicity/mobility value for the aquifer in the space provided.

### **Ground Water Actual Contamination Targets Summary Table**

If there is an observed release at a drinking water well, enter each hazardous substance meeting the requirements for an observed release by well and sample ID on SI Table 5 and record the detected concentration. Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For MCL and MCLG benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population using the well as a Level I target. If these percentages are less than 100% or all are N/A, evaluate the population using the well as a Level II target for that aquifer.

SI TABLE 4: GROUND WATER OBSERVED RELEASE SUBSTANCES (BY AQUIFER - Shallow (20') Aquifer)

Sample ID	Hazardous Substance	Bckgrd. Conc. <sup>a</sup> (ug/l)	Toxicity/Mobility	References	Sample ID	Hazardous Substance	Bckgrd. Conc. <sup>a</sup> (ug/l)	Toxicity/Mobility	References
None	None								
Highest Toxicity/Mobility									

SI TABLE 5: GROUND WATER ACTUAL CONTAMINATION TARGETS

Well ID: None Level I        Level II        Population Served        References       

Sample ID	Hazardous Substance	Con. (ug/l)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RID	% of RID
None	None							
Highest Percentage					Sum of Percents		Sum of Percents	

Well ID: None Level I        Level II        Population Served        References       

Sample ID	Hazardous Substance	Con. (ug/l)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RID	% of RID
None	None							
Highest Percentage					Sum of Percents		Sum of Percents	

## GROUND WATER PATHWAY GROUND WATER USE DESCRIPTION

### Describe Ground Water Use within 4 miles of the Site:

Describe generalized stratigraphy, aquifers, municipal and private wells.

The site is underlain by Pleistocene and Pliocene sands and gravels, primarily associated with the Brandywine, Coharie, and Suderland formations. The Brandywine Formation consists of less than 50 feet of sand and gravel which resembles the coarser sands of the Hawthorn, unconformably stratigraphically below the Brandywine. Should any formations overlie the Brandywine, these would probably lie unconformably. The Coharie Formation may overlie the Brandywine Formation or the Hawthorn, both unconformably. (Reference 41).

The sources at the site were either relatively small (contaminated soils in the frac tank area and in the area behind the secondary containment berm) or were primarily contained in a concrete secondary containment system (References 4, 16, 29). As evidenced during rainfall during the VSI for the previous PA reconnaissance, infiltration rate is not high and the subsurface to a great depth does not appear to be highly permeable (Reference 42). Releases to the soils would most likely have migrated to the surface water pathway more readily than the groundwater pathway at the site. The site is not karst according to the City of Waycross Wellhead Protection Plan (Reference 43).

Municipal and industrial groundwater production in the Waycross area occurs primarily from the Ocala Limestone of the Principal Floridan Aquifer at depths exceeding 500 feet. Residential wells that are installed in the area penetrate the Miocene/Pliocene aquifers (around 300 feet deep) or the shallower aquifers (20-40 feet deep). Current residential wells are installed in the Pliocene aquifers, however, the area does include some older wells that are completed in the shallow aquifers (References 44 and 45). The primary public supplies of groundwater are provided by the City of Waycross, Waycross/Ware Industrial Park, and the Satilla Regional Water and Sewer Authority (References 47 and 48). Groundwater withdrawal in Ware County accounts for 84% of all water supplies in the county. (Reference 49).

The Seven Out LLC Tank site lies within an area determined to have a higher (Drastic Rating > 141) groundwater pollution susceptibility rating (Reference 50). The site is not located within a significant groundwater recharge area (Reference 51).

Although groundwater contamination of the deep aquifer is not suspected at this site, the potential for shallow aquifer contamination exists. The large number of secondary targets and the potential for groundwater contamination is a cause for concern. Four wells that serve 19,114 people are within 0.25-0.50 mile from the site (Reference 47).

### Show Calculations of Ground Water Drinking Water Populations for each Aquifer:

Provide apportionment calculations for blended supply systems. County average number of persons per household: 2.47  
References 47, 48, 53, 54, and 56

Groundwater in the Waycross area is the only source of drinking water for the area. Data for residential well usage in the 4-mile radius has been obtained using the 1990 U.S. Census and the 2000 U.S. Census. The 1990 Census was the last Census that included questions regarding residential well usage. The 1990 Census data was used to establish the number of residential wells. The 2000 Census data was used to establish residents per household.

Radius (miles)	Total Population	#Wells	Population on Wells
0-.25	167	0	0
.25-.5	1,241	4	19,114
.5-1	4,090	7	20
1-2	9,644	105	592
2-3	7,195	310	5,492
3-4	2,995	721	2,405
<b>Totals</b>	<b>25,333</b>	<b>1,147</b>	<b>27,623</b>

NOTE: Total Population within 4-mile radius and Population on Wells within 4-mile radius varies because some residents on municipal/county supplies for which wells are within 4-mile radius are actually outside the 4-mile radius of the site.

# GROUND WATER PATHWAY WORKSHEET

LIKELIHOOD OF RELEASE	Score	Data Type	Refs
1. OBSERVED RELEASE: If sampling data or direct observation support a release to the aquifer, assign a score of 550. Record observed release substances on SI Table 4.			
2. POTENTIAL TO RELEASE: Depth to aquifer: <u>300</u> feet. If sampling data do not support a release to the aquifer, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Optionally, evaluate potential to release according to HRS Section 3.	90		44,45, 53,47 46
LR = <u>90</u>			

## TARGETS

<p>Are any wells part of a blended system? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, attach a page to show apportionment calculations.</p> <p>3. ACTUAL CONTAMINATION TARGETS: If analytical evidence indicates that any target drinking water well for the aquifer has been exposed to a hazardous substance from the site, evaluate the factor score for the number of people served (SI Table 5).</p> <p>Level I: <u>0</u> people x 10 = <u>0</u></p> <p>Level II: <u>0</u> people x 1 = <u>0</u> Total =</p>	0		App. F.
4. POTENTIAL CONTAMINATION TARGETS: Determine the number of people served by drinking water wells for the aquifer or overlying aquifers that are not exposed to a hazardous substance from the site; record the population for each distance category in SI Table 6a or 6b. Sum the population values and multiply by 0.1.	1103		53,54, 55
5. NEAREST WELL: Assign a score of 50 for any Level I Actual Contamination Targets for the aquifer or overlying aquifer. Assign a score of 45 if there are Level II targets but no Level I targets. If no Actual Contamination Targets exist, assign the Nearest Well score from SI Table 6a or 6b. If no drinking water wells exist within 4 miles, assign 0.	18		53,54, 55
6. WELLHEAD PROTECTION AREA (WHPA): If any source lies within or above a WHPA for the aquifer, or if a ground water observed release has occurred within a WHPA, assign a score of 20; assign 5 if neither condition applies but a WHPA is within 4 miles; otherwise assign 0.	5		43
<p>7. RESOURCES: Assign a score of 5 if one or more ground water resource applies; assign 0 if none applies.</p> <ul style="list-style-type: none"> <li>• Irrigation (5 acre minimum) of commercial food crops or commercial forage crops</li> <li>• Watering of commercial livestock</li> <li>• Ingredient in commercial food preparation</li> <li>• Supply for commercial aquaculture</li> <li>• Supply for a major or designated water recreation area, excluding drinking water use</li> </ul>	0		53,54, 55,57, 4
Sum of Targets T = <u>1126</u>			

## Environmental Protection Agency

## Pl. 300, App. A

TABLE 3-1—GROUND WATER MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum value	Value assigned
<b>Likelihood of Release to an Aquifer:</b>		
1. Observed Release	550	—
2. Potential to Release:		
2a. Containment	10	10
2b. Net Precipitation	10	3
2c. Depth to Aquifer	5	1
2d. Travel Time	35	5
2e. Potential to Release (lines 2a-2d)	500	90
3. Likelihood of Release (higher of lines 1 and 2e)	550	90
<b>Waste Characteristics:</b>		
4. Toxicity/Mobility	(a)	—
5. Hazardous Waste Quantity	(a)	—
6. Waste Characteristics	100	—
<b>Targets:</b>		
7. Nearest Well	50	—
8. Population:		
8a. Level I Concentrations	(b)	—
8b. Level II Concentrations	(b)	—
8c. Potential Contamination	(b)	—
8d. Population (lines 8a-8c)	(b)	—
9. Resources	5	—
10. Wellhead Protection Area	20	—
11. Targets (lines 7-4d-9-10)	(b)	—
<b>Ground Water Migration Score for an Aquifer:</b>		
12. Aquifer Score (lines 3 & 6 x 11) (82,500)	100	—
<b>Ground Water Migration Pathway Score:</b>		
13. Pathway Score (S <sub>p</sub> ), (highest value from line 12 for all aquifers evaluated)	100	—

\* Maximum value applies to waste characteristics category.

