Preliminary Assessment Report

1-7, 13, 15, 16 Fourth Street and 209 Valley Street

South Orange, New Jersey

April 2015

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1.0 GENERAL INFORMATION

1.1 INTRODUCTION

On behalf of Capodagli Property Company, LLC, Fennelly Environmental Associates, LLC (FEA) conducted a Preliminary Assessment (PA) for the properties located at 1-7 Fourth Street (Block 2304, Lot 10), 13 Fourth Street (Block 2304, Lot 11), 15 Fourth Street (Block 2304, Lot 12), 16 Fourth Street (Block 2303, Lot 8), and 209 Valley Street (Block 2303, Lot 7), Township of South Orange Village, Essex County, New Jersey (Figure 1).

This PA Report was prepared in accordance with the New Jersey Department of Environmental Protection (NJDEP) *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Preliminary Assessment Technical Guidance* (April 2013). The assessment was conducted to evaluate and identify conditions indicative of releases of hazardous substances and/or petroleum products at the subject properties, and to identify the presence of any potentially contaminated areas of concern.

1.2 SCOPE OF WORK

FEA's PA included the following activities:

- An on-site inspection of the subject properties to evaluate current conditions and identify potential areas of concern;
- A review of property history using interview, ownership records, and historical mapping;
- A review of state, county, and local government files;
- A review of Federal, state, and local government permits;
- A review of the NJDEP Data-Miner and Geographical Information Systems (GIS) website records; and,
- A review of historical aerial photographs.

1.3 SITE DESCRIPTION

The subject properties are bounded to the west by Erie Lackawanna/New Jersey Transit rail lines, commercial and residential properties to the north, Valley Street to the east, and commercial properties to the south.

1-7 Fourth Street

The 0.36-acre property at 1-7 Fourth Street is referenced as Block 2304, Lot 10. The subject property is improved with a 1-story garage/storage area and a 2-story, 4,000-square foot building with no basement. A U-shaped area around the 2-story building is paved with asphalt and used for parking.

13 Fourth Street

The 0.21-acre property at 13 Fourth Street is referenced as Block 2304, Lot 11. The subject property is improved with a two-story, two-family residential living/office space, with a two-bay door detached garage at the rear of the property. The residence is approximately 3,000-square feet and includes a full basement.

15 Fourth Street

The 0.17-acre property at 15 Fourth Street is referenced as Block 2304, Lot 12. The subject property is improved with a two-story, two-family residence with a three-bay door garage/storage area at the rear of the property. The residence is approximately 2,500-square feet and includes a full basement and attic space.

16 Fourth Street

The 0.15-acre property at 16 Fourth Street is referenced as Block 2303, Lot 8. The subject property is improved with a two-story, single family residence. The residence is approximately 2,500-square feet and includes a full basement.

209 Valley Street

The 0.67-acre property at 209 Valley Street (a.k.a. 213 Valley Street) is referenced as Block 2303, Lot 7. This is an L-shaped lot facing the west side of Valley Street and the south side of Fourth Street. The front yard along Valley Street and the side yard along Fourth Street have been

asphalt-paved to provide on-site parking. The rear yard also contains a paved parking area.

The subject property is improved with a 1- and 2-story building and is approximately 18,900-square feet, which includes a partial basement area.

The general location of the subject properties and the physiographic features of the surrounding area are shown on Figure 2.

The subject properties are located at an elevation of approximately 158 feet above mean sea level, and slope downward to the west. The east branch of the Rahway River is within a quarter-mile of the subject properties and the properties are located within the 500-year flood zone.

The total area of the subject properties is approximately 1.57 acres. The subject properties are currently used for commercial and residential purposes. Other nearby properties along Fourth and Valley Streets have been developed for residential and commercial use. The following property uses were identified in the vicinity of the subject properties:

- Residential homes at 8, 10 and 14 Fourth Street,
- Residential home at 182 Valley Street,
- Vacant Lot at 184 Valley Street,
- Community Health Law Project at 185 Valley Street,
- BCB Community Bank at 200 Valley Street,
- The Home Design Studios of Dr. Fixit at 215 Valley Street, and
- Quality Auto Centers at 254 Valley Street.

A tax map identifying the block and lot of each of the parcels which are the subject properties for this PA report is presented in Figure 3. A scaled site plan detailing property boundaries and current site conditions is presented as Figure 4.

2.0 OWNERSHIP HISTORY

The ownership history of the subject properties was developed through a review of the deeds and tax records recorded at the Essex County Hall of Records. The results are summarized below.

2.1 1-7 FOURTH STREET

Block 2304 Lot 10

Name of Property Owner	From	To
T & G Realty Enterprises, LLC	November 14, 2003	Present
Shauger Exchange, LLC	October 1, 2003	November 14, 2003
429 Dodd Street, LLC	October 1, 2003	October 1, 2003
1-7 Fourth Street, LLC	October 26, 2001	October 1, 2003
United Trust Bank (formerly United National Bank)	October 30, 2000	October 26, 2001
Armando B. Fontoura – Sheriff	Unknown	October 20, 2000

2.2 13 FOURTH STREET

Block 2304 Lot 11

Name of Property Owner	From	To
John Iantosca	June 6, 2008	Present

Mark, James, David Iantosca	November 7, 2007	June 6,2008
John & Eileen Iantosca	August 25, 1999	November 7, 2007
Angelo B. & JoAnn Iantosca	March 14, 1972	August 25, 1999
Angelo & Marie Iantosca	February 8, 1940	March 14, 1972
Michael Kenny	September 29, 1903	February 8, 1940
Sarah B. Hixon	Unknown	September 29, 1903

2.3 15 FOURTH STREET

Block 2304 Lot 12

Name of Property Owner	**From**	**To**
Joseph J. Mercadante & Robert T. Mercadante	June 10, 1992	Present
Lucille Mercadante	January 23, 1963	June 10, 1992
Joseph Jr. & Lucille Mercadante	April 26, 1956	January 23, 1963
Rose & Joseph Mercadante, Sr.	Unknown	April 26, 1956

2.4 16 FOURTH STREET

Block 2303 Lot 8

Name of Property Owner	**From**	**To**

David E. & Margaret Iantosca	February 11, 1993	Present
John Iantosca, Rocco J. Iantosca, & Angelo B. Iantosca	August 24, 1978	February 11, 1993
John Iantosca (Executor & Trustee for Angelo & Marie Iantosca)	June 13, 1967	August 24, 1978
Antoinette Barone Nittolo (Wife of Eudemio Nittolo) & Angelo Iantosca	June 29, 1950	June 13, 1967
William F. Griese	November 25, 1940	June 29, 1950
John W. Griese Et. Al	March 31, 1933	November 25, 1940
Emily Jane Hector	Unknown	March 31, 1933

2.5 209 VALLEY STREET

Block 2303 Lot 7

Name of Property Owner	**From**	**To**
MFM Holdings, LLC	August 25, 2010	Present
Northfield Bank	October 15, 2009	August 25, 2010
Armando B. Fontoura – Sheriff	January 26, 2005	October 15, 2009
Jacqueline Beifus	December 17, 2004	January 26, 3005
Andrew & Jacqueline Beifus	December 30, 1986	December 17, 2004

Peter Cocoziello	Unknown	December 30, 1986

3.0 OPERATIONAL HISTORY

Source of Information	Name/Years Reviewed
Sanborn Fire Insurance Maps	1912, 1924, 1949, 1967
Aerial Photographs	1954, 1966, 1969, 1970, 1976, 1984, 1989, 1991, 2002, 2006, 2008, 2013
City Directories	1971, 1976, 1982, 1989, 1994, 1999, 2003, 2007
USGS Topographic Maps	1947, 1955, 1995
Interviews with Current Owner(s)	Mr. Thomas Sautter – 1-7 Fourth Street Mr. Mark Iantosca – 13 Fourth Street Mr. Joe Mercadante – 15 Fourth Street Mr. Dave Iantosca – 16 Fourth Street Mr. Steve Monteleone – 209 Valley Street

3.1 HISTORICAL SANBORN MAPS

Sanborn Library Maps of the subject properties were obtained for the years 1912, 1924, 1949, and 1967.

The 1912 Sanborn map for 1-7 Fourth Street shows a large lumber shed onsite running parallel to the railroad tracks with a railroad spur adjacent to the edge of the shed. A wood shed also is present on this subject property, which is part of a much larger lumber yard (H.B. Halsey Company). Two-story dwellings are shown at 13, 15, and 16 Fourth Street each with a storage or coop space at the rear of the property. Two dwellings, a wagon shed, and a chicken coop are shown at 209 Valley Street. The surrounding properties are residential to the north and east, vacant land to the south, and railroad tracks to the west of the subject properties.

The 1924 Sanborn map shows that between 1912 and 1924 conditions at the subject properties and other nearby properties remained mostly unchanged, with one exception. The subject property at 1-7 Fourth Street has been divided from the lumber yard property as shown on the 1912 map. The lumber and wood shed, and rail spur no longer are shown on

this map. Two unlabeled buildings are shown on this map and their use is unknown.

The 1949 Sanborn map at 1-7 Fourth Street shows one large building split into three sections and labeled as "Contractors Site", and the lumber yard is no longer listed. Dwellings at 13 and 15 Fourth Street have additions on the original footprints from the 1912 map, with buildings in the rear of the property. How these building are used is unclear. The dwelling at 16 Fourth Street shows the same footprint at previous maps with the addition of three small buildings in the rear of the property. It is unclear in this map how these buildings are utilized. Two dwellings remain in the northern half of the subject property at 209 Valley Street, but the southern half of the property now has been improved with a large building identified as "Auto Sales and Service" and "Auto Repair." This building has the same footprint of the present day improvements on the southern end. The surrounding properties are residential/commercial to the north and east, railroad tracks to the west, and commercial to the south of the subject properties.

The 1967 Sanborn map at 1-7 Fourth Street shows a similar building configuration as on the 1949 map with the addition of and L-shaped building at the rear of the property. It is unclear how this building was used. The dwellings at 13 and 15 Fourth Street appear similar to the 1949 map with the addition of a large storage space added to the rear of the property at 13 Fourth Street. The reproduction quality is faded in the area of 16 Fourth Street and it is unclear if there have been any changes to this subject property on this map. The northern half of the subject property at 209 Valley Street has been redeveloped with a 1- and 2-story building identified as Auto Sales and Service. The surrounding properties are residential/commercial to the north and east, railroad tracks to the west, and commercial to the south of the subject properties.

3.2 AERIAL PHOTOGRAPH REVIEW

Aerial photographs of the subject properties were obtained for the years 1954, 1966, 1969, 1970, 1976, 1984, 1989, 1991, 2002, 2006, 2008, and 2013.

The 1954 aerial shows 1-7 Fourth Street occupied with a long warehouse type building running parallel to the railroad tracks and a garage area spanning the width of the property along the northern property boundary. Dwellings are visible at 13, 15, and 16 Fourth Street, with garage/storage buildings at the rear of each property at 13 and 15 Fourth Street. One building is present at the southern half of the subject property

at 209 Valley Street adjacent to a larger open lot. Railroad tracks are present to the west, residential and commercial development is apparent to the north, south, and east of the subject properties.

No changes are visible at 1-7, 13, 15, and 16 Fourth Street in the 1966 aerial photo. A second building has been constructed adjacent to the existing building at 209 Valley Street. No changes are observed with regard to the surrounding properties.

The 1969 and 1970 aerial maps are similar to the 1966 aerial map. No other changes are visible on the subject properties.