\* Maximum value not applicable.

\* Do not round to nearest integer.

$$22 \times (26 + 20 + 20) = 90$$

$$10 \times (3 + 1 + 5)$$

$$10 \times 9$$

## 3.0.1 General considerations

## 3.0.1.1 Ground water target distance limit.

The target distance limit defines the maximum distance from the sources at the site which targets are evaluated. Use a target distance limit of 4 miles for the ground water migration pathway, except when aquifer discontinuities apply (see section 3.0.1.2.2). Furthermore, consider any well with an observed release from a source at the site (see section 3.1.1) to lie within the target distance limit of the site, regardless of the well's distance from the sources at the site.

For sites that consist solely of a contaminated ground water plume with no identified sources, begin measuring the 4-mile target distance limit at the center of the area of observed ground water contamination. Determine the area of observed ground water contamination based on available samples that meet the criteria for an observed release.

3.0.1.2 **Aquifer boundaries.** Combine multiple aquifers into a single hydrologic unit for scoring purposes if aquifer interconnections can be established for these aquifers. In contrast, restrict aquifer boundaries if aquifer discontinuities can be established.

3.0.1.2.1 **Aquifer interconnections.** Evaluate whether aquifer interconnections occur within 2 miles of the sources at the site. If they occur within this 2-mile distance, combine the aquifers having interconnections in scoring the site. In addition, if observed ground

water contamination attributable to the sources at the site extends beyond 2 miles from the sources, use any locations within the limits of this observed ground water contamination in evaluating aquifer interconnections. If data are not adequate to establish aquifer interconnections, evaluate the aquifers as separate aquifers.

3.0.1.2.2 **Aquifer discontinuities.** Evaluate whether aquifer discontinuities occur within the 4-mile target distance limit. An aquifer discontinuity occurs for scoring purposes only when a geologic, topographic, or other structure or feature entirely transects an aquifer within the 4-mile target distance limit, thereby creating a continuous boundary to ground water flow within this limit. If two or more aquifers can be combined into a single hydrologic unit for scoring purposes, an aquifer discontinuity occurs only when the structure or feature entirely transects the boundaries of this single hydrologic unit.

When an aquifer discontinuity is established within the 4-mile target distance limit, exclude that portion of the aquifer beyond the discontinuity in evaluating the ground water migration pathway. However, if hazardous substances have migrated across an apparent discontinuity within the 4-mile target distance limit, do not consider this to be a discontinuity in scoring the site.

3.0.1.3 **Karst aquifer.** Give a karst aquifer that underlies any portion of the sources at

# Waycross/Ware County Municipal/County Blended Groundwater Supplies Appropriation Calculations

Provider	ID #	Well #	Aquifer/ Depth	Radius (miles)	Population Served	Gallons Pumped (gpm)	% of Gallons of Total Blended System	X Total Population Served by Blended System	Appropriated Population for Allocation
Satilla Regional Water & Sewer Authority	GA2990001	Monroe St. Well*	Floridan NA	2-3	9415	120,276,000	8.9	32,120	2859
Satilla Regional Water & Sewer Authority	GA2990001	Off Nevada Avenue in Emerson Park Well*	Floridan 806'	2-3	Combined with above	61,728,000	4.6	32,120	1478
Satilla Regional Water & Sewer Authority	GA2990001	Off Albany Avenue - Waresboro Well*	Floridan 800'	>4	Combined with above	96,504,000	7.2	32,120	2313
Satilla Regional Water & Sewer Authority	GA2990051	Driggers Road Well*	Floridan 806'	>4	3305	88,380,000	6.6	32,120	2120
Satilla Regional Water & Sewer Authority	GA2990051	Swamp Road Well*	Floridan 800'	1-2	Combined with above	18,504,000	1	32,120	321
City of Waycross	GA2990002	Well #1* 658'*	Floridan 700'	¼-1/2	16900	120,000	0	32,120	0
City of Waycross	GA2990002	Well #2* 762'	Floridan 762'	¼-1/2	Combined with above	109,500,000	8.1	32,120	2602
City of Waycross	GA2990003	Well #3 773'*	Floridan 773'	¼-1/2	Combined with above	693,500,000	51.4	32,120	16,510
Waycross-Ware County Industrial Park	GA2990019	Well #1* Fulford Road	Floridan	>4	2500	96,725,000	7.2	32,120	2313
Waycross - Ware County Industrial Park	GA2990019	Well #2* Harris Road	Floridan	3-4	Combined with Above	63,875,000	4.7	32,120	1510
<b>TOTALS</b>					32,120	1,349,107,000	99.7*		32026*

\*Scientific Rounding Accounts for differences in percentage and totals

Outside the 4-mile radius

Reference Telecommunications with Sharpton, McDaniel, and Thomas.

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**SI TABLE 6 (From HRS TABLE 3-12): VALUES FOR POTENTIAL CONTAMINATION GROUND WATER TARGET POPULATIONS**

**SI Table 6a: Other Than Karst Aquifers**

Distance from Site	Pop.	Nearest Well (choose highest)	Population Served by Wells within Distance Category												Pop. Value	Ref.
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,000 to 3,000,000		
0 to $\frac{1}{4}$ mile	0	20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455	0	47,53, 54,57
$> \frac{1}{4}$ to $\frac{1}{2}$ mile	19,114	18	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122	10,122	47,53, 54
$> \frac{1}{2}$ to 1 mile	20	9	1	5	17	52	167	523	1,669	5,224	16,684	52,239	166,835	522,385	5	47,53, 54
$> 1$ to 2 miles	592	5	0.7	3	10	30	94	294	939	2,939	9,385	29,384	93,845	293,842	94	47,53, 54
$> 2$ to 3 miles	5,492	3	0.5	2	7	21	68	212	678	2,122	6,778	21,222	67,777	212,219	678	47,53, 54
$> 3$ to 4 miles	2,405	2	0.3	1	4	13	42	131	417	1,306	4,171	13,060	41,709	130,596	131	47,53, 54
Nearest Well = 18															Sum = 11,030	

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**SI TABLE 6 (From HRS TABLE 3-12): VALUES FOR POTENTIAL CONTAMINATION GROUND WATER TARGET POPULATIONS (continued)**

**SI Table 6b: Karst Aquifers**

Distance from Site	Pop.	Nearest Well (choose highest)	Population Served by Wells within Distance Category												Pop. Value	Ref.
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,000 to 3,000,000		
0 to $\frac{1}{4}$ mile		20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455		
$> \frac{1}{4}$ to $\frac{1}{2}$ mile		20	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122		
$> \frac{1}{2}$ to 1 mile		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		
$> 1$ to 2 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		
$> 2$ to 3 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		
$> 3$ to 4 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227		

Nearest Well =

Sum =



# GROUND WATER PATHWAY WORKSHEET (concluded)

WASTE CHARACTERISTICS	Score	Data Type	Does not Apply																						
8. If any Actual Contamination Targets exist for the aquifer or overlying aquifers, assign the calculated hazardous waste quantity score or a score of 100, whichever is greater; if no Actual Contamination Targets exist, assign the hazardous waste quantity score calculated for sources available to migrate to ground water.	100																								
9. Assign the highest ground water toxicity/mobility value from SI Table 3 or 4. (Benzene)	1000																								
10. Multiply the ground water toxicity/mobility and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below: (from HRS Table 2-7)																									
<table border="1"> <thead> <tr> <th>Product</th> <th>WC Score</th> </tr> </thead> <tbody> <tr><td>0</td><td>0</td></tr> <tr><td>&gt;0 to &lt;10</td><td>1</td></tr> <tr><td>10 to &lt;100</td><td>2</td></tr> <tr><td>100 to &lt;1,000</td><td>3</td></tr> <tr><td>1,000 to &lt; 10,000</td><td>6</td></tr> <tr><td>10,000 to &lt;1E + 05</td><td>10</td></tr> <tr><td>1E + 05 to &lt;1E + 06</td><td>18</td></tr> <tr><td>1E + 06 to &lt;1E + 07</td><td>32</td></tr> <tr><td>1E + 07 to &lt;1E + 08</td><td>56</td></tr> <tr><td>1E + 08 or greater</td><td>100</td></tr> </tbody> </table>				Product	WC Score	0	0	>0 to <10	1	10 to <100	2	100 to <1,000	3	1,000 to < 10,000	6	10,000 to <1E + 05	10	1E + 05 to <1E + 06	18	1E + 06 to <1E + 07	32	1E + 07 to <1E + 08	56	1E + 08 or greater	100
Product	WC Score																								
0	0																								
>0 to <10	1																								
10 to <100	2																								
100 to <1,000	3																								
1,000 to < 10,000	6																								
10,000 to <1E + 05	10																								
1E + 05 to <1E + 06	18																								
1E + 06 to <1E + 07	32																								
1E + 07 to <1E + 08	56																								
1E + 08 or greater	100																								
WC = 18																									

Multiply LR by T and by WC. Divide the product by 82,500 to obtain the ground water pathway score for each aquifer. Select the highest aquifer score. If the pathway score is greater than 100, assign 100.

GROUND WATER PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

22.1

(Maximum of 100)

LR = 90

T = 1126

WC = 18

$$90 \times 1126 \times 18$$

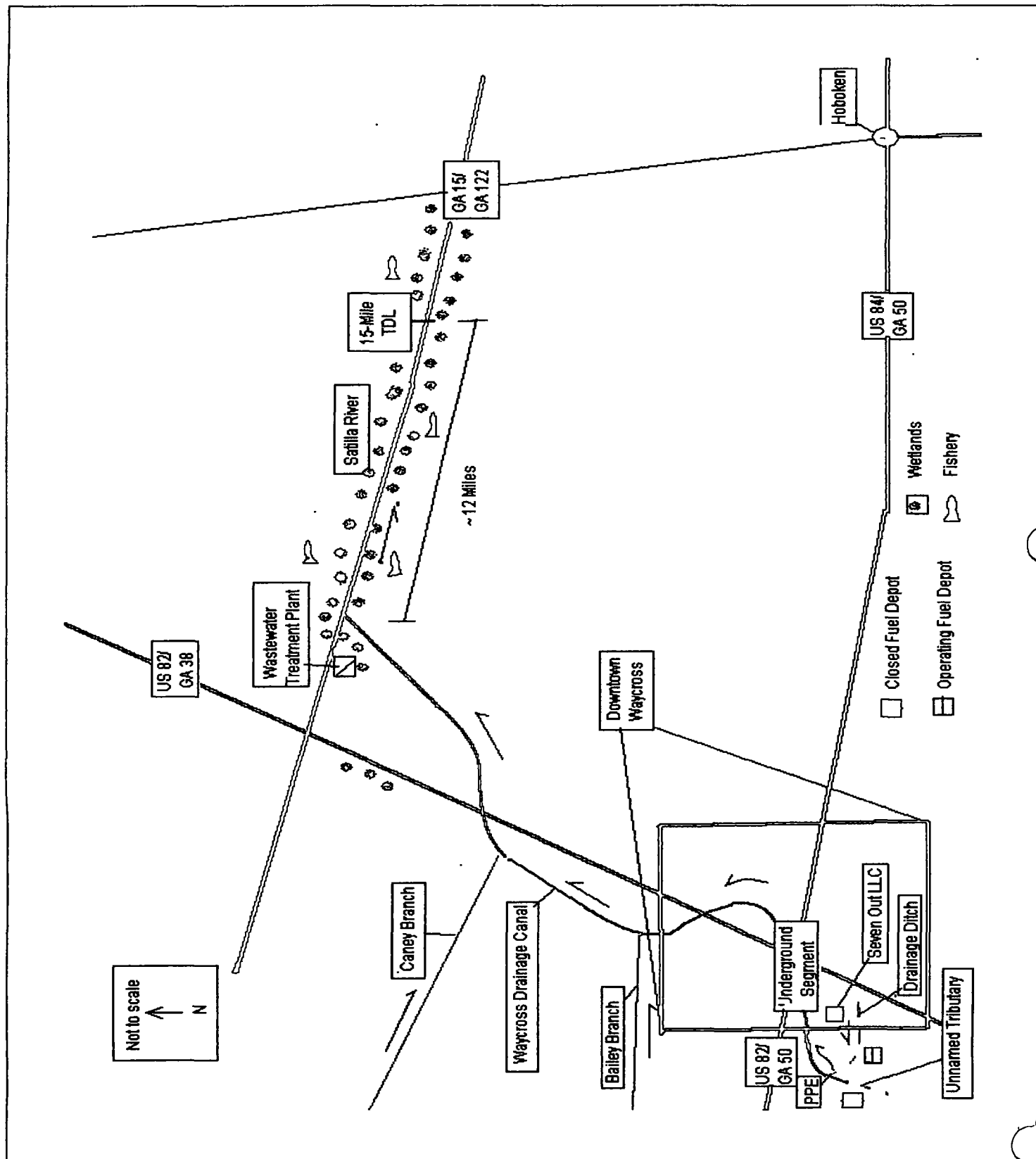
$$82,500$$

= 22.1

# SURFACE WATER PATHWAY

## Sketch of the Surface Water Migration Route:

Label all surface water bodies. Include runoff route and drainage direction, probable point of entry, and 15-mile target distance limit. Mark all sample locations, intakes, fisheries, and sensitive environments. Indicate flow directions, tidal influence, and rate.



## **SURFACE WATER PATHWAY**

### **Surface Water Observed Release Substances Summary Table**

On SI Table 7, list the hazardous substances detected in surface water samples for the watershed, which can be attributed to the site. Include only those substances in observed releases (direct observation) or with concentration levels significantly above background levels. Obtain toxicity, persistence, bioaccumulation potential, and ecotoxicity values from SCDM. Enter the highest toxicity/persistence, toxicity/persistence/bioaccumulation, and ecotoxicity/persistence/ecobioaccumulation values in the spaces provided.

- TP = Toxicity x Persistence
- TPB = TP x bioaccumulation
- ETPB = EP x bioaccumulation (EP = ecotoxicity x persistence)

### **Drinking Water Actual Contamination Targets Summary Table**

For an observed release at or beyond a drinking water intake, on SI Table 8 enter each hazardous substance by sample ID and the detected concentration. For surface water sediment samples detecting a hazardous substance at or beyond an intake, evaluate the intake as Level II contamination. Obtain benchmark, cancer risk, and reference dose concentrations for each substance from SCDM. For MCL and MCLG benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages of the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population served by the intake as a Level I target. If the percentages are less than 100% or all are N/A, evaluate the population served by the intake as a Level II target.

SI TABLE 7: SURFACE WATER OBSERVED RELEASE SUBSTANCES

Sample ID	Hazardous Substance	Bckgrd. Conc.	Toxicity/ Persistence	Toxicity/ Persis./ Bioaccum	Ecotoxicity/ Persis/ Ecobioaccum	References
NONE *	NONE					
Highest Values						

SI TABLE 8: SURFACE WATER DRINKING WATER ACTUAL CONTAMINATION TARGETS

Intake ID: \_\_\_\_\_ Sample Type \_\_\_\_\_ Level I \_\_\_\_\_ Level II \_\_\_\_\_ Population Served \_\_\_\_\_ References \_\_\_\_\_

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Sample ID	Hazardous Substance	Conc. (µg/L)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
NONE *	NONE							
Highest Percent					Sum of Percents		Sum of Percents	

Intake ID: \_\_\_\_\_ Sample Type \_\_\_\_\_ Level I \_\_\_\_\_ Level II \_\_\_\_\_ Population Served \_\_\_\_\_ References \_\_\_\_\_

Sample ID	Hazardous Substance	Conc. (µg/L)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
NONE *	NONE							
Highest Percent					Sum of Percents		Sum of Percents	

\* SW MEDIA NOT SAMPLED

INTENTIONALLY

LEFT BLANK

# SURFACE WATER PATHWAY LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT WORKSHEET

## LIKELIHOOD OF RELEASE- OVERLAND/FLOOD MIGRATION

	Score	Data Type	Refs
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7.			
2. POTENTIAL TO RELEASE: Distance to surface water: <u>1000</u> (feet) If sampling data do not support a release to surface water in the watershed, use the table below to assign a score from the table below based on distance to surface water and flood frequency.			