The resolution and scale on the 1976, 1984, 1989, and 1991 make it difficult to see any changes to the subject properties.

No changes are visible at 1-7, 13, 15, and 16 Fourth Street and 209 Valley Street in the 1994, 2002, 2006, 2008 and 2013 aerial maps.

3.3 CITY DIRECTORIES

Directories were reviewed and entries for the subject properties were noted as follows:

- 1971: The subject properties are listed as Permanent Driveways, Inc. at 1-7 Fourth Street, R. Graessle and M. Iantosca as occupants, and South Orange Construction Company at 13 Fourth Street, W. Baker, Jr. and D. Hanna as occupants at 15 Fourth Street, T. Pasquariello and A. Pasquariello as occupants at 16 Fourth Street, and A. R. Rose Chevrolet, Inc., Chapp Chevrolet Corporation, Chevrolet Sales & Service at 209 Valley Street.

- 1976: The subject properties are listed as Permanent Driveways, Inc. at 1-7 Fourth Street, A. J. Griffin, M. Iantosca as occupants and South Orange Construction Company, Inc. at 13 Fourth Street, V. Chorbajian and J. Schwester as occupants at 15 Fourth Street, G. Maragelis and J. Murphy as occupants at 16 Fourth Street, and A. R. Rose Chevrolet, Inc. at 209 Valley Street.

- 1982: The subject properties are listed as Pressure Concrete & Grouting Company at 1-7 Fourth Street, J. Iantosca and S. Iantosca, and South Orange Construction Company, Inc. at 13 Fourth Street, D. M. De Domenico and G. Paravati as occupants at 15 Fourth

Street, C. Reardon as occupant at 16 Fourth Street, and A. R. Rose Chevrolet at 209 Valley Street.

- 1989: The subject properties are listed as Pressure Concrete & Grouting Company at 1-7 Fourth Street, M. Iantosca and S. Iantosca as occupants, and South Orange Construction Company, Inc. at 13 Fourth Street, K. Peters as occupant at 15 Fourth Street, A. Echo and D. Iantosca as occupants at 16 Fourth Street, and twenty-four tenants at 209 Valley Street including, Advanced Marketing Technology, Armstrong Telecommunications, Beifus Motors Body Repair, Beifus Motors Mercedes Wholesale & Body Parts, George Blauvelt Constable, Business Center of South Orange, C& C Detective Agency Inc., Computerized Surveillance System, Connors Williams Associates, Event Associates Incorporated, GLR & Associates, Genix Corporation, Hunterdon Financial Group, Ltd, Lana James Consultants, Mister Mail Services Center, Inc., Portwood Properties Corporation, Gerald L. Reif Constable, South Orange Chamber of Commerce, South Orange Maplewood Business Center, Text Processing Center, The Valerie Fund, Valet Park America, and Harold P. Vollmer.

- 1994: No listing was available for 1-7 Fourth Street, an occupant and South Orange Construction, Inc. were listed for 13 Fourth Street, B. Dunkins and L. Wigington occupy 15 Fourth Street, D. Echo, D. Iantosca, and an occupant are listed at 16 Fourth Street, and several tenants at 209 Valley Street including, Beifus Motors Body Repair, C & C Detective Agency, Inc., Computerized Surveillance Systems, Connors Williams Associates, Lana James Consultants, Mister Mail Services Center, Inc., Paye Systems Group, Peoples Wm. D. Jr. constable of South Orange, South Orange Maplewood Business Center, Systems Integration Lab, Terry Viney Consultants, and The Typing Shop.

- 1999: The subject properties are listed as Royal Motor Antique Auto Sales and Royal Printing Service Corp. at 1-7 Fourth Street, M. Iantosca and South Orange Construction, Inc. at 13 Fourth Street, J. Jackson, R. Johnson, N. Mauncele, III, and L. Wigington as tenants at 15 Fourth Street, occupant listed at 16 Fourth Street, and Beifus Motors Body Repair, Connors Williams Associates, Mercedes-Benz Authorized Sales & Service and Systems Integration Lab. Operations at Connors Williams Associates and Systems Integration Lab was not specified in this directory.

- 2003: The subject properties are listed as Van Go Medial Transport at 1-7 Fourth Street, Ki-Soeg Jung and South Orange Construction, Inc. at 13 Fourth Street, Ralph Johnson, Nicholas Mauncele, III and Leland Wigington as tenants at 15 Fourth Street, Deborah Echo at 16 Fourth Street, and Midland House Building, System Integration Laboratory, and Beifus Motors Service and Body Shop at 209 Valley Road. Operations at Midland House Building and System Integration Laboratory was not specified in this directory.

- 2007: The subject properties are listed as AAA-Able Plumbing, Heating and Drain at 1-7 Fourth Street, J. Iantosca as homeowner and South Orange Construction Inc. at 13 Fourth Street, S. Gonczi at 15 Fourth Street, no listing for 16 Fourth Street, Midland House Building and Beifus Motors Service & Body shop at 209 Valley Street. Operations at Midland House Building was not specified in this directory.

3.4 ENVIRONMENTAL RECORDS DATABASE SEARCH

A database search of public and regulatory environmental records was conducted. Available records indicate that the subject properties are listed in the following databases:

- FRS – Facility Registry System – South Orange Construction at 13 Fourth Street, 1-7 Fourth Street, Monty Motors and Beifus Motors Inc. Auto Body Shop at 209 Valley Street.

- RCRA_CESQG – Resource Conservation and Recovery Act Conditionally Exempt Small Quantity Generator at 209 Valley Street (EPA ID NJD982275299).

- UST-NJ – Underground Storage Tank (UST) at 209 Valley Street.

- RAATS – Major violators with enforcement actions issued under RCRA at 209 Valley Street (EPA ID NJD982275299).

Additionally, the search also returned records on sites within one mile of the subject properties in several databases, and are summarized below.

- Federal Lists:

    - Federal RCRA generators list:

        - RCRA_CESQG – 1 site is located within 0.25 miles of the subject properties.
    - Federal RCRA non-CORRACTS TSD facilities list:
        - RCRA_TSDF – 1 site is located within 0.25 miles of the subject properties.

- State and Tribal Lists:

    - Registered Storage Tank list:
        - UST-NJ – 14 sites are located within 1 mile of the subject properties.
    - Leaking Storage Tanks list:
        - LUST-NJ – 2 sites are located within 0.5 miles of the subject properties.
    - Equivalent CERCLIS:
        - HIST HWS – NJ – 292 sites are located within 1 mile of the subject properties.
        - HWS RE-EVAL – NJ – 4 sites are located within 1 mile of the subject properties.
        - SHWS – NJ – 22 sites are located within 1 mile of the subject properties.
    - Voluntary Cleanup Sites:
        - VCP - NJ – 20 sites are located within 0.5 miles of the subject properties.

- Additional Environmental Records

    - Other Ascertainable Records:
        - RCRA NonGen – 14 sites are located within 1 mile of the subject properties.
        - Daycare – NJ – 22 sites are located with 1 mile of the subject properties.
        - ISRA – NJ – 2 sites are located within 0.25 miles of the subject properties.
    - Local Brownfields:
        - FED Brownfields – 1 site is located within 0.5 miles of the subject properties.
        - Tribal Brownfields – 1 site is located within 0.5 miles of the subject properties.
        - Brownfields – NJ – 7 sites are located within 0.5 miles of the subject properties.

Based on local topography and expected groundwater flow direction, FEA has determined that it is possible that the subject properties may

potentially be impacted by off-site environmental issues. The subject properties are listed in the above databases due to the presence of former USTs that were used as part of previous operations.

3.5 INDUSTRIAL DIRECTORIES

No records were found related to industrial operations at the subject properties.

3.6 LOCAL GOVERNMENT RECORDS

FEA submitted a records request to the Township of South Orange Village Municipal Clerk's office on February 24, 2015 for all the subject properties. The request was made for access to documents related to the presence of USTs, releases, or other potential contamination issues, and/or investigation and remediation of Areas of Concern at the subject properties.

On February 24, 2015, FEA received copies of the following documents on file with the Township of South Orange Village for the following subject properties:

3.6.1 1-7 Fourth Street

- Township of South Orange Village Certificate of Approval dated November 3, 1995 related to removal of one 550-gallon oil tank.
- NJDEP Communication Center Notification Report dated September 29, 2003 related to a release of arsenic metal discharged to soil.
- NJDEP Unrestricted Use No Further Action Letter dated June 21, 2005.

Certificate of Approval

Permit # 19950565 was issued for the removal of one 550-gallon oil tank, which was completed in accordance with the New Jersey Uniform Construction Code.

NJDEP Communications Center Notification Report

This report (NJDEP Case # 03-09-29-1537-52) describes soil analysis identifying a two year old discharge of arsenic to soil approximately 1 foot below ground surface. Remediation was "pending" at time of incident report.

No Further Action Letter

NJDEP issued an Unrestricted Use No Further Action letter in reference to removal of two floor drains associated with contaminated soils for Case # 03-09-29-1537-52, Program Interest (PI) # 213875.

3.6.2 13 Fourth Street

- Township of South Orange Village Certificate of Approval dated December 21, 2000 related to removal of one 1,000-gallong diesel UST and one 1,000-gallon gasoline UST.

- EnviroTactics UST removal report dated January 19, 2001.

Certificate of Approval

Permit # 20000263 was issued for the removal of one 1,000-gallon diesel UST and one 1,000-gallon gasoline UST, which was completed in accordance with the New Jersey Uniform Construction Code.

EnviroTactics Report

This report details activities completed during the removal of one 1,000-gallon diesel fuel UST and one 1,000-gallon gasoline UST. Results from this report are summarized in Section 14.

3.7 STATE AND COUNTY RECORDS

FEA submitted and Open Public Records Act (OPRA) request to NJDEP and Essex County, New Jersey on February 24, 2015.

On March 3, 2015 and March 23, 2015, NJDEP responded to the request and indicated records were available for review for 1-7 Fourth Street and 209 Valley Street, respectively. FEA scheduled a file review at NJDEP Headquarters for April 8, 2015, which was the first available appointment. No records were identified for the other subject properties.

The NJDEP Geographical Information System (GIS) was used to identify properties within 0.5 miles of the subject properties that are included under the NJDEP Site Remediation Program (SRP). Results from the search indicated that the properties included in the NJDEP "NJEMS" and UST Facility databases are located within 0.5 miles of the subject properties. The subject property at 1-7 Fourth Street appeared on the GIS map/NJEMS database under the SRP and has been assigned Program Interest (PI) # 213875. Additionally, the subject property at 209 Valley Street also appeared on the NJEMS and UST Facility databases under the SRP and has been assigned PI # 016168.

On February 27, 2015, FEA received a response from Essex County. The county representative forwarded a copy of an Environmental Complaint from the resident at 16 Fourth Street dated January 28, 1994. This property is adjacent to the former Beifus Motors business. The complaint was made due to the idling of vehicles and fumes from those vehicles affecting the residents and their children. At the time of the site inspection by the Environmental Specialist, no evidence of idling vehicles was observed, therefore no action was taken.

3.8 INTERVIEWS

3.8.1 1-7 Fourth Street

An interview was conducted with Mr. Thomas Sautter, the current co-owner of 1-7 Fourth Street. Mr. Sautter's partner, Mr. Glenn Dowling was unavailable during this interview. Mr. Sautter operates AAA-Able, which is a plumbing, heating, air-conditioning, drain cleaning, and excavating company. No manufacturing is performed on the premises. Mr. Sautter stated that no USTs are known to be present on the subject property, and he was not aware of any spills, discharges, or releases. According to Mr. Sautter, the first floor of the 4,000-square foot building is used as office/storage space and the second floor is used as a residence. The garage area is also used for storage.

3.8.2 13 Fourth Street

An interview was conducted with Mr. Mark Iantosca, the current owner of 13 Fourth Street. The residence at this location is currently used by the South Orange Rescue Squad as a headquarters, and occupies the first floor. The second floor is currently unfinished and is vacant. The garage space is currently used for storage and houses rescue vehicles. One 275-gallon waste oil AST is also present in the garage area. Waste oil stored in

the AST is recycled by Lorco in machines that use this type of oil. This area was formerly used for maintenance and repairs of vehicles related to the family's construction business (South Orange Contracting Company). Mr. Iantosca did mention that two 1,000-gallon USTs were removed from the subject property in late 1999 to early 2000, and he was not aware of any spills, discharges or releases at the subject property. A dry well was also present in the basement.

3.8.3 15 Fourth Street

An interview was conducted with Mr. Joseph Mercadante, the current owner of 15 Fourth Street. The three-story residence is used as a two-family apartment space. The apartment areas were unavailable for inspection during the interview, but the exterior and basement of the subject property was inspected. Mr. Mercadante indicated that the subject property was formerly used for the family concrete/construction business (South Orange Construction, Inc.). Approximately 37 years ago, one 275-gallon diesel fuel AST was taken out of service and moved from the outside location and is currently located in the garage space. The garage space is currently used to store paper food containers for the family's frozen yogurt business and other miscellaneous items. Mr. Mercadante stated that no known USTs have been or are currently present on the subject property, and he was not aware of any spills, discharges or releases at the subject property.

3.8.4 16 Fourth Street

An interview was conducted with Mr. David Iantosca, the current owner of 16 Fourth Street. The first floor of the two-story residence is used by Mr. Iantosca as a living space, and the second floor is currently vacant. Mr. Iantosca stated that the residence used to be heated by a coal burner, but was converted to heating oil at an unknown date. One 275-gallon heating oil AST was present in the basement to heat the first floor, and one 275-gallon heating oil AST was removed in 2014. Mr. Iantosca stated that no known USTs are present onsite, and he was not aware of any spills, discharges, or releases at the subject property.

3.8.5 209 Valley Street

An interview was conducted with Mr. Steven Monteleone, the current owner and Mr. Levent Erhamza, the current tenant at 209 Valley Street. Automotive repair operations occur throughout the ground floor of the building with repair operations partitioned into three major portions of the building. The southern portion of the building is currently leased to

Mr. Erhamza who operates Guten Parts + Service (GP+S), which is a full service shop specializing in foreign automobiles that routinely performs repair, maintenance, and builds custom cars. Three active hydraulic lifts were observed in this portion of the building. The central portion of the building contains a self-contained enclosed spray-painting booth for the auto body shop (Monty Motors). The northern portion of the building is used for automotive repair operations with seven active hydraulic lifts, a new (500 + gallon) and used (275 gallon) aboveground motor oil tank, a mechanical parts washing sink, a slop sink, and a small gasoline caddy for routine maintenance operations. The second floor of the building was not inspected, but Mr. Monteleone indicated that the second floor consisted of office space and was not currently in use. The basement under the central and northern portions of the building is used mainly as a body shop and storage, with two active hydraulic lifts. Mr. Monteleone did indicate USTs were present onsite, but have been removed as well as any impacted soil associated with releases from these USTs.

3.9 SUMMARY OF OPEARATIONAL HISTORY

The information provided above can be summarized as follows:

- The Sanborn maps indicated that the subject properties were developed as early at 1912.

- The subject property at 1-7 Fourth Street mainly operated as a commercial business from 1912 to present. Operations included a lumber yard, asphalt driveway contractor, grouting and concrete contactor. AAA-Able has been operating at the subject property since approximately 2005.

- The subject properties at 13, 15, and 16 Fourth Street have mainly been used for residential purposes. Family construction companies were also run out of 13 and 15 Fourth Street for a period of time.

- The subject property at 209 Valley Street was residential until approximately 1949. Since then, this property has operated as an auto repair and service shop. Monty Motors, Inc. has been operating at the subject property since approximately 2010.

4.0 CURRENT SITE OPERATIONS

The subject property at 1-7 Fourth Street currently consists of a two-story 4,000-square foot building with detached garage space. The first floor is used for office space to support the plumbing, heating, and excavating business. The second floor is used as residential apartment space. No manufacturing or service is currently performed on the property.

The subject property at 13 Fourth Street consists of a two-story residential/office space. The first floor is currently occupied by the South Orange Rescue Squad and used as a residence. The first floor office and second floor are currently vacant. A large detached garage is also present onsite which houses rescue vehicles and vehicle repair. The basement area is also used for storage.

The subject property at 15 Fourth Street consists of a two-story residence. Both floors are currently occupied by tenants. A large detached garage is also present at the rear of the property that is currently used as storage. The full basement is also used for storage.

The subject property at 16 Fourth Street consists of a two-story residence. Only the first floor is currently occupied, and the second floor is vacant. The basement is used for storage.

The subject property at 209 Valley Street is improved with a 1- and 2-story building and is approximately 18,900 square feet, which includes a partial basement area. The current operations at the subject property include auto part sales, storage, maintenance, and repair of vehicles.

5.0 HAZARDOUS MATERIALS AND SUBSTANCES

The subject property at 1-7 Fourth Street has been mainly used for commercial purposes and has historically been used as a lumber yard, paving company, and currently as a plumbing/heating/excavating business. Chemicals stored on the property include caulks, sealants, glues, spray paints, and household cleaning supplies. Empty acetylene gas cylinders, HVAC reclamation tanks, and Freon tanks were stored in various locations on the property. Scrap metal was also stored outside waiting to be recycled. Two diesel- powered mini-excavators were also parked in the rear of the property.

The subject property at 13 Fourth Street has been mainly used for residential purposes. Household cleaning supplies were stored throughout the living space. One 275-gallon used oil tank was located in the garage space. Used oil is recovered and recycled by Lorco. Some staining was observed on the floor under this AST.

The subject property at 15 Fourth Street has been mainly used for residential purposes, however, a family owned concrete and construction company was once run out of the home. One empty diesel fuel AST was observed in the garage/storage area. This AST was taken out of service ~35 years ago, but the empty tank still remains onsite. Some staining was observed on the ends of the tank at the bottom. The area where the tank used to sit was partially snow covered and wet, therefore, it was difficult to determine any staining on the asphalt. No other chemicals were observed onsite.

The subject property at 16 Fourth Street has been mainly used for residential purposes. Household cleaning chemicals and detergents were stored in various places throughout the home. Currently, one 275-gallon heating oil AST services the first floor of the residence and was located in the basement. Spillage/overflow stains were observed on the top and sides of the tank, but no stains were observed on the floor underneath the tank. A second heating oil AST was removed from the basement in 2014. No staining was observed in the area of the former AST.

The subject property at 209 Valley Street has been mainly used for commercial purposes and has historically been and currently is used as an auto repair/service shop. Chemicals used and stored on the property include automotive paints and solvents, lubricants, and commercially packaged automotive cleaners and maintenance products. Safety Kleen Systems, Inc. maintains and services the spent solvent recovery system

and the mechanical parts washing sink. All materials were properly labeled and stored. No floor staining was observed in the various chemical storage areas. Additionally, a 275-gallon waste oil tank is present at the northeast corner of the automobile repair shop. Labels on this waste oil tank indicate that the DePalma Oil Company of Union, New Jersey recovers the waste oil for recycling. Some staining was observed on the outside of the waste oil tank and on the floor beneath it. There is also a 500+ gallon aboveground motor oil tank located adjacent to the waste oil tank. No staining or obvious signs of overfilling were observed near the motor oil tank. The building is heated by ceiling hung, natural gas-fired furnace units. Floor drains were observed on the ground floor of the auto body shop within the central portion of the building. An active curtain drain was observed in front of the garage door to the main service area, and cement-sealed curtain drains were observed within the auto body shop. An active curtain drain was also observed within the basement. All drains are connected to the municipal sewer, and no staining was observed around any of these floor drains.

Natural gas and electric service is provided by PSE&G to the subject properties. The subject property at 16 Fourth Street is heated by a 275-gallon AST. Electrical transformers were present on the poles along the sidewalks adjacent to the subject properties. No staining or evidence of past discharges of transformer oil was apparent beneath these transformers.

6.0 WASTEWATER DISCHARGE HISTORY

Currently, sanitary discharges from the subject properties at 1-7, 13, 15, and 16 Fourth Street are directed to the municipal sanitary sewer system. Current site operations do not include the discharge of wastewater.

Currently, sanitary discharges from 209 Valley Street are also directed to the municipal sanitary sewer system. Floor drains were observed on the ground floor of the auto body shop within central portion of the building. An active curtain drain was observed in front of the garage door to the main service area, and cement-sealed curtain drains were observed within the auto body shop. An active curtain drain was also observed within the basement, which are apparently connected to the municipal sewer. No staining was observed around any of these floor drains.

According to the Village of South Orange Engineer, public sanitary sewer was available in this area since the 1930's, and is suspected to have serviced the current subject properties since that time.

7.0 PROCESS WASTE STREAMS

The subject property at 1-7 Fourth Street has mainly been used for commercial purposes and is currently used as a plumbing/heating/excavating business. Wastes generated consisted mainly of general trash and recyclable material.

The subject properties at 13, 15, and 16 Fourth Street have mainly been used for residential purposes. Wastes generated as part of the residence mainly consist of general trash and recyclable materials. Waste oil generated at 13 Fourth Street is collected and recycled by Lorco.

The subject property at 209 Valley Street has mainly been used for commercial purposes and is currently being used as an auto service/repair shop. Waste oil is recovered by DePalma Oil Company for recycling. Additionally, Safety Kleen Systems, Inc. maintains and services the spent solvent recovery system and the mechanical parts washing sink. Other wastes generated consist mainly of general trash.

During the course of this PA, FEA did not encounter information indicating that other process waste streams are or have been generated at the subject properties.

8.0 RADIOACTIVE MATERIALS

During the course of this PA, FEA did not encounter information indicating that radioactive materials have ever been used, stored, or generated at the subject properties.

9.0 DISCHARGE HISTORY

A previous investigation was completed in 2003 in response to a discharge to soil via two former floor drains located within the garage bay/office area at 1-7 Fourth Street.

A previous investigation was completed in 1999 in response to UST removal at 209 Valley Street. During UST removal, the integrity of two USTs was found to be compromised and evidence of petroleum discharges were observed in the corresponding excavations.

Additional details associated with these incidents are discussed in Section 14.0. No other reports or evidence of discharges at 13, 15, and 16 Fourth Street have been encountered during the course of this PA.

10.0 ENVIRONMENTAL PERMITS

Available information indicates that no permits have been issued for 1-7, 13, 15 and 16 Fourth Street.

An application was submitted by Beifus Motors to the NJDEP Air Pollution Control Permit Program in October 1991 to obtain a permit to operate a spray booth within the body shop. The application was approved on October 21, 1991 and a conditional five year certificate (number 104683 and 104685, plant ID G0591) was issued.

11.0 ENFORCEMENT ACTIONS

Available information indicates that no enforcement actions have been issued for the subject properties at 1-7, 13, 15, and 16 Fourth Street.