Distance to surface water <2500 feet <u>(1000)</u>	<u>(500)</u>
Distance to surface water >2500 feet, and:	
Site in annual or 10-yr floodplain	500
Site in 100-yr floodplain	400
Site in 500-yr floodplain	300
Site outside 500-yr floodplain	100

Optionally, evaluate surface water potential to release according to HRS Section 4.1.2.1.2

LR = 500

## LIKELIHOOD OF RELEASE GROUND WATER TO SURFACE WATER MIGRATION

	Score	Data Type	Refs
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7.			
NOTE: Evaluate ground water to surface water migration only for a surface water body that meets all of the following conditions:			
1) A portion of the surface water is within 1 mile of site sources having a containment factor greater than 0.			
2) No aquifer discontinuity is established between the source and the above portion of the surface water body.			
3) The top of the uppermost aquifer is at or above the bottom of the surface water.			
Elevation of top of uppermost aquifer <u>19.5'</u>			
Elevation of bottom of surface water body <u>15'</u>			
2. POTENTIAL TO RELEASE: Use the ground water potential to release. Optionally, evaluate surface water potential to release according to HRS Section 3.1.2.			

LR = 340

**SURFACE WATER PATHWAY  
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT WORKSHEET  
(CONTINUED)**

<b>DRINKING WATER THREAT TARGETS</b>	<b>Score</b>	<b>Data Type</b>	<b>Refs</b>																
<p>Record the water body type, flow, and number of people served by each drinking water intake within the target distance limit in the watershed. If there is no drinking water intake within the target distance limit, assign 0 to factors 3, 4, and 5.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Intake Name</th> <th style="text-align: left; padding: 2px;">Water Body Type</th> <th style="text-align: left; padding: 2px;">Flow</th> <th style="text-align: left; padding: 2px;">People Served</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><u>NONE</u></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> </tbody> </table> <p>Are any intakes part of a blended system? Yes _____ No <u>X</u> If yes, attach a page to show apportionment calculations.</p> <p><b>3. ACTUAL CONTAMINATION TARGETS:</b> If analytical evidence indicates a drinking water intake has been exposed to a hazardous substance from the site, list the intake name and evaluate the factor score for the drinking water population (SI Table 8).</p> <hr style="border: 0; border-top: 1px solid black; margin: 10px 0;"/> <p>Level I: <u>0</u> people x 10 = <u>0</u>            Level II: <u>0</u> people x 1 = <u>0</u>      <b>Total =</b></p>	Intake Name	Water Body Type	Flow	People Served	<u>NONE</u>												0		47, 59
Intake Name	Water Body Type	Flow	People Served																
<u>NONE</u>																			
<p><b>4. POTENTIAL CONTAMINATION TARGETS:</b> Determine the number of people served by drinking water intakes for the watershed that have not been exposed to a hazardous substance from the site. Assign the population values from SI Table 9. Sum the values and multiply by 0.1.</p>	0		47, 49																
<p><b>5. NEAREST INTAKE:</b> Assign a score of 50 for any Level I Actual Contamination Drinking Water Targets for the watershed. Assign a score of 45 if there are Level II targets for the watershed, but no Level I targets. If no Actual Contamination Drinking Water Targets exist, assign a score for the intake nearest the PPE from SI Table 9. If no drinking water intakes exist, assign 0.</p>	0		47, 49, 59																
<p><b>6. RESOURCES:</b> Assign a score of 5 if one or more surface water resource applies; assign 0 if none applies.</p> <ul style="list-style-type: none"> <li>• Irrigation (5 acre minimum) of commercial food crops or commercial forage crops</li> <li>• Watering of commercial livestock</li> <li>• Ingredient in commercial food preparation</li> <li>• Major or designated water recreation area, excluding drinking water use</li> </ul>	0		47, 49, 59																
<b>SUM OF TARGETS T=</b>	0																		

**SI TABLE 9 (From HRS Table 4-14): DILUTION-WEIGHTED POPULATION VALUES FOR POTENTIAL CONTAMINATION FOR SURFACE WATER MIGRATION PATHWAY**

Type of Surface Water Body	Pop.	Nearest Intake	Number of people									Pop. Value
			0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	
Minimal Stream (<10 cfs)		20	0	4	17	53	164	522	1,633	5,214	16,325	
Small to moderate stream (10 to 100 cfs)		2	0	0.4	2	5	16	52	163	521	1,633	
Moderate to large stream (> 100 to 1,000 cfs)		0	0	0.04	0.2	0.5	2	5	16	52	163	
Large Stream to river (>1,000 to 10,000 cfs)		0	0	0.004	0.02	0.05	0.2	0.5	2	5	16	
Large River (> 10,000 to 100,000 cfs)		0	0	0	0.002	0.005	0.02	0.05	0.2	0.5	16	
Very Large River (>100,000 cfs)		0	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2	
Shallow ocean zone or Great Lake (depth < 20 feet)		0	0	0	0.002	0.005	0.02	0.05	0.2	0.5	2	
Moderate ocean zone or Great Lake (Depth 20 to 200 feet)		0	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2	
Deep ocean zone or Great Lake (depth > 200 feet)		0	0	0	0	0	0.001	0.003	0.008	0.03	0.08	
3-mile mixing zone in quiet flowing river (≥ 10 cfs)		10	0	2	9	26	82	261	817	2,607	8,163	
Nearest Intake = <input type="text"/>			Sum = <input type="text"/>									

References \_\_\_\_\_

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## **SURFACE WATER PATHWAY**

### **Human Food Chain Actual Contamination Targets Summary Table**

On SI Table 10, list the hazardous substances detected in sediment, aqueous, sessile benthic organism tissue, or fish tissue samples (taken from fish caught within the boundaries of the observed release) by sample ID and concentration. Evaluate fisheries within the boundaries of observed releases detected by sediment or aqueous samples as Level II, if at least one observed release substance has a bioaccumulation potential factor value of 500 or greater (see SI Table 7). Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For FDAAL benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate this portion of the fishery as subject to Level I concentrations. If the percentages are less than 100% or all are N/A, evaluate the fishery as a Level II target.

### **Sensitive Environment Actual Contamination Targets Summary Table**

On SI Table 11, list each hazardous substance detected in aqueous or sediment samples at or beyond wetlands or a surface water sensitive environment by sample ID. Record the concentration. If contaminated sediments or tissues are detected at or beyond a sensitive environment, evaluate the sensitive environment as Level II. Obtain benchmark concentrations from SCDM. For AWQC/AALAC benchmarks, determine the highest percentage of benchmark of the substances detected in aqueous samples. If benchmark concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage equals or exceeds 100%, evaluate that part of the sensitive environment subject to Level I concentrations. If the percentage is less than 100%, or all are N/A, evaluate the sensitive environment as Level II.

**SI TABLE 10: HUMAN FOOD CHAIN ACTUAL CONTAMINATION TARGETS FOR WATERSHED**

Fishery ID: \_\_\_\_\_ Sample Type \_\_\_\_\_ Level I \_\_\_\_\_ Level II \_\_\_\_\_ References \_\_\_\_\_

Sample ID	Hazardous Substance	Conc. (mg/kg)	Benchmark Concentration (FDAAL)	% of Benchmark	Cancer Risk Concentration.	% of Cancer Risk Concentration	RfD	% of RfD
ADNE *	ADNE							
			Highest Percent		Sum of Percents		Sum of Percents	

**SI TABLE 11: SENSITIVE ENVIRONMENT ACTUAL CONTAMINATION TARGETS FOR WATERSHED**

Environment ID: \_\_\_\_\_ Sample Type \_\_\_\_\_ Level I \_\_\_\_\_ Level II \_\_\_\_\_ Environment Value \_\_\_\_\_

[illegible]

Environment ID: \_\_\_\_\_ Sample Type \_\_\_\_\_ Level I \_\_\_\_\_ Level II \_\_\_\_\_ Environment Value \_\_\_\_\_

Sample ID	Hazardous Substance	Conc.. (µg/L)	Benchmark Concentration (AWQC or AALAC)	% of Benchmark	References
NONE*	NONE.				
			Highest Percent		

\* MEDIA NOT SAMPLED

# SURFACE WATER PATHWAY (continued) HUMAN FOOD CHAIN THREAT WORKSHEET

## HUMAN FOOD CHAIN THREAT TARGETS

Score

Data  
Type

Refs

Record the water body type and flow for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a score of 0 at the bottom of this page.