Several enforcement actions have been issued for the subject property at 209 Valley Street which include the following:

- Notice of Violation issued November 29, 1995 for failure to prepare a manifest prior to transporting hazardous waste off-site.

- NOV issued December 18, 2001 for operating a spray booth with expired operating certificate (#104685), PI # G0591. No penalty was assessed and the violation was satisfied and closed on August 20, 2002.

- NOV issued November 4, 2005 for Hazardous Waste PI # NJD982275299 non-compliance of the following:

    - Beifus Motors in violation of 40 CFR 262.34(d)(5)(ii)(A-C) – failed to post name of emergency coordinator and telephone # next to telephone; location of fire extinguisher, spill control material and fire alarm next to telephone; and fire department phone # next to telephone.
    - Beifus Motors in violation of 40 CFR 262.34(a)3 – failed to clearly mark 12 containers storing F005 (spent non-halogenated solvents) hazardous waste with the words "Hazardous Waste."
    - Beifus Motors in violation of 40 CFR 265.37(a)(3)&(4) – failed to make arrangements with an emergency response contractor and to familiarize local hospitals with properties of hazardous waste handled and types of injuries that could occur from these hazards.
    - Beifus Motors in violation of 40 CFR 262.34(a)2 – failed to clearly mark 12 containers storing F005 hazardous waste with accumulation start date.
    - Beifus Motors in violation of 40 CFR 265.174 – failed to inspect the container storage area on a weekly basis.
    - Beifus Motors in violation of 40 CFR 265.173(a) – failed to close one 16-gallon container storing F005 hazardous waste by leaving funnel in opening while in storage.

A penalty of $4,500 was assessed, a Settlement Agreement was reached, and the violations were satisfied and closed on September 5, 2006.

- NOV issued November 9, 2000 for failing to complete and submit to the NJDEP the Community Right to Know Survey for the 1999 reporting year for Beifus Motors by March 1, 2000 (PI # 37908700000). No penalty was assessed and the violation was satisfied and closed on March 2, 2002.

- NOV issued August 18, 2005 for failing to complete and submit to the NJDEP the Community Right to Know Survey for the 2004 reporting year for Beifus Motors by March 1, 2005. No penalty was assessed and the violation was satisfied and closed on September 29, 2005.

12.0 FILL MATERIAL

A review of the New Jersey Geological Survey (NJGS) Historic Fill map was completed as part of this PA. According to this map, the Erie Lackawanna/New Jersey Transit railroad lines immediately adjacent to the western property boundary of 1-7 Fourth Street are potentially underlain by historic fill material, which may extend onto the subject property. There is no evidence that any investigation has been conducted to determine the presence and extent of fill material at 1-7 Fourth Street.

The other subject properties do not appear to be underlain by historic fill material as shown on the NJGS Historic Fill map.

13.0 WASTE DIPOSAL AREAS, DUMPS AND LANDFILLS

During the course of this PA, FEA did not encounter any information suggesting that waste disposal areas, dumps, or landfills are potentially present at the subject properties.

14.0 PREVIOUSLY CONDUCTED OR ON-GOING REMEDIATION

In accordance with the NJDEP *Preliminary Assessment Technical Guidance*, FEA reviewed available documentation related to investigation and remediation activities previously conducted or currently underway at the subject properties. A summary of the review follows.

14.1 SUMMARY OF REMEDIAL ACTIVITIES AT 1-7 FOURTH STREET

FEA utilized the NJDEP Dataminer website to search for records related to remediation activities conducted at the subject property. The results of the search indicated a remedial investigation was completed at the property under the PI # 213875. The document submissions listed in Dataminer were subsequently reviewed during FEA's file review.

Documents reviewed during the file review conducted at NJDEP headquarters include the following:

- Letter of Non-Applicability (LNA) Application (Application # N20012919) under Industrial Site Recovery Act (ISRA) for sale of property dated August 22, 2001. NJDEP determined that the transaction was not subject to the provisions of ISRA due to the absence of an industrial establishment;

- LNA Application (Application # N20033161) under ISRA for sale of property dated September 4, 2003. NJDEP determined that the transaction was not subject to the provisions of ISRA due to the absence of an industrial establishment;

- Remedial Investigation Report (RIR) dated December 19, 2003;

- Notice of Deficiency (NOD) dated August 4, 2004 from NJDEP regarding RIR;

- Response to NOD by AquaTek Environmental Consulting, Inc. (AquaTek) dated April 5, 2005 addressing administrative and technical deficiencies;

- No Further Action (NFA) letter dated June 21, 2005 for 1-7 Fourth Street, South Orange, Essex County (Block 2304 Lot 10), PI # 213875, NJDEP Case # 03-09-29-1537-52.

The following original documents were not available for review by FEA during the file review at NJDEP, but were discussed in other reviewed documents which include the following:

- Limited Phase I Report dated March 19, 1993 prepared by EcolSciences;
- Phase II Environmental Investigation Report dated August 25, 1993 prepared by EcolSciences;
- Phase I Environmental Assessment (ESA) dated December 1, 1999 by Industrial Waste Management, Inc. (IWM); and
- Site Investigation Report (SIR) dated November 14, 2001.

14.2 SUMMARY OF PREVIOUS ENVIRONMENTAL REPORTS AT 1-7 FOURTH STREET

14.2.1 Limited Phase I Report

A Limited Phase I Report was prepared by EcolSciences for the subject property dated March 19, 1993 and reviewed by AccuTech Environmental Services, Inc. (AccuTech). EcolSciences identified the following Areas of Environmental Concern (AECs):

- Former UST area on the northwestern boundary of the subject property. Three USTs were reportedly removed from the area in 1989.
- One 1,500-gallon heating oil UST outside the northeast corner of the office building. Estimated date of tank installation was "prior to 1979".
- Unpaved yard on eastern side of subject property used for materials storage.
- Floor drains – one in the boiler room and one in the garage building
- Existing aboveground storage tanks (ASTs) (approximately 275-gallon) used for waste oil.

EcolSciences recommended the following activities to address the AECs.

- Collecting soil samples in the area of the three 1,500-gallon USTs (contents unknown) removed in 1989. Analyze samples for volatile organic compounds (VOCs), lead, and Total Petroleum Hydrocarbons (TPHC).

- Excavation and sampling around the 1,500-gallon heating oil UST.

- Collect soil samples from unpaved yard. Analyze samples for VOCs, Semi-volatile organic compounds (SVOCs), Polychlorinated biphenyls (PCBs), and metals.

- No further investigation was recommended for floor drains in the boiler room and garage building.

- Removal of residual waste oil in the 275-gallon AST.

14.2.2 Phase II Environmental Investigation Report

A Phase II Environmental Investigation was completed at the subject property by EcolSciences in 1993. A summary of EcolSciences's findings, conclusions, and recommendations associated with this effort were presented in the Phase II Environmental Investigation Report dated August 25, 1993. The purpose of this investigation was to sample soil in and around the former UST area, and install test pits to sample around existing 1,500-gallon heating oil UST.

EcolSciences concluded that, based on the soil sample results, no further action was warranted in the former UST areas, and recommended removing the 1,500-gallon heating oil UST. AccuTech agreed with these conclusions and suggested abandoning the 1,500-gallon UST in place due to the close proximity of the building and utility lines.

The original EcolSciences Phase II report was not reviewed by FEA.

14.2.3 Phase I Environmental Assessment Report

A Preliminary Assessment Report (PAR) was prepared by Industrial Waste Management, Inc. (IWM) for the subject property dated December 1, 1999. IWM concluded that the assessment revealed no evidence of recognized environmental conditions in connection with the subject property, with the exception the following:

- Presumed Asbestos Containing Materials – a 5 feet x 4 four feet area of ceiling tiles observed in the Royal Printing offices was

found to be deteriorating. IWM recommended testing of these tiles for asbestos fibers.

- Floor Drains – "determine discharge point of floor drains".

- USTs – Based on the conclusions and recommendations in the AccuTech letter, the three USTs located in the northwestern part of the subject property were removed in 1989 and the soil sample results warranted no further action. One 1,500-gallon heating oil UST was present at the northeast corner outside the office building. Additionally, IWM interviewed South Orange Building Director, Anthony Grenci, stating that the removal of a 550-gallon heating oil UST in 1995 was a clean closure.

- Potential for Off-site contamination – sites listed on the Leaking Underground Storage Tank (LUST) are located in the projected hydrogeologic upgradient direction from the subject property. No additional investigation was recommended by IWM.

14.2.4 Site Investigation Report

A Site Investigation Report (SIR) dated November 14, 2001 was prepared by IWM. This investigation focused on the two floor drains located inside the building and summarizes the soil sampling activities and analytical results.

On October 8, 2001, soils near the floor drain located inside the garage area at the northern end of the property (Drain 1) and inside the office building garage (Drain 2) were sampled. Soil samples were collected from 1.5 feet to 2 feet bgs. and 0.5 feet to 1 foot bgs., respectively, and were analyzed for TPHC. Additional analysis included VOCs, base neutrals (BN), PCBs, and metals.

TPHC was detected in both samples at 99 mg/Kg (Drain 1) and 110 mg/Kg (Drain 2). Secondary analysis was reported for Drain 2. Based on the analytical results, the soils around Drain 2 had elevated concentrations of arsenic (152 mg/Kg). Since the arsenic concentration exceeded the NJDEP cleanup criteria at the time, the NJDEP Spill Hotline was contacted and a case number was assigned.

Additionally, piping running to the north of Drain 2 was observed during soil sampling. This piping was approximately 30 feet long and believed to end at the floor drain located next to the gas burner. IWM recommended additional soil sampling at this drain.

14.2.5 Remedial Investigation Report

A Remedial Investigation Report (RIR) was prepared by AquaTek Environmental Consulting, Inc. (AquaTek) dated December 19, 2003. The purpose of the RI was to comply with the requirements of the Memorandum of Agreement (MOA) dated October 2003 between the site owner and NJDEP, and the *Technical Requirements for Site Remediation* (TRSR) (N.J.A.C. 7:26E).

During a site inspection AquaTek identified three floor drains within the garage areas and a boiler room. The floor drain existing within the garage bay of the office building was heavily oil-stained (Drain 2), in which the oil staining extended on the concrete surface surrounding the drain. The steel drain cover was removed and significant oil staining inside the walls to the interior base of the drain (approximately 1 foot below grade) was observed. No information regarding the integrity of the drain system or the disposition of liquids entering the system at this point was available.

Floor Drain 2 – Soil Excavation and Sampling

Based on the arsenic exceedence in IWM's soil sample from Drain 2 located within the garage area of the office building, AquaTek performed soil remediation at Drain 2 between September and October 2003. In addition, soil remediation and sampling of a third floor drain (Drain 3) was completed. Drain 3 was located in the boiler room of the garage area of the office building. It was determined that Drain 2 was connected to Drain 3 via a 4-inch diameter clay pipe located approximately 3 feet bgs.

On September 30, 2003 a 5 foot by 5 foot area surrounding Drain 2 was excavated to a depth 4 feet bgs., which was below the previously detected arsenic contamination (0.5- to 1-foot bgs.). Following the removal of the impacted soil, AquaTek collected two post excavation samples (SS-1 and SS-2) from the base of the excavation from 4.5 feet to 5.0 feet bgs. These samples were analyzed for arsenic.

Results of the post-excavation soil samples from the Drain 2 excavation reported concentrations of arsenic at 1.5 mg/Kg at SS-1 and 1.6 mg/Kg at SS-2, which were below the NJDEP Most Restrictive Soil Cleanup Criteria (MRSCC) of 20 ppm.

Floor Drain 3 – Soil Excavation and Sampling

Additional excavation was completed at Drain 3, located in the boiler room of the office building. On September 30, 2003, a 2 foot by 2 foot area

adjacent to Drain 3 was excavated to a depth of 1.5 feet bgs. AquaTek collected one post-excavation soil sample (SS-3) from the base of the excavation (~1.5 feet to 2 feet bgs.). This sample was analyzed for arsenic. Results indicated a concentration of 369 ppm of arsenic, which exceeded the MRSCC.

On October 24, 2003, additional soil remediation around SS-3 was completed along with the removal of the floor drain. The excavation in the area of SS-3 was extended horizontally and completed to a depth of approximately 3 feet bgs. Post-excavation soil samples were collected, SS-4 and SS-5, at the base of the excavation from a depth of 3 to 3.5 feet bgs. These samples were analyzed for arsenic. Arsenic results for SS-4 and SS-5 were reported at concentrations of 178 ppm and 149 ppm, respectively. Since these results reported exceeded the MRSCC, additional excavation was needed.

On October 27, 2003, AquaTek preformed additional soil remediation in the vicinity of Drain 3. The original excavation was extended vertically beneath SS-4 and SS-5 to a depth of 5 feet bgs. One post-excavation sample was collected, SS-7, from 5 feet to 5.5 feet bgs. The arsenic result for SS-7 was reported at a concentration of 7.8 ppm, which was below the MRSCC.

AquaTek noted that groundwater was not encountered during excavation activities. Both excavations were backfilled with quarry process clean fill.

Following the completion of excavation activities and the removal of Drain 2 and Drain 3, AquaTek requested that an NFA for soil at the former floor drains was warranted at the subject property.

Upon review of the RIR by NJDEP, a notice of deficiency was issued dated August 4, 2004. In order for an NFA to be issued, the property owner needed to address the following:

- Determine the discharge point of the drainage system in the garage bay area.

- Complete a baseline ecological evaluation (BEE).

- Confirmation that the fill material used in the excavations was not contaminated and provide analytical results of the fill material.

14.2.6 Response to NJDEP Directive Letter

On April 5, 2005, AquaTek submitted a response to NJDEP regarding the administrative and technical deficiencies that were discovered in the 2003 RIR.

Garage Bay Drainage System

AquaTek obtained a signed affidavit dated March 31, 2005 from Mr. Donald Shauger, former owner of 1-7 Fourth Street. In this affidavit, Mr. Shauger indicated that "all drain systems in the garage are directly connected to the existing public sanitary sewer system." Since the discharge from the garage floor drains is directed to the publicly-owned sanitary sewer, AquaTek proposed no further action for this area of concern.

Baseline Ecological Evaluation

A Baseline Ecological Evaluation (BEE) was completed by AquaTek in March 2005. Results of this BEE for the subject property warranted no further ecological evaluation.

14.2.7 NJDEP No Further Action Determination

On June 21, 2005, NJDEP issued a No Further Action (NFA) letter for the removal of two floor drains and associated contaminated soils only, for the subject property (Block 2304 Lot 10).

14.3 SUMMARY OF REMEDIAL ACTIVITIES AT 13 FOURTH STREET

FEA received documents from the Township of South Orange related to site remediation activities conducted at the subject property. Documents that were reviewed include:

- Township of South Orange Village Certificate of Approval dated December 21, 2000 related to removal of one 1,000-gallong diesel UST and one 1,000-gallon gasoline UST.

- EnviroTactics UST removal report dated January 19, 2001.

14.4 SUMMARY OF PREVIOUS ENVIRONMENTAL REPORTS AT 13 FOURTH STREET

14.4.1 UST Removal

A UST removal report was prepared by EnviroTactics dated January 19, 2001. This report documented the removal activities of 1 – 1,000-gallon diesel UST and 1 – 1,000-gallon gasoline UST at the subject property. The tanks were single-walled steel tanks located near the northeast corner of the residential dwelling.

Prior to removal, the clean soil overlying both USTs was excavated and the tanks were uncovered and cut open for cleaning. No evidence of contamination was observed in the overlying soil, these soils were stockpiled for reuse as backfill material. All gasoline/diesel product was removed from the tanks and disposed of by Active Tank & Environmental Services of Newark, New Jersey.

Once the tanks were removed from the excavation, the soil was field screened and visually inspected. No evidence of contamination (i.e., stained soils, petroleum odor, or elevated PID readings) was encountered. Two post-excavation soil samples were collected at the base of each tank excavation, approximately 6.5 feet bgs. Samples D-1 and D-2 were collected from the 1,000-gallon diesel tank and analyzed for TPH. Samples G-1 and G-2 were collected from the 1,000-gallon gasoline tank, and analyzed for VOCs+10.

TPH concentrations in D-1 and D-2 were reported as non-detect in both samples. VOC results for G-1 and G-2 were reported below the NJDEP MSSCC.

Each tank was inspected and approved by the South Orange construction official, and each excavation was filled with quarry process stone. Groundwater was not encountered in either excavation area.

Based on the lack of discharge evidence and the soil sample results, EnviroTactics recommended no further action was necessary for the former USTs.

14.5 SUMMARY OF REMEDIAL ACTIVITIES AT 209 VALLEY STREET

FEA utilized the NJDEP Dataminer website to search for records related to remediation activities conducted at the subject property. The results of

the search indicate environmental assessment activities have been conducted at the subject property under the Air, Hazardous Waste, Right to Know (RTK), and Site Remediation Program (SRP). The subject property is listed under Air PI # G0591 (Beifus Motors) and G9019 (Monty Motors), Hazardous Waste PI # NJD982275299, RTK PI # 37908700000, and SRP PI # 016168. Many of the document submissions listed in Dataminer were subsequently reviewed during FEA's file review.

Documents reviewed during a file review conducted at NJDEP headquarters include the following:

- UST Registration Questionnaire dated November 9, 1987;
- UST Facility Questionnaires dated June 1999 and September 1999;
- UST Closure Approval dated June 1999 (UST No. 0161688, Notification # C99-0715);
- Site Investigation/Remedial Action Report (SI/RIR) dated September 24, 1999;
- No Further Action Letter dated March 20, 2000;
- Notice of Civil Administrative Penalty Assessment dated May 31, 2006; and
- Settlement Agreement dated July 28, 2006.

Other documents reviewed while conducting a site visit at the subject property include:

- Phase I Environmental Site Assessment/Preliminary Assessment dated June 1, 2010;
- Site Investigation Report (SIR) dated July 28, 2010; and
- UST Closure Report dated August 23, 2010.

14.6 SUMMARY OF PREVIOUS ENVIRONMENTAL REPORTS AT 209 VALLEY STREET

14.6.1 Site Investigation/Remedial Action Report

A Site Investigation/Remedial Action Report (SI/RAR) dated September 24, 1999 was prepared by Able Sanitary & Environmental Services (Able) for Beifus Body Shop. This investigation focused on the decommissioning/closure for the removal of five registered USTs NJDEP Case # 99-06-17-1422-27. Removal activities were completed in June and August 1999. The USTs consisted of:

- AOC-1 - 1,000-gallon motor oil UST (UST-T1);
- AOC-2 - 550-gallon waste oil UST (UST-T2);
- AOC-3 - 1,000-gallon No. 2 fuel oil UST (UST-T5);
- AOC- 4 - 275-gallon motor oil UST (UST-T3) and 275-gallon vehicular waste oil UST (UST-T4). Closed in place.

Site Investigation – Soils

AOC-2 UST-T2

On June 17, 1999, two soil samples, 2-A1 and 2-A2, were collected from the north and south ends at the base of the tank cavity at approximately 7.5 feet to 8 feet bgs. A third sample, 2-A3 was collected at a midway point underneath the piping between the former UST and the building, approximately 2 feet to 2.5 feet bgs. Samples were analyzed for TPHC with contingent analysis on 25% of samples with TPHC results greater than 100 ppm.

Soil sample results indicated that TPHC was detected at sample locations 2-A1 (225 ppm), 2-A2 (59.7 ppm) and 2-A3 (27.2 ppm). Since the TPHC result was greater than 100 ppm at sample location 2-A1, additional analysis was requested, which included VOCs+10, BN+15, PCB and Priority Pollutant metals. Results from the contingent analysis were reported below the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC) and the Residential Direct Contact Soil Cleanup Criteria (RDCSCC).

As a result of the soil sample analytical results being below the NJDEP soil cleanup criteria, the UST-T2 cavity was backfilled with field screened and segregated clean overburden and quarry process material.

AOC-4 UST-T3 and UST-T4

On August 3, 1999 soil samples were collected from underneath the west and east invert of UST-T3 (3-A1 and 3-A2) and UST-T4 (4-A1 and 4-A2). Soil samples were collected from approximately 6.5 feet to 7 feet bgs. A sample was not collected from the piping associated with the USTs because, no piping was observed. Samples were analyzed for TPHC with contingent analysis of VOCs+10, BN +15, PCB, and Priority Pollutant metals.

Soil sample results indicated that TPHC was detected at sample locations 3-A1 (1,860 ppm) 3-A2 (2,450 ppm), 4-A1 (2,980 ppm), and 4-A2 (4,320 ppm). Contingent analysis was conducted on sample 4-A2. Results from the contingent analysis were reported below the NJDEP IGWSCC and RDCSCC. Concentrations of PAHs at sample location 3-A2 were reported below the NJDEP IGWSCC and RDCSCC.

UST-T3 and UST-T4 were reportedly closed in place by filling with quarry process material and pea gravel overlain with poured reinforced concrete. However, in an earlier section of this report, it is noted that these tanks were uncovered, emptied, accessed, cleaned and ***exhumed***.

Remedial Action – Soils

AOC-1 UST-T1

One June 17, 1999, petroleum impacted soils were removed from AOC-1 to a depth of approximately 11.5 feet bgs. The overall excavation measured approximately 13 feet north-south and 7.5 feet east-west centered around the former UST location. Five post-excavation soil samples, 1-A1 through 1-A4, were collected from the sidewalls and sample 1-A5 was collected from the center base of the excavation from 10 feet to 11.5 feet bgs. One additional sample, 1-A6 was collected from 2 feet to 2.5 feet bgs at a point midway between the former UST location and the building. Samples were analyzed for TPHC with contingent analysis of VOCs+10, BN +15, PCB, and lead.

Soil sample results reported concentrations of TPHC at 1-A1 (24.7 ppm), 1-A2 (74.4 ppm), 1-A4 (126 ppm), and 1-A6 (2,840 ppm). Sample 1-A6 reported the highest TPHC concentration, therefore, contingent analysis

was requested. Results from the contingent analysis were below the NJDEP IGWSCC and RDCSCC.

AOC-3 UST-T5

On June 17, 1999, petroleum impacted soils were removed from AOC-3 to a depth of approximately 12.5 feet bgs. The final excavation measured approximately 8 feet north-south and 13 feet east-west centered around the former UST location. Five post-excavation soil samples, 5-A1 through 5-A4 were collected from the sidewalls, and sample 5-A5 was collected from the center base of the excavation from 12 feet to 13 feet bgs. One additional sample, 5-A6 was collected from 2 feet to 2.5 feet bgs at a point midway between the former UST location and the building. Samples were analyzed for TPHC with contingent analysis of VOCs+10, BN +15, PCB, and Priority Pollutant metals.

Soil sample results reported concentrations of TPHC at one location, 5-A3 south sidewall (50.3 ppm). Contingent analysis was requested, and the results of this analysis were below the NJDEP IGWSCC and RDCSCC.