Fishery Name Satilla Water Body River Flow 7228 cfs

Species sunfish Production ~ 300 lbs/yr  
Species \_\_\_\_\_ Production \_\_\_\_\_ lbs/yr

Fishery Name \_\_\_\_\_ Water Body \_\_\_\_\_ Flow \_\_\_\_\_ cfs

Species \_\_\_\_\_ Production \_\_\_\_\_ lbs/yr  
Species \_\_\_\_\_ Production \_\_\_\_\_ lbs/yr

Fishery Name \_\_\_\_\_ Water Body \_\_\_\_\_ Flow \_\_\_\_\_ cfs

Species \_\_\_\_\_ Production \_\_\_\_\_ lbs/yr  
Species \_\_\_\_\_ Production \_\_\_\_\_ lbs/yr

## FOOD CHAIN INDIVIDUAL

### 7. ACTUAL CONTAMINATION FISHERIES:

If analytical evidence indicates that a fishery has been exposed to a hazardous substance with a bioaccumulation factor greater than or equal to 500 (SI Table 10), assign a score of 50 if there is a Level I fishery. Assign 45 if there is a Level II fishery, but no Level I fishery.

### 8. POTENTIAL CONTAMINATION FISHERIES:

If there is a release of a substance with a bioaccumulation factor greater than or equal to 500 to a watershed containing fisheries within the target distance limit, but there are no Level I or Level II fisheries, assign a score of 20.

If there is no observed release to the watershed, assign a value for potential contamination fisheries from the table below using the lowest flow at all fisheries within the target distance limit:

Lowest Flow	FCI Value
<10 cfs	20
10 to 100 cfs	2
>100 cfs, coastal tidal waters, oceans, or Great Lakes	0
3-mile mixing zone in quiet flowing river	10

FCI Value =

SUM OF TARGETS T =

61

61

# **SURFACE WATER PATHWAY (continued) ENVIRONMENTAL THREAT WORKSHEET**

When measuring length of wetlands that are located on both sides of a surface water body, sum both frontage lengths. For a sensitive environment that is more than one type, assign a value for each type.

ENVIRONMENTAL THREAT TARGETS			Score	Data Type	Refs																																			
<p>Record the water body type and flow for each surface water sensitive environment within the target distance (see SI Table 12). If there is no sensitive environment within the target distance limit, assign a score of 0 at the bottom of the page.</p> <table border="1"> <thead> <tr> <th>Environment Name</th> <th>Water Body Type</th> <th>Flow</th> </tr> </thead> <tbody> <tr> <td>Satilla River</td> <td>River / Wetland</td> <td>&gt; 228 cfs</td> </tr> <tr> <td></td> <td>(moderate to large)</td> <td>cfs</td> </tr> <tr> <td></td> <td></td> <td>cfs</td> </tr> <tr> <td></td> <td></td> <td>cfs</td> </tr> <tr> <td></td> <td></td> <td>cfs</td> </tr> </tbody> </table>			Environment Name	Water Body Type	Flow	Satilla River	River / Wetland	> 228 cfs		(moderate to large)	cfs			cfs			cfs			cfs			61 60																	
Environment Name	Water Body Type	Flow																																						
Satilla River	River / Wetland	> 228 cfs																																						
	(moderate to large)	cfs																																						
		cfs																																						
		cfs																																						
		cfs																																						
<p><b>9. ACTUAL CONTAMINATION SENSITIVE ENVIRONMENTS:</b> If sampling data or direct observation indicate any sensitive environment has been exposed to a hazardous substance from the site, record this information on SI Table 11, and assign a factor value for the environment (SI Tables 13 and 14).</p> <table border="1"> <thead> <tr> <th>Environment Name</th> <th>Environment Type and Value (SI Tables 13 &amp; 14)</th> <th>Multiplier (10 for Level I, 1 for Level II)</th> <th>Product</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td align="center">x</td> <td></td> </tr> <tr> <td></td> <td></td> <td align="center">x</td> <td></td> </tr> <tr> <td></td> <td></td> <td align="center">x</td> <td></td> </tr> <tr> <td></td> <td></td> <td align="center">x</td> <td></td> </tr> <tr> <td align="right" colspan="3">Sum =</td> <td align="center">0</td> </tr> </tbody> </table>			Environment Name	Environment Type and Value (SI Tables 13 & 14)	Multiplier (10 for Level I, 1 for Level II)	Product			x				x				x				x		Sum =			0														
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<p><b>10. POTENTIAL CONTAMINATION SENSITIVE ENVIRONMENTS:</b></p> <table border="1"> <thead> <tr> <th>Flow</th> <th>Dilution Weight (SI Table 12)</th> <th>Environment Type and Value (SI Tables 13 &amp; 14)</th> <th>Pot. Cont.</th> <th>Product</th> </tr> </thead> <tbody> <tr> <td>228 cfs</td> <td>0.01 x</td> <td>Wetland (500) x</td> <td>0.1 =</td> <td>0.5</td> </tr> <tr> <td>cfs</td> <td>x</td> <td>x</td> <td>0.1 =</td> <td></td> </tr> <tr> <td>cfs</td> <td>x</td> <td>x</td> <td>0.1 =</td> <td></td> </tr> <tr> <td>cfs</td> <td>x</td> <td>x</td> <td>0.1 =</td> <td></td> </tr> <tr> <td>cfs</td> <td>x</td> <td>x</td> <td>0.1 =</td> <td></td> </tr> <tr> <td align="right" colspan="4">Sum =</td> <td align="center">0.5</td> </tr> </tbody> </table>			Flow	Dilution Weight (SI Table 12)	Environment Type and Value (SI Tables 13 & 14)	Pot. Cont.	Product	228 cfs	0.01 x	Wetland (500) x	0.1 =	0.5	cfs	x	x	0.1 =		cfs	x	x	0.1 =		cfs	x	x	0.1 =		cfs	x	x	0.1 =		Sum =				0.5			60
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cfs	x	x	0.1 =																																					
cfs	x	x	0.1 =																																					
Sum =				0.5																																				
T =			0.5																																					

**SI TABLE 12 (HRS Table 4-13):  
SURFACE WATER DILUTION WEIGHTS**

<b>Type of Surface Water Body</b>		<b>Assigned Dilution Weight</b>
<b>Descriptor</b>	<b>Flow Characteristics</b>	
Minimal stream	< 10 cfs	1
Small to moderate stream	10 to 100 cfs	0.1
Moderate to large stream	> 100 to 1,000 cfs	0.01
Large stream to river	> 1,000 to 10,000 cfs	0.001
Large river	> 10,000 to 100,000 cfs	0.0001
Very large river	> 100,000 cfs	0.00001
Coastal tidal waters	Flow not applicable; depth not applicable	0.001
Shallow ocean zone or Great Lake	Flow not applicable; depth less than 20 feet	0.001
Moderate depth ocean zone or Great Lake	Flow not applicable; depth 20 to 200 feet	0.0001
Deep ocean zone or Great Lake	Flow not applicable; depth greater than 200 feet	0.000005
3-mile mixing zone in quiet flowing river	10 cfs or greater	0.5

**SI TABLE 13 (HRS TABLE 4-23):  
SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES**

<b>SENSITIVE ENVIRONMENT</b>	<b>ASSIGNED VALUE</b>
Critical habitat for Federal designated endangered or threatened species Marine Sanctuary National Park Designated Federal Wilderness Area Ecologically important areas identified under the Coastal Zone Wilderness Act Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes) National Monument (air pathway only) National Seashore Recreation Area National Lakeshore Recreation Area	100
Habitat known to be used by Federal designated or proposed endangered or threatened species National Preserve National or State Wildlife Refuge Unit of Coastal Barrier Resources System Coastal Barrier (undeveloped) Federal land designated for the protection of natural ecosystems Administratively Proposed Federal Wilderness Area Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary Migratory pathways and feeding areas critical for the maintenance of anadromous fish species within river reaches or areas in lakes or coastal tidal waters in which the fish spend extended periods of time Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding National river reach designated as recreational	75
Habitat known to be used by State designated endangered or threatened species Habitat known to be used by a species under review as to its Federal endangered or threatened status Coastal Barrier (partially developed) Federally designated Scenic or Wild River	50
State land designated for wildlife or game management State designated Scenic or Wild River State designated Natural Area Particular areas, relatively small in size, important to maintenance of unique biotic communities	25
State designated areas for the protection of maintenance of aquatic life under the Clean Water Act	5
Wetlands	See SI Table 14 (Surface Water Pathway) or SI Table 23 (Air Pathway)