UST-T1, UST-T5, and approximately 56 tons of petroleum impacted soils were removed and the excavations were backfilled with quarry process material. A variance was requested for the use of this type of backfill because the material is less permeable than the surrounding soils. This request was made based on the necessity of placing suitable road base material in the UST excavation to reconstruct the overlying roadway/parking area.

Based on the analytical results from the site investigation and post-excavation soil samples, the removal of approximately 56 tons of petroleum impacted soils, the absence of groundwater within the excavations, No Further Action was proposed for the site inclusive of the four AOCs comprising the five former USTs at the subject property.

14.6.2 NJDEP No Further Action Determination

On March 20, 2000, NJDEP issued a No Further Action (NFA) letter for NJDEP Case # 99-06-14-1442-27, UST #0161688, Closure #C99-0715. This case included the following: the abandonment in place of one 275-gallon waste oil UST and one 275-gallon motor oil UST, the removal of one 1,000-gallon #2 fuel oil UST, one 550-gallon waste oil UST, and one 1,000-gallon motor oil/waste oil UST for the subject property (Block 2303 Lot 7).

14.6.3 Phase I Environmental Site Assessment/Preliminary Assessment

A Phase I Environmental Site Assessment/Preliminary Assessment (Phase 1) was prepared by EcolSciences, Inc. (EcolSciences) for the subject property dated June 1, 2010. EcolSciences identified twelve AOCs, including the following:

- AOC-1 Aboveground Storage Tanks (ASTs) – One 275-gallon waste oil tank and a 500+ gallon motor oil tank are located within the automobile repair shop. Both tanks are situated on a concrete floor that is set above a full basement area. No staining or obvious signs of overfilling were observed by these tanks, and there is no direct migratory pathway in which spilled oiled could impact the underlying soil.

- AOC-2 USTs – Identifies USTs that were abandoned in place and removed and covered under the March 2000 NFA.

  Sanborn maps showed two single family homes and several detached structures on the subject property. The potential exists that heating oil USTs may be present adjacent to the former homes, and the potential exists that buried ASTs may be present in former basement areas.

- AOC-3 Dumpsters – A small trash dumpster was staged on the asphalt paved parking lot at the southeast corner of the subject property. No staining was observed within the parking lot.

- AOC-4 Chemical Storage Closets – small quantities of commercially packaged paints and solvents are used in the spray booth by Beifus Motors. Paints are stored and mixed in the paint mixing room behind the spray booth. Spent paints are drummed for off-site disposal, and there is a Safety Kleen™ solvent recovery system located adjacent to the spray booth to collect spent paint solvents. No significant staining was observed in the paint mixing room, and it appears paints and solvents are properly handled.

- AOC-5 Floor Drains – Floor drains were observed in the ground floor of the body shop. No staining was observed by these floor drains. A curtain drain was observed in front of the garage door to the main service area, and cement-filled curtain drains were observed within the auto body shop. A curtain drain and sump pump were also observed within the basement, which is connected to the municipal sewer.

- AOC-6 Process Area Sinks and Piping – Slop sinks were observed in the automotive service area and the former parts department on the second floor. Both sinks are connected to the municipal sanitary sewer.

- AOC-7 Storm Sewer Collection Systems – Runoff from asphalt paved portions of the subject property flows overland and is collected in a series of curbside storm sewer catch basins. No staining was observed on paved areas of the subject property.

- AOC-8 Electrical Transformers or Capacitors – Five utility-owned pole-mounted electrical transformers were observed along the roadside on the east side of the subject property. No staining or evidence of past discharges of transformer oil was apparent beneath the transformers.

- AOC-9 Compressor Vent Discharges – Three air compressors service the auto body shop and service department operations. The condensate from the air compressors is contained in a 5-gallon container. Air compressor blowdown does not discharge to the floor of the compressor room or to the outside of the building.

- AOC-10 Air Vents and Ducts – Filtered exhaust from the spray booth is vented to the roof. A duct carries the exhaust to the outer wall of the building where it is vented to into the atmosphere. No staining was observed by the exhaust vent.

- AOC-11 Hydraulic Lifts – Four out of service automobile hydraulic lifts are located within the central service department area. The piston cylinders of the hydraulic floor lifts contain approximately 15-gallons of hydraulic fluid, and there is typically a small centrally located aboveground or underground hydraulic oil storage tank.

- AOC-12 Potential Asbestos Containing Materials – Potential asbestos containing materials observed during EcolSciences' site visit included 9- by 9-inch floor tiles in the parts department and the cement-based ceiling tiles in the basement ceiling. Given the age of the building, it is possible that the roofing materials could contain asbestos.

EcolScience recommended the following activities to address the AOCs:

- AOC-2 USTs – a geophysical survey to confirm the presence or absence of USTs on the subject property. If found, the USTs or

buried ASTs should be removed according to applicable State and local regulations.

- AOC-5 Floor Drains – The installation and sampling of a series of soil borings adjacent to the curtain drains to document that past use of these drains has not impacted the underlying soil.

- AOC-11 Hydraulic Lifts – Prior to sampling, a geophysical survey should be performed to map-out the subsurface configurations of each lift and, if present, locate the hydraulic oil USTs for the lifts. The installation and sampling of a series of soil borings adjacent to the hydraulic lifts is recommended to determine the integrity of pistons and hydraulic oil reservoir(s).

- AOC-12 Potential Asbestos Containing Materials – An asbestos survey should be conducted to identify potential asbestos-containing materials. Potential or suspected asbestos-containing materials should be periodically inspected and repaired, or preferably removed by a licensed asbestos contractor for proper off-site disposal.

14.6.4 Site Investigation Report

A Site Investigation Report (SIR) dated July 28, 2010 was prepared by EcolSciences. This investigation focused on addressing the AOCs identified in the June 2010 Phase 1.

AOC-2 USTs

On July 1, 2010, a geophysical survey was completed throughout the exterior portions of the subject property. One anomaly, indicative of a USTs was detected onsite (Anomaly A). This anomaly was suspected to be a 550-gallon fuel oil UST. The tank was inactive and buried approximately 2.5 feet bgs. No fill ports or vent lines were observed or detected.

Anomaly A was detected in the parking lot behind the Beifus Motors building. Historically, this piece of property was a separate lot and a fuel oil tank is present onsite presumably associated with a former dwelling. Two soil borings were attempted using a drill rig. None of the soil samples collected were conclusive regarding the condition of the UST. Refusal was encountered at a shallow depth, but it is unclear in this report what that depth was.

Two other anomalies (Anomaly C and Anomaly D) were detected along Valley Street on the subject property. Both anomalies were indicative of former excavated areas, and could be associated with the removal of former USTs.

EcolSciences recommended that the UST be removed according to State and local regulations.

AOC-5 Floor Drains

Three curtain drains are located on the subject property. One cement-filled curtain drain is located in the auto body repair shop. Additionally, two active curtain drains are located at the entrance of the building and building basement. Additionally, a square concrete basin presumably serving as a drains junction box or pump box was observed at the entrance in the main building. Two soil borings were installed and soil samples were collected from the interval beneath the invert of the drain and basin. One sample was collected adjacent to the square concrete box (D1) and a second sample was collected adjacent to the concreted curtain drain (D2). No other borings were drilled adjacent to the other two drains because it was obvious that their purpose was to prevent storm water from entering into the garage and basement. Both soil samples were analyzed for Target Compound List/Target Analyte List (TCL/TAL 30) less pesticides.

Soil sample results for VOCs reported an estimated concentration for tetrachloroethene (PCE) of 0.00042 J mg/Kg at D1. This result is below the NJDEP Residential/Non-Residential Direct Contact Soil Remediation Standard (R/NRDCSRS) and the Default Impact to Groundwater Soil Screening Levels (DIGWSSL). Two BN compounds were reported at concentration in excess of NJDEP DIGWSSL including benzo(a)anthracene (0.6 mg/Kg at D1) and benzo(a)pyrene (0.49 mg/Kg at D1, 0.42 mg/Kg at D2). Benzo(a)pyrene results for both samples exceed the R/NRDCSRS of 0.2 mg/Kg. PCB compounds were reported as non-detect for both samples. Metals concentrations reported in excess of the NJDEP DIGWSSL at sample location D1 include aluminum at 5,200 mg/Kg and manganese at 346 mg/Kg. Metals concentrations reported in excess of the NJDEP DIGWSSL at sample location D2 include aluminum at 7,650 mg/Kg, lead at 94.6 mg/Kg, and manganese at 365 mg/Kg. Metals concentrations did not exceed the R/NRDCSRS for either sample.

EcolSciences noted that both soil samples exhibited fill material appearance (mixture of silty sand, pieces of brick, concrete, and cinder). Since benzo(a)anthracene, benzo(a)pyrene, and lead are typically

encountered in historic fill, aluminum and manganese are naturally occurring, and groundwater was more than two feet below the sample, EcolSciences recommended no further investigation for this AOC.

AOC-11 Hydraulic Lifts

Four inactive hydraulic lifts are located in the service area. A drill rig was used to install one soil boring adjacent to each lift. One soil sample was collected from each boring at an unspecified depth. These samples, identified as L1 through L4, were analyzed for PHC and Polynuclear Aromatic Hydrocarbons (PAHs).

PHC results ranged from non-detect in samples L-2 and L-3 to 650 mg/Kg in L-1 and 580 mg/Kg at L-4. Contingent PAH analysis was run on L-1 and L-4. Two PAH compounds, benzo(g,h,i)perylene (0.08 J mg/Kg at L-1) and pyrene (0.086 J mg/Kg at L-4), were detected as an estimated value, but results were below the NJDEP R/NRDCSRS and DIGWSSL.

EcolSciences recommended the removal of all four hydraulic lifts and any impacted soil encountered, followed by post-excavation soil sampling.

14.6.5 UST Closure

A UST Closure document dated August 23, 2010 was prepared by Environmental Waste Management Associates, LLC (EWMA). This document reported on the removal and sampling of one 550-gallon UST previously associated with residential structures. Holes were observed in the UST after the material was removed from the tank indicating that the holes were caused during the removal. No indication of a discharge was noted within the excavation. Based on the condition of the UST and the soil within the excavation, the Township of South Orange Code Official approved the tank removal. A total of three samples were collected from the excavation, two from the base of the excavation and one from beneath the piping run. Results were non-detect for petroleum hydrocarbons.

Sample IDs and analytical results were not included in this document.

14.7 ORDER OF MAGNITUDE EVALUATION

As required by the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E), FEA conducted an evaluation of historic sample results which were used to support a final remediation document. Results were

compared to current remediation standards to determine if any results exceed the current standards by more than and order of magnitude.

14.7.1 1-7 Fourth Street

Soil sample results from the 2001 SIR were compared to the current NJDEP Residential/Non-Residential Direct Contact Soil Remediation Standards (R/NRDCSRS). Exceedences of the R/NRDCSRS (19 mg/Kg) for arsenic were noted in Drain 2 (152 mg/Kg) sample.

Soil sample results from the December 2003 RIR were compared to the current NJDEP R/NRDCSRS for arsenic. No exceedences of these standards were reported for Drain 2 samples, SS-1 and SS-2. Exceedences of the R/NRDCSRS (19 mg/Kg) for arsenic were noted in Drain 3 samples, SS-3 (369 mg/Kg), SS-4 (178 mg/Kg), and SS-5 (149 mg/Kg). No exceedence of these standards were reported at Drain 3 sample SS-7 (7.8 mg/Kg).

In summary, a review of historical data at the subject property indicates soil results do exceed the current standards. However, the contaminant concentrations remaining are less than an order of magnitude greater than the remediation standard. Therefore, the protectiveness evaluation is complete with one exception, which is discussed in Section 16.3.

In accordance with the NJDEP *Preliminary Assessment Technical Guidance, the Order of Magnitude Evaluation* was not performed for historical TPHC results, and results were not screened against the current Default Impact to Groundwater Soil Screening Levels (DIGWSSL).

14.7.2 209 Valley Street

Soil sample results from the 1999 SI/RAR were compared to the current NJDEP Residential/Non-Residential Direct Contact Soil Remediation Standards (R/NRDCSRS). No exceedences of these standards for VOCs, BN, PCB, or metals were observed.

Soil sample results from the 2010 SIR were compared to the current NJDEP R/NRDCSRS. Exceedences of the R/NRDCSRS were reported for benzo(a)pyrene (0.2 mg/Kg) in D1 (0.49 mg/Kg) and D2 (0.42 mg/Kg) collected from AOC-5. No exceedences of the SRS were reported for metals compounds.

A review of the historical data indicates that some soil results do exceed the current standards. However, the contaminant concentrations

remaining are less than an order of magnitude greater than the remediation standard. The protectiveness evaluation is complete with one exception, which is discussed in Section 16.3.

In accordance with the NJDEP *Preliminary Assessment Technical Guidance, the Order of Magnitude Evaluation* was not performed for historical TPHC results, and results were not screened against the current Default Impact to Groundwater Soil Screening Levels (DIGWSSL).

14.8 PROTECTIVENESS EVALUATIONS OF APPROVED REMEDIES

14.8.1 1-7 Fourth Street

As discussed above, NJDEP issued an NFA for the subject property. The NFA was issued following the submission of investigation sample results which the NJDEP viewed as acceptable. No remedies have been implemented at the subject property.

14.8.2 13 Fourth Street

No documentation was observed indicating that an NFA was issued for the tanks located at the subject property. Additionally, post-excavation sidewall samples were not collected from either former tank area. Documentation related to closure approval from the NJDEP was not observed.

14.8.3 209 Valley Street

As discussed above, NJDEP issued an NFA for the subject property. The NFA was issued following the submission of a SI/RAR that documented acceptable UST closure at the subject property. The remedy included the removal of petroleum impacted soil surrounding two former USTs.

15.0 SITE INSPECTION

A site inspection was completed on March 9, 2015, by Ms. Michelle Mirigliano of FEA. During the site visit, FEA made the following observations:

- Various sealants, paints, piping, and cylinders were observed throughout the main office building at 1-7 Fourth Street. Two diesel powered mini-excavators were present on the asphalt lot, no staining was observed around this equipment.

- One 275-gallon used oil AST was present in the detached garage space at 13 Fourth Street. Staining and sorbent material was observed underneath this AST. FEA was unable to fully view the former 1,000-gallon diesel fuel UST and 1,000-gallon gasoline UST excavation areas due to snow piles. A dry well was observed in the basement of the subject property.

- One 275-gallon AST was staged within the detached garage space at 15 Fourth Street. This AST was taken off-line and moved from an outside location along the western property boundary. It was difficult to determine if there was any staining on the asphalt where the AST was once located as the area was snow covered and wet.

- One 275-gallon heating oil AST was located in the basement at 16 Fourth Street, oil residue was observed on the top and sides of this AST.

- Several active hydraulic lifts were present throughout the subject property at 209 Valley Street. One 275-gallon waste oil tank and one 500+ gallon motor oil tank was observed in the auto repair area of the property.

- A spray booth with exhaust venting to the roof was observed in the body shop area at 209 Valley Street. Additionally, various paints, lubricants, and oils were observed in chemical storage areas throughout the shop.

- Curtain drains present at the ground level of the body shop and at the bottom of a ramp leading to the basement.

Photographs taken during the site inspection are included in Appendix A.

16.0 POTENTIAL AREAS OF CONCERN

16.1 AOC-1 – ABOVEGROUND STORAGE TANKS

13 Fourth Street

One 275-gallon waste oil AST was observed in the detached garage space at the subject property. Waste oil is recovered by Lorco. Staining and sorbent material was observed on the floor beneath the tank.

Additional investigation is recommended for this AOC.

15 Fourth Street

One inactive 275-gallon diesel fuel AST was observed in the detached garage space of the subject property. The property owner indicated that the AST was taken out of service approximately 35 years ago and was previously located outside of the garage. The AST was used to service construction vehicles. A visual inspection of the former area where the AST was located was difficult to complete due to the area being wet from snow.

Additional investigation is recommended for this AOC.

16 Fourth Street

One 275-gallon heating oil AST remains in the basement at the subject property. The integrity of the tank was intact and no staining was observed underneath the tank. Oil residue was observed on the top and sides of the tank around the inlet pipe. The fill port for this AST was not observed during the site visit.

One 275-gallon AST was removed from the basement in 2014, no staining was observed on the floor where the former tank was placed.

No additional investigation is recommended for this AOC at this subject property.

209 Valley Street

One 275-gallon waste oil tank and a 500+ gallon motor oil tank are located within the automobile repair shop. Both tanks are situated on a concrete floor that is set above a full basement area. No staining or obvious signs

of overfilling were observed by these tanks, and there is no direct migratory pathway in which spilled oil could impact the underlying soil.

No additional investigation is recommended for this AOC.

16.2 AOC-2 – FORMER UNDERGROUND STORAGE TANKS

1-7 Fourth Street

As reported in IWM's December 1999 report, three 1,500-gallon USTs located on the northwestern boundary of the subject property were removed in 1989 and the soil results reportedly warranted no further action. Additionally, a 550-gallon heating oil UST was removed in November of 1995. Based on earlier reports prepared by others, these tanks apparently did not adversely impact the subsurface. No other information regarding these USTs (i.e., sample locations, sample results, NJDEP closure approval, etc.) was observed.

Test pit excavations and sampling was proposed for a 1,500-gallon heating oil UST located at the northeast corner of the office building. The status of this tank is unknown as no further information was observed by FEA.

Additional investigation is recommended for this AOC at the subject property.

13 Fourth Street

As reported in EnviroTactics January 2001 report, one 1,000-gallon gasoline UST and one 1,000-gallon diesel fuel UST was removed from the subject property. Based on the review of the sample locations for this AOC, two samples were collected from the base of each excavation. The limits of the excavation areas were not mentioned in EnviroTactics report. Results for TPH were reported as non-detect and VOCs were reported below the NJDEP MRSCC. However, no post-excavation sidewall samples were collected in either of the excavation areas. Additionally, soil overlying the UST was used as backfill material along with quarry process stone. Even though there were no visual impacts, odors or elevated PID readings observed within this soil, the soil was not sampled prior to use as backfill material.

Additional investigation is recommended for this AOC at the subject property.

209 Valley Street

As reported in Able's SI/RAR dated September 1999, five former USTs were removed/abandoned in place at the subject property. Based on the analytical results from the site investigation and post-excavation soil samples, the removal of approximately 56 tons of petroleum impacted soils, and the absence of groundwater within the excavations, No Further Action was proposed for the site inclusive of the four AOCs comprising the five former USTs at the subject property. An NFA letter was issued by NJDEP dated March 20, 2000.

Additionally, a 550-gallon UST discovered during a 2010 geophysical survey was also removed from the subject property in August 2010. Based on the analytical results, no further action was warranted according to EWMA.

Analytical data associated with this UST and closure approval documents were not available for review.

Additional investigation is recommended for the 550-gallon UST.

16.3 AOC-3 - FORMER AND CURRENT DRAINS

1-7 Fourth Street

As reported in AquaTek's RIR dated December 19, 2003, no soil impacts were detected above the NJDEP MRSCC, and AquaTek requested that an NFA be issued for the soils related to the former drains on the subject property. An NFA letter was issued by NJDEP dated June 21, 2005.

A review of historical data at the subject property indicates soil results do exceed the current standards. While arsenic was delineated vertically below the floor drains in 2003, there is no indication whether or not the piping that connected those drains was removed and/or sampled. Additionally, horizontal delineation of arsenic in soil was not completed at either former floor drain location, and a potential source area was not identified during any previous investigation.

Additional investigation is recommended for this AOC.

209 Valley Street

As reported in the EcolSciences' SIR dated July 2010, soil samples were collected from the interval beneath the invert of the curtain drain and basin located within the body shop. Metals (aluminum, manganese, and lead), benzo(a)anthracene, and benzo(a)pyrene were detected in the soil samples. EcolSciences stated that the soils sampled exhibited characteristics similar to fill material and no further investigation was warranted. However, when compared to the current R/NRDCSRS, the base neutral compounds exceed the current standards. The exceedences have not been horizontally or vertically delineated.

A review of the historical data indicates that some soil results do exceed the current standards. Concentrations of benzo(a)pyrene at both D1 and D2 sample locations were reported above the current R/NRDCSRS. Vertical and horizontal delineation was not completed at these locations during the SI and the impacted soil still remains on the subject property.

Additional investigation is recommended for this AOC.

16.4 AOC-4 - CHEMICAL STORAGE CLOSETS

209 Valley Street

Small quantities of commercially packaged paints and solvents are used in the spray booth by Beifus Motors. Paints are stored and mixed in the paint mixing room behind the spray booth. Spent paints are drummed for off-site disposal, and there is a Safety Kleen™ solvent recovery system located adjacent to the spray booth to collect spent paint solvents. No significant staining was observed in the paint mixing room, and it appears paints and solvents are properly handled.

No additional investigation is recommended for this AOC.

16.5 AOC-5 – PROCESS AREA SINK AND PIPING

209 Valley Street

Slop sinks were observed in the automotive service area and the former parts department on the second floor. Both sinks are connected to the municipal sanitary sewer.

No additional investigation is recommended for this AOC.

16.6 AOC-6 – AIR VENTS AND DUCTS

209 Valley Street

Filtered exhaust from the spray booth is vented to the roof. A duct carries the exhaust to the outer wall of the building where it is vented to into the atmosphere. No staining was observed by the exhaust vent.

No additional investigation is recommended for this AOC.

16.7 AOC-7 – HYDRAULIC LIFTS

As reported in EcolSciences SIR dated July 2010, four inactive hydraulic lifts are located in the service area. Two PAH compounds, benzo(g,h,i)perylene (0.08 J mg/Kg at L-1) and pyrene (0.086 J mg/Kg at L-4), were detected as an estimated value, but results were below the NJDEP R/NRDCSRS and DIGWSSL.

EcolSciences recommended that all four hydraulic lifts be removed and that any impacted soil encountered, soil remediation and post-excavation soil sampling be performed.

Additionally, 7 active lifts were observed within the service shop, 2 active lifts within the basement area, and 3 active lifts within the tenant space. No staining was observed around any of the lifts.

Additional investigation is recommended for the out of service hydraulic lifts.

16.8 AOC-8 – ELECTRICAL TRANSFORMERS

Five utility owned pole-mounted electrical transformers were observed along the roadside on the east side of the subject property. No staining or evidence of past discharges of transformer oil was apparent beneath the transformers.

No additional investigation is recommended for this AOC.

16.9 AOC-9 – DRY WELL

13 Fourth Street

A dry well was located in the basement space of the subject property. The discharge pathway could not be determined.

Additional investigation is recommended for this AOC.