**SI TABLE 14 (HRS TABLE 4-24): SURFACE WATER  
WETLANDS FRONTAGE VALUES**

<b>Total Length of Wetlands</b>	<b>Assigned Value</b>
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

INTENTIONALLY

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**SURFACE WATER PATHWAY (concluded)**  
**WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

**WASTE CHARACTERISTICS**

**Score**

<p>14. If an Actual Contamination Target (drinking water, human food chain, <u>or</u> environmental threat) exists for the watershed, assign the calculated hazardous waste quantity score, or a score of 100, whichever is greater.</p>																																
<p>15. Assign the highest value from SI Table 7 (observed release) or SI Table 3 (no observed release) for the hazardous substance waste characterization factors below. Multiply each by the surface water hazardous waste quantity score and determine the waste characteristics score for each threat.</p>																																
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;"></th> <th style="width:20%;">Substance Value</th> <th style="width:10%;"></th> <th style="width:10%;">HWQ</th> <th style="width:10%;"></th> <th style="width:10%;">Product</th> <th style="width:10%;"></th> </tr> </thead> <tbody> <tr> <td>Drinking Water Threat Toxicity/Persistence</td> <td align="center">10000</td> <td align="center">x</td> <td align="center">18</td> <td align="center">=</td> <td align="center">180 K</td> <td></td> </tr> <tr> <td>Food Chain Threat Toxicity/Persistence Bioaccumulation</td> <td align="center">5.00 E +08</td> <td align="center">x</td> <td align="center">18</td> <td align="center">=</td> <td align="center">9.00 E +09</td> <td></td> </tr> <tr> <td>Environmental Threat Ecotoxicity/Persistence/ Ecobioaccumulation</td> <td align="center">5.00 E +08</td> <td align="center">x</td> <td align="center">18</td> <td align="center">=</td> <td align="center">9.00 E +09</td> <td></td> </tr> </tbody> </table>		Substance Value		HWQ		Product		Drinking Water Threat Toxicity/Persistence	10000	x	18	=	180 K		Food Chain Threat Toxicity/Persistence Bioaccumulation	5.00 E +08	x	18	=	9.00 E +09		Environmental Threat Ecotoxicity/Persistence/ Ecobioaccumulation	5.00 E +08	x	18	=	9.00 E +09		<p><b>WC Score (from Table)</b> <b>(Maximum of 100)</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td align="center" style="height: 30px;">18</td></tr> <tr><td align="center" style="height: 30px;">100</td></tr> <tr><td align="center" style="height: 30px;">100</td></tr> </table>	18	100	100
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1E + 12 or greater	1000																															

**SURFACE WATER PATHWAY THREAT SCORES**

Threat	Likelihood of Release (LR) Score	Targets (T) Score	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score <u>LR x T x WC</u> 82,500
Drinking Water	500	0	18	(maximum of 100) 0
Human Food Chain	500	0	100	(maximum of 100) 0
Environmental	500	.5	100	(maximum of 60) .3

**SURFACE WATER PATHWAY SCORE**  
**(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)**

(maximum of 100)

**.3**



## **SOIL EXPOSURE PATHWAY**

If there is no observed contamination (e.g., ground water plume with no known surface source), do not evaluate the soil exposure pathway. Discuss evidence for no soil exposure pathway.

### **Soil Exposure Resident Population Targets Summary**

For each property (duplicate page 35 as necessary):

If there is an area of observed contamination on the property and within 200 feet of a residence, school, or day care center, enter on Table 15 each hazardous substance by sample ID. Record the detected concentration. Obtain cancer risk, and reference dose concentrations from SCDM. Sum the cancer risk and reference dose percentages for the substances listed. If cancer risk or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the residents and students as Level I. If both percentages are less than 100% or all are N/A, evaluate the targets as Level II.

SI TABLE 15: SOIL EXPOSURE RESIDENT POPULATION TARGETS

Residence ID: NONE Level I        Level II        Population       

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	% of Cancer Risk Conc.	RfD	% of RfD	Toxicity Value	References
<u>NONE</u>	<u>NONE</u>							
			Highest Percent		Sum of Percents		Sum of Percents	

Residence ID: NONE Level I        Level II        Population       

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	% of Cancer Risk Conc.	RfD	% of RfD	Toxicity Value	References
<u>NONE</u>	<u>NONE</u>							
			Highest Percent		Sum of Percents		Sum of Percents	

Residence ID: NONE Level I        Level II        Population       

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	% of Cancer Risk Conc.	RfD	% of RfD	Toxicity Value	References
<u>NONE</u>	<u>NONE</u>							
			Highest Percent		Sum of Percents		Sum of Percents	

NO RESIDENCES IDENTIFIED WITH SOIL CONTAMINATION FROM SITE

C-35

# SOIL EXPOSURE PATHWAY WORKSHEET RESIDENT POPULATION THREAT

LIKELIHOOD OF EXPOSURE	Score	Data Type	Refs
1. OBSERVED CONTAMINATION: If evidence indicates presence of observed contamination (depth of 2 feet or less), assign a score of 550; otherwise, assign a 0. Note that a likelihood of exposure score of 0 results in a soil exposure pathway score of 0.			App. E.
LE = 550			

TARGETS	Score	Data Type	Refs										
2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of observed contamination (HRS section 5.1.3).  Level I: <u>0</u> people x 10 = <u>0</u> Level II: <u>0</u> people x 1 = <u>0</u> Sum =	0		4										
3. RESIDENT INDIVIDUAL: Assign a score of 50 if any Level I resident population exists. Assign a score of 45 if there are Level II targets but no Level I targets. If no resident population exists (i.e., no Level I or Level II targets), assign 0 (HRS Section 5.1.3).	0		4										
4. WORKERS: Assign a score from the table below for the total number of workers at the site and nearby facilities with areas of observed contamination associated with the site. <table border="1"> <thead> <tr> <th>Number of Workers</th> <th>Score</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> </tr> <tr> <td>1 to 100</td> <td>5</td> </tr> <tr> <td>101 to 1,000</td> <td>10</td> </tr> <tr> <td>&gt;1,000</td> <td>15</td> </tr> </tbody> </table>	Number of Workers	Score	0	0	1 to 100	5	101 to 1,000	10	>1,000	15	5		4, 38
Number of Workers	Score												
0	0												
1 to 100	5												
101 to 1,000	10												
>1,000	15												
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value for each terrestrial sensitive environment (SI Table 16) in an area of observed contamination. <table border="1"> <thead> <tr> <th>Terrestrial Sensitive Environment Type</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>NONE</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Terrestrial Sensitive Environment Type	Value	NONE								0		4, 38, 68, 69
Terrestrial Sensitive Environment Type	Value												
NONE													
6. RESOURCES: Assign a score of 5 if any one or more of the following resources is present on an area of observed contamination at the site; assign 0 if none applies. <ul style="list-style-type: none"> <li>Commercial agriculture</li> <li>Commercial silviculture</li> <li>Commercial livestock production or commercial livestock grazing</li> </ul>	0		0										
Total of Targets T= 5													

**SI TABLE 16 (HRS TABLE 5-5): SOIL EXPOSURE PATHWAY  
TERRESTRIAL SENSITIVE ENVIRONMENT VALUES**

<b>TERRESTRIAL SENSITIVE ENVIRONMENT</b>	<b>ASSIGNED VALUE</b>
Terrestrial critical habitat for Federal designated endangered or threatened species National Park Designated Federal Wilderness Area National Monument	100
Terrestrial habitat known to be used by Federal designated or proposed threatened or endangered species National Preserve (terrestrial) National or State terrestrial Wildlife Refuge Federal land designated for protection of natural ecosystems Administratively proposed Federal Wilderness Area Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	75
Terrestrial habitat used by State designated endangered or threatened species Terrestrial habitat used by species under review for Federal designated endangered or threatened status	50
State lands designated for wildlife or game management State designated Natural Areas Particular areas, relatively small in size, important to maintenance of unique biotic communities	25

# **SOIL EXPOSURE PATHWAY WORKSHEET NEARBY POPULATION THREAT**

LIKELIHOOD OF EXPOSURE		Score	Data Type	Ref.
7. Attractiveness/Accessibility (from SI Table 17 or HRS Table 5-6)	Value <u>10</u>			
Area of Contamination (from SI Table 18 or HRS Table 5-7)	Value <u>20</u>			4, 8, 38
Likelihood of Exposure (from SI Table 19 or HRS Table 5-8)		5		
LE =		5		

TARGETS	Score	Data Type	Ref.
8. Assign a score of 0 if Level I or Level II resident individual has been evaluated or if no individuals live within 1/4 mile travel distance of an area of observed contamination. Assign a score of 1 if nearby population is within 1/4 mile travel distance and no Level I or Level II resident population has been evaluated.	1		4
9. Determine the population within 1 mile travel distance that is not exposed to a hazardous substance from the site (i.e., properties that are not determined to be Level I or Level II); record the population for each distance category in SI Table 20 (HRS Table 5-10). Sum the population values and multiply by 0.1.	5.7		4, 53
T =	6.7		

**SI TABLE 17 (HRS TABLE 5-6):  
ATTRACTIVENESS/ACCESSIBILITY VALUES**

<b>Area of Observed Contamination</b>	<b>Assigned Value</b>
Designated recreational area	100
Regularly used for public recreation (for example, vacant lots in urban area)	75
Accessible and unique recreational area (for example, vacant lots in urban area)	75
Moderately accessible (may have some access improvements—for example, gravel road) with some public recreation use	50
Slightly accessible (for example, extremely rural area with no road improvement) with some public recreation use	25
Accessible with no public recreation use	10
Surrounded by maintained fence or combination of maintained fence and natural barriers	5
Physically inaccessible to public, with no evidence of public recreation use	0

**SI TABLE 18 (HRS TABLE 5-7): AREA OF CONTAMINATION FACTOR VALUES**

<b>Total area of the areas of observed contamination (square feet)</b>	<b>Assigned Value</b>
≤ to 5,000	5
> 5,000 to 125,000	20
> 125,000 to 250,000	40
> 250,000 to 375,000	60
> 375,000 to 500,000	80
> 500,000	100

**C-40**

**SI TABLE 20 (HRS TABLE 5-10): DISTANCE-WEIGHTED POPULATION VALUES FOR NEARBY POPULATION THREAT**

Reference(s) 53.4

Sum = 57

## SOIL EXPOSURE PATHWAY WORKSHEET (concluded)

### WASTE CHARACTERISTICS

10. Assign the hazardous waste quantity score calculated for soil exposure	100																						
11. Assign the highest toxicity value from SI Table 16	1000																						
12. Multiply the toxicity and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below: <table border="1" style="margin: 10px auto; border-collapse: collapse; font-size: 0.8em;"> <thead> <tr> <th style="padding: 2px;">Product</th> <th style="padding: 2px;">WC Score</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;">0</td><td style="text-align: center; padding: 2px;">0</td></tr> <tr><td style="padding: 2px;">&gt;0 to &lt;10</td><td style="text-align: center; padding: 2px;">1</td></tr> <tr><td style="padding: 2px;">10 to &lt;100</td><td style="text-align: center; padding: 2px;">2</td></tr> <tr><td style="padding: 2px;">100 to &lt;1,000</td><td style="text-align: center; padding: 2px;">3</td></tr> <tr><td style="padding: 2px;">1,000 to &lt;10,000</td><td style="text-align: center; padding: 2px;">6</td></tr> <tr><td style="padding: 2px;">10,000 to &lt;1E + 05</td><td style="text-align: center; padding: 2px;">10</td></tr> <tr><td style="padding: 2px;">1E + 05 to &lt;1E + 06</td><td style="text-align: center; padding: 2px;">18</td></tr> <tr><td style="padding: 2px;">1E + 06 to &lt;1E + 07</td><td style="text-align: center; padding: 2px;">32</td></tr> <tr><td style="padding: 2px;">1E + 07 to &lt;1E + 08</td><td style="text-align: center; padding: 2px;">56</td></tr> <tr><td style="padding: 2px;">1E + 08 or greater</td><td style="text-align: center; padding: 2px;">100</td></tr> </tbody> </table>	Product	WC Score	0	0	>0 to <10	1	10 to <100	2	100 to <1,000	3	1,000 to <10,000	6	10,000 to <1E + 05	10	1E + 05 to <1E + 06	18	1E + 06 to <1E + 07	32	1E + 07 to <1E + 08	56	1E + 08 or greater	100	WC = 18
Product	WC Score																						
0	0																						
>0 to <10	1																						
10 to <100	2																						
100 to <1,000	3																						
1,000 to <10,000	6																						
10,000 to <1E + 05	10																						
1E + 05 to <1E + 06	18																						
1E + 06 to <1E + 07	32																						
1E + 07 to <1E + 08	56																						
1E + 08 or greater	100																						

### RESIDENT POPULATION THREAT SCORE:

(Likelihood of Exposure, Question 1;  
Targets = Sum of Questions 2, 3, 4, 5, 6)

$$\frac{550 \times 5 \times 18}{82,500} = 0.6$$

LE X TX WC  
82,500

0.6

### NEARBY POPULATION THREAT SCORE:

(Likelihood of Exposure, Question 7;  
Targets = Sum of Questions 8, 9)

$$\frac{5 \times 6.7 \times 18}{82,500} = \phi$$

LE X TX WC  
82,500

0

### SOIL EXPOSURE PATHWAY SCORE:

Resident Population Threat + Nearby Population Threat

0.6  
(Maximum of 100)



## **AIR PATHWAY**

### **Air Pathway Observed Substances Summary Table**

On SI Table 21, list the hazardous substances detected in air samples of a release from the site. Include only those substances with concentrations significantly greater than background levels. Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For NAAQS/NESHAPS benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate targets in the distance category from which the sample was taken and any closer distance categories as Level I. If the percentages are less than 100% or all are N/A, evaluate targets in that distance category and any closer distance categories that are not Level I as Level II.

SI TABLE 21: AIR PATHWAY OBSERVED RELEASE SUBSTANCES

Sample ID: NONE Level I        Level II        Distance from Sources (mi)        References       

Hazardous Substance	Conc. ( $\mu\text{g}/\text{m}^3$ )	Gaseous Particulate	Benchmark Conc. (NAAQS or NESHAPS)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
NONE								
	Highest Toxicity/ Mobility		Highest Percent		Sum of Percents		Sum of Percents	

Sample ID: NONE Level I        Level II        Distance from Sources (mi)        References       

[illegible]

Sample ID:	Level I	Level II	Distance from Sources (mi)	References
NONE				

Hazardous Substance	Conc. ( $\mu\text{g}/\text{m}^3$ )	Toxicity/ Mobility	Benchmark Conc. (NAAQS or NESHAPS)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
NONE								
	Highest Toxicity/ Mobility		Highest Percent		Sum of Percents		Sum of Percents	

NO MEDIA SAMPLES TAKEN

# AIR PATHWAY WORKSHEET

LIKELIHOOD OF RELEASE	Score	Data Type	Refs
1. OBSERVED RELEASE: If sampling data or direct observation support a release to air, assign a score of 550. Record observed release substances on SI Table 21.			
2. POTENTIAL TO RELEASE: If sampling data do not support a release to air, assign a score of 500. Optionally, evaluate air migration gaseous and particulate potential to release (HRS Section 6.1.2).	500		3,4,16, 31,32,33 34
LR =		500	

## TARGETS

3. ACTUAL CONTAMINATION POPULATION: Determine the number of people within the target distance limit subject to exposure from a release of a hazardous substance to the air.  a) Level I: <u>0</u> people x 10 = <u>0</u> b) Level II: <u>0</u> people x 1 = <u>0</u> Total =			3,4, 16,31, 32,33 34																				
4. POTENTIAL TARGET POPULATION: Determine the number of people within the target distance limit not subject to exposure from a release of a hazardous substance to the air, and assign the total population score from SI Table 22. Sum the values and multiply the sum by 0.1.	25.3		4, 53																				
5. NEAREST INDIVIDUAL: Assign a score of 50 if there are any Level I targets. Assign a score of 45 if there are Level II targets but no Level I targets. If no Actual Contamination Population exists, assign the Nearest Individual score from SI Table 22.	20		4																				
6. ACTUAL CONTAMINATION SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (SI Table 13) and wetland acreage values (SI Table 23) for environments subject to exposure from the release of a hazardous substance to the air.  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sensitive Environment Type</th> <th style="text-align: center;">Value</th> </tr> </thead> <tbody> <tr><td>NONE</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr> <th style="text-align: left;">Wetland Acreage</th> <th style="text-align: center;">Value</th> </tr> <tr><td>NONE</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </tbody> </table>	Sensitive Environment Type	Value	NONE								Wetland Acreage	Value	NONE								0		4,38
Sensitive Environment Type	Value																						
NONE																							
Wetland Acreage	Value																						
NONE																							
7. POTENTIAL CONTAMINATION SENSITIVE ENVIRONMENTS: Use SI Table 24 to evaluate sensitive environments not subject to exposure from a release.	.2		56																				
8. RESOURCES: Assign a score of 5 if one or more air resources apply within 1/2 mile of a source; assign a 0 if none applies. <ul style="list-style-type: none"> <li>• Commercial agriculture</li> <li>• Commercial silviculture</li> <li>• Major or designated recreation area</li> </ul>	0		56																				
T =		45.5																					

SI TABLE 22 (From HRS TABLE 6-17): VALUES FOR POTENTIAL CONTAMINATION AIR TARGET POPULATIONS

Distance from Site	Pop.	Nearest Individual (choose highest)	Number of People within the Distance Category												Pop. Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,000 to 3,000,000	
On a source	0	20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455	0
0 to $\frac{1}{4}$ mile	167	20	1	4	13	41	131	408	1,304	4,081	13,034	40,812	130,340	408,114	41
$>\frac{1}{4}$ to $\frac{1}{2}$ mile	1,241	2	0.2	0.9	3	9	28	88	282	882	2,815	8,815	28,153	88,153	88
$>\frac{1}{2}$ to 1 mile	4,090	1	0.06	0.3	0.9	3	8	26	83	261	834	2,612	8,342	26,119	83
$>1$ to 2 miles	9,644	0	0.02	0.09	0.3	0.8	3	8	27	83	266	833	2,659	8,326	27
$>2$ to 3 miles	7,195	0	0.009	0.04	0.1	0.4	1	4	12	38	120	375	1,199	3,755	12
$>3$ to 4 miles	2,995	0	0.005	0.02	0.07	0.2	0.7	2	7	28	73	229	730	2,285	2
Nearest Individual =			Sum =												253

References 4, 53

\* Score = 20 if the Nearest Individual is within  $\frac{1}{8}$  mile of a source; score = 7 if the Nearest Individual is between  $\frac{1}{8}$  and  $\frac{1}{4}$  mile of a source.

nearest resident is at 103 Folks Street (app. 220 feet)

SI TABLE 23 (HRS TABLE  
6-18): AIR PATHWAY  
VALUES FOR WETLAND  
AREA

Wetland Area	Assigned Value
< 1 acre	0
1 to 50 acres	25
> 50 to 100 acres	75
> 100 to 150 acres	125
> 150 to 200 acres	175
> 200 to 300 acres	250
> 300 to 400 acres	350
> 400 to 500 acres	450
> 500 acres	500

SI TABLE 24: DISTANCE WEIGHTS AND  
CALCULATIONS FOR AIR PATHWAY POTENTIAL  
CONTAMINATION SENSITIVE ENVIRONMENTS

Distance	Distance Weight	Sensitive Environment Type and Value (from SI Tables 13 and 20) <sup>4</sup>	Product
On a Source	0.10	x 0	
		x	
0 to 1/4 mile	0.025	x 0	
		x	
		x 0	
1/4 to 1/2 mile	0.0054	x	
		x	
		x	
1/2 to 1 mile	0.0016	x 0	
		x	
		x	
1 to 2 miles	0.0005	x Wetlands (75)	0.03
		x	
		x	
2 to 3 miles	0.00023	x Wetlands (450)	0.10
		x	
		x	
3 to 4 miles	0.00014	x Wetlands (500)	0.07
		x	
		x	
> 4 miles	0	x 0	
Total Environments Score =			20

## AIR PATHWAY (concluded)

### WASTE CHARACTERISTICS

<b>9.</b> If any Actual Contamination Targets exist for the air pathway, assign the calculated hazardous waste quantity score or a score of 100, whichever is greater; if there are no Actual Contamination Targets for the air pathway, assign the calculated HWQ score for sources available to air migration.	100																						
<b>10.</b> Assign the highest air toxicity/mobility value from SI Table 21.	2000																						
<b>11.</b> Multiply the air pathway toxicity/mobility and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below:	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <table border="1" style="border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px 10px;">Product</th> <th style="padding: 2px 10px;">WC Score</th> </tr> </thead> <tbody> <tr><td>0</td><td>0</td></tr> <tr><td>&gt;0 to &lt;10</td><td>1</td></tr> <tr><td>10 to &lt;100</td><td>2</td></tr> <tr><td>100 to &lt;1,000</td><td>3</td></tr> <tr><td>1,000 to &lt; 10,000</td><td>6</td></tr> <tr><td>10,000 to &lt;1E + 05</td><td>10</td></tr> <tr><td>1E + 05 to &lt;1E + 06</td><td>18</td></tr> <tr><td>1E + 06 to &lt;1E + 07</td><td>32</td></tr> <tr><td>1E + 07 to &lt;1E + 08</td><td>56</td></tr> <tr><td>1E + 08 or greater</td><td>100</td></tr> </tbody> </table> </div> <div style="margin-top: 10px; font-size: 1.2em;">WC = 18</div>	Product	WC Score	0	0	>0 to <10	1	10 to <100	2	100 to <1,000	3	1,000 to < 10,000	6	10,000 to <1E + 05	10	1E + 05 to <1E + 06	18	1E + 06 to <1E + 07	32	1E + 07 to <1E + 08	56	1E + 08 or greater	100
Product	WC Score																						
0	0																						
>0 to <10	1																						
10 to <100	2																						
100 to <1,000	3																						
1,000 to < 10,000	6																						
10,000 to <1E + 05	10																						
1E + 05 to <1E + 06	18																						
1E + 06 to <1E + 07	32																						
1E + 07 to <1E + 08	56																						
1E + 08 or greater	100																						

**AIR PATHWAY SCORE:**

$$\frac{L^R \times T \times WC}{82,500}$$

5  
 (maximum of 100)

$$LR = 500$$

$$T = 45.5$$

$$WC = 18$$

$$\frac{500 \times 45.5 \times 18}{82,500} = 4.96$$

$$= 5$$

SITE SCORE CALCULATION		S	S <sup>2</sup>
GROUND WATER PATHWAY SCORE (S <sub>GW</sub> )		22.1	488.41
SURFACE WATER PATHWAY SCORE (S <sub>SW</sub> )		.3	.09
SOIL EXPOSURE (S <sub>S</sub> )		.6	.36
AIR PATHWAY SCORE (S <sub>A</sub> )		5	.25
SITE SCORE $\sqrt{\frac{S_{GW}^2 + S_{SW}^2 + S_S^2 + S_A^2}{4}}$ $\sqrt{\frac{488.41 + .09 + .36 + .25}{4}} =$			11.3

#### COMMENTS

THE PRIMARY DRIVER FOR THE SITE IS THE REMAINING WASTES IN THE TANKS AT THE SITE. THE LARGE QUANTITY RESULTS IN A HIGH WASTE CHARACTERISTICS SCORE. THE SMALL AREAS OF CONTAMINATED SOILS, THE LACK OF NEARBY USERS OF THE SHALLOW GROUNDWATER (< 20') AND THE GEOLOGIC PRESENCE OF PRIMARILY CLAY LAYERS MORE THAN 100 FEET THICK BETWEEN THE SOIL CONTAMINATION AND SHALLOW GROUNDWATER AND THE GROUNDWATER AQUIFERS PRIMARILY USED BY RESIDENTIAL AND MUNICIPAL CONSUMERS, CAUSES THE GROUNDWATER PATHWAY TO BE OF LIMITED CONCERN. OTHER PATHWAYS ARE OF NEGLIGIBLE CONCERN.