16.10 AOC-10 – HISTORIC FILL MATERIAL

1-7 Fourth Street

This subject property is adjacent to an active rail line, and a portion of this property may be underlain by historic fill material. Historically, a rail spur was once active on this subject property.

Additional investigation is recommended for this AOC.

16.11 AOC-11 – FORMER RAILROAD SPUR

1-7 Fourth Street

As seen in historical Sanborn maps, a railroad spur was located on the subject property between approximately 1912 and 1967. This railroad spur was adjacent to a former lumber shed. No records have been observed related to any investigation conducted along this railroad spur.

Additional investigation is recommended for this AOC.

16.12 AOC-12 – DUMPSTERS

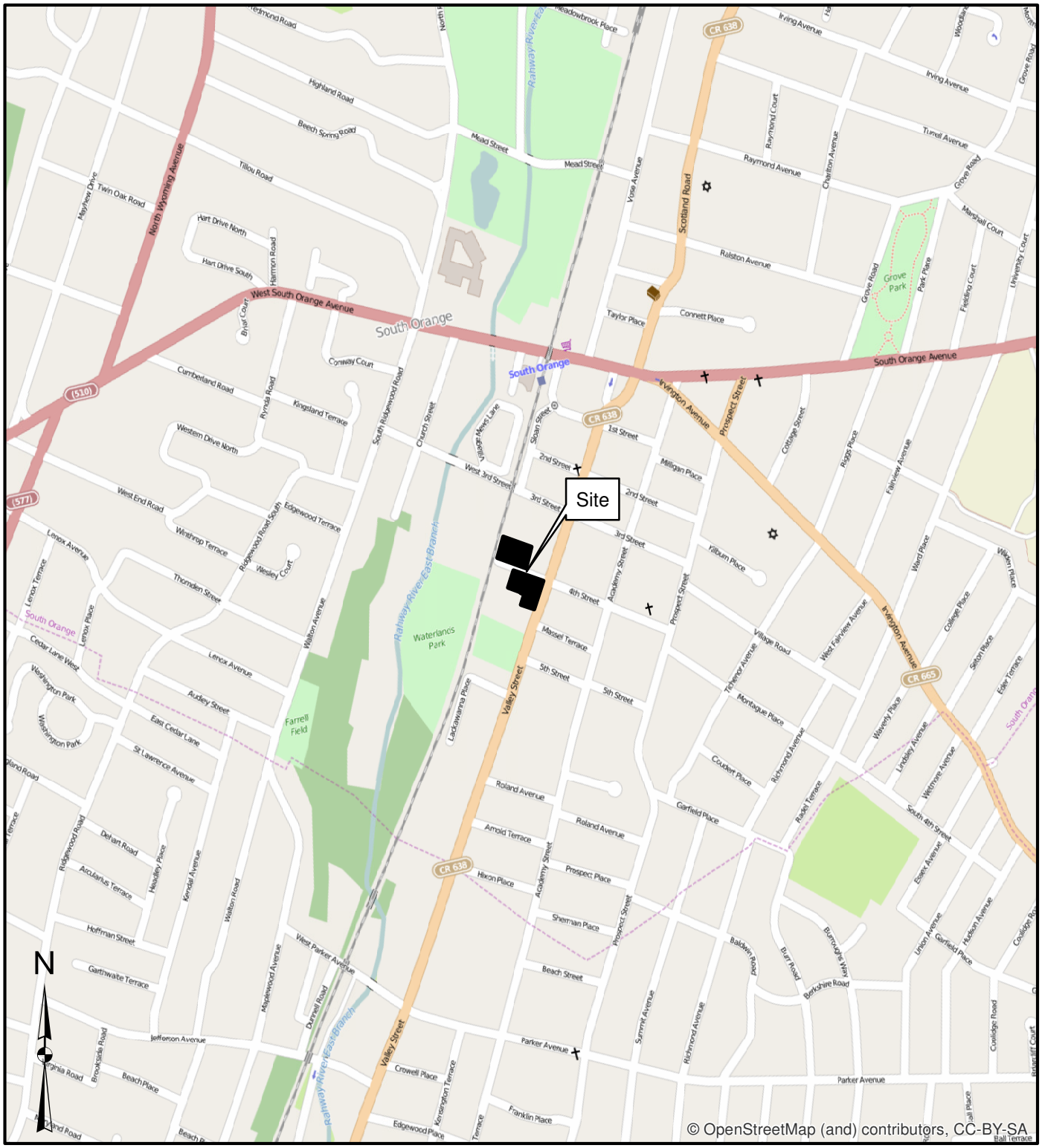
During the site inspection, two dumpsters were observed on the subject properties, one at 1-7 Fourth Street and one at 209 Valley Street, which are used for regular trash disposal. Dumpsters are emptied on a weekly basis, and no staining was observed around the dumpster area.

No additional investigation is recommended for this AOC.

17.0 CONCLUSIONS AND RECOMMENDATIONS

FEA has performed a Preliminary Assessment in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Preliminary Assessment Technical Guidance* (April 2013) for 1-7, 13, 15, and 16 Fourth Street and 209 Valley Street in Township of South Orange Village, Essex County, New Jersey. The assessment revealed the presence of Areas of Concern at the subject properties. FEA has determined that investigation activities will be necessary to determine if these areas have resulted in environmental impacts. Areas where site investigation or remediation activities are necessary include the following:

- AOC-1 – Aboveground Storage Tanks – 13, 15, 16 Fourth Street,
- AOC-2 – USTs – 1-7 and 13 Fourth Street, 209 Valley Street,
- AOC-3 – Former and Current Drains – 1-7 Fourth Street and 209 Valley Street,
- AOC-7 – Hydraulic Lifts – 209 Valley Street,
- AOC-9 – Dry Well – 13 Fourth Street,
- AOC-10 – Historic Fill Material – 1-7 Fourth Street,
- AOC-11 – Former Railroad Spur – 1-7 Fourth Street.



Sources:
Base Map: ERSI

FENNELLY ENVIRONMENTAL ASSOCIATES, LLC

Fennelly Environmental Associates, LLC
116 Village Blvd., Suite 200
Princeton, New Jersey 08540

SITE LOCATION MAP
1-7, 13, 15, AND 16 FOURTH STREET
AND 209 VALLEY STREET
BLOCK 2304, LOTS 10-12, BLOCK 2303, LOTS 7 AND 8
SOUTH ORANGE, ESSEX COUNTY, NEW JERSEY

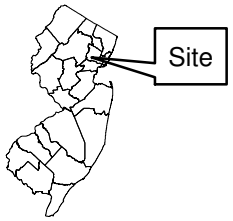
DWN: SL
CHKD: MM
Date: 4/16/2015

Figure No: 1

GIS Maps\South Orange - Fourth St Properties\Figure 1 Site location map.mxd

N

0 500 1,000 1,500 2,000 Feet



Sources:
Base Map: ERSI

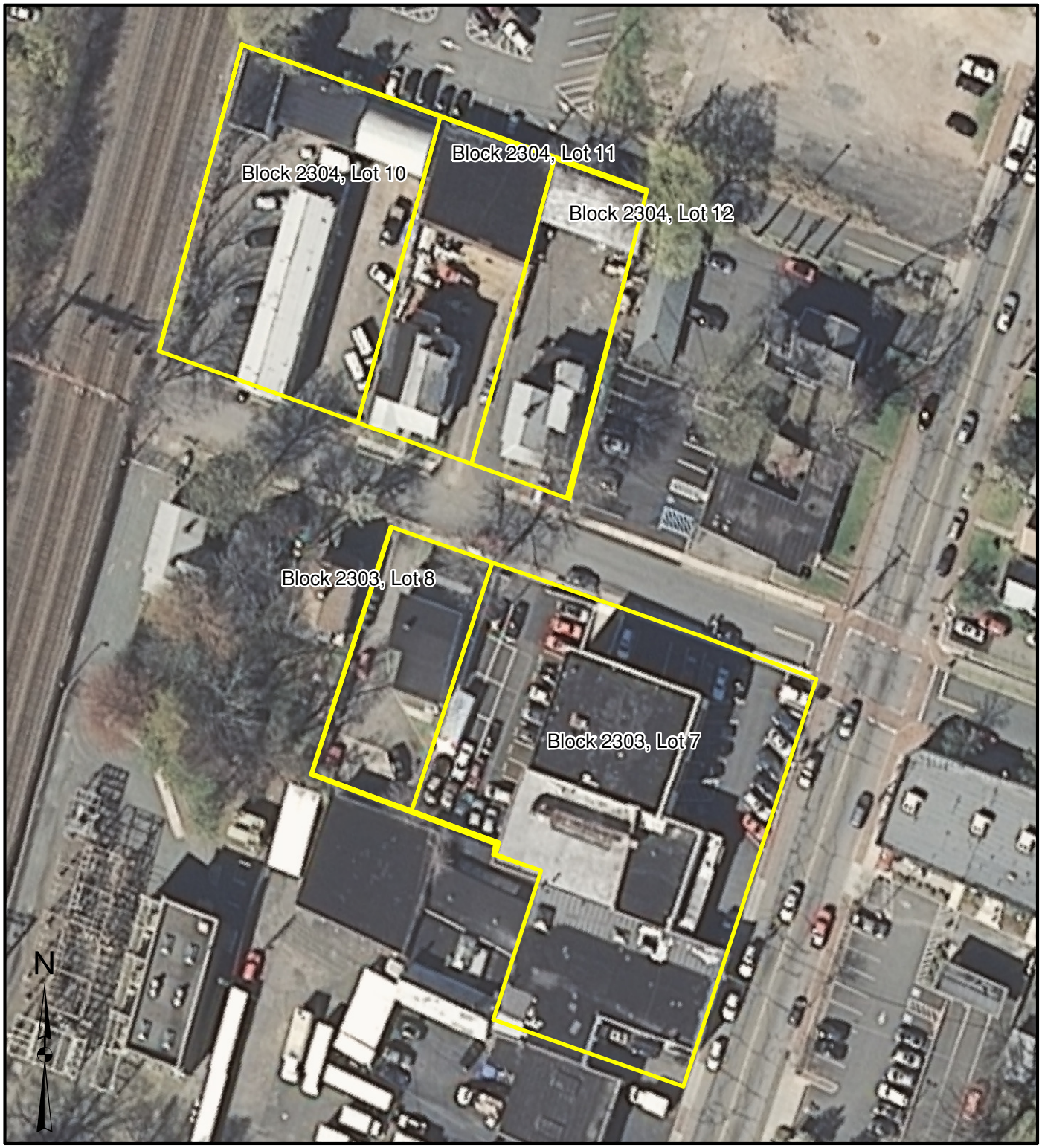
FEA
FENNELLY ENVIRONMENTAL ASSOCIATES, LLC
Fennelly Environmental Associates, LLC
116 Village Blvd., Suite 200
Princeton, New Jersey 08540

TOPOGRAPHIC MAP
1-7, 13, 15, AND 16 FOURTH STREET
AND 209 VALLEY STREET
BLOCK 2304, LOTS 10-12, BLOCK 2303, LOTS 7 AND 8
SOUTH ORANGE, ESSEX COUNTY, NEW JERSEY

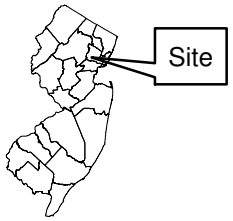
DWN: SL
CHKD: MM
Date: 4/16/2015

Figure No: **2**

GIS Maps\South Orange - Fourth St Properties\Figure 2 - Topographic Map.mxd



0 70 140 Feet



Sources:
Base Map: ERSI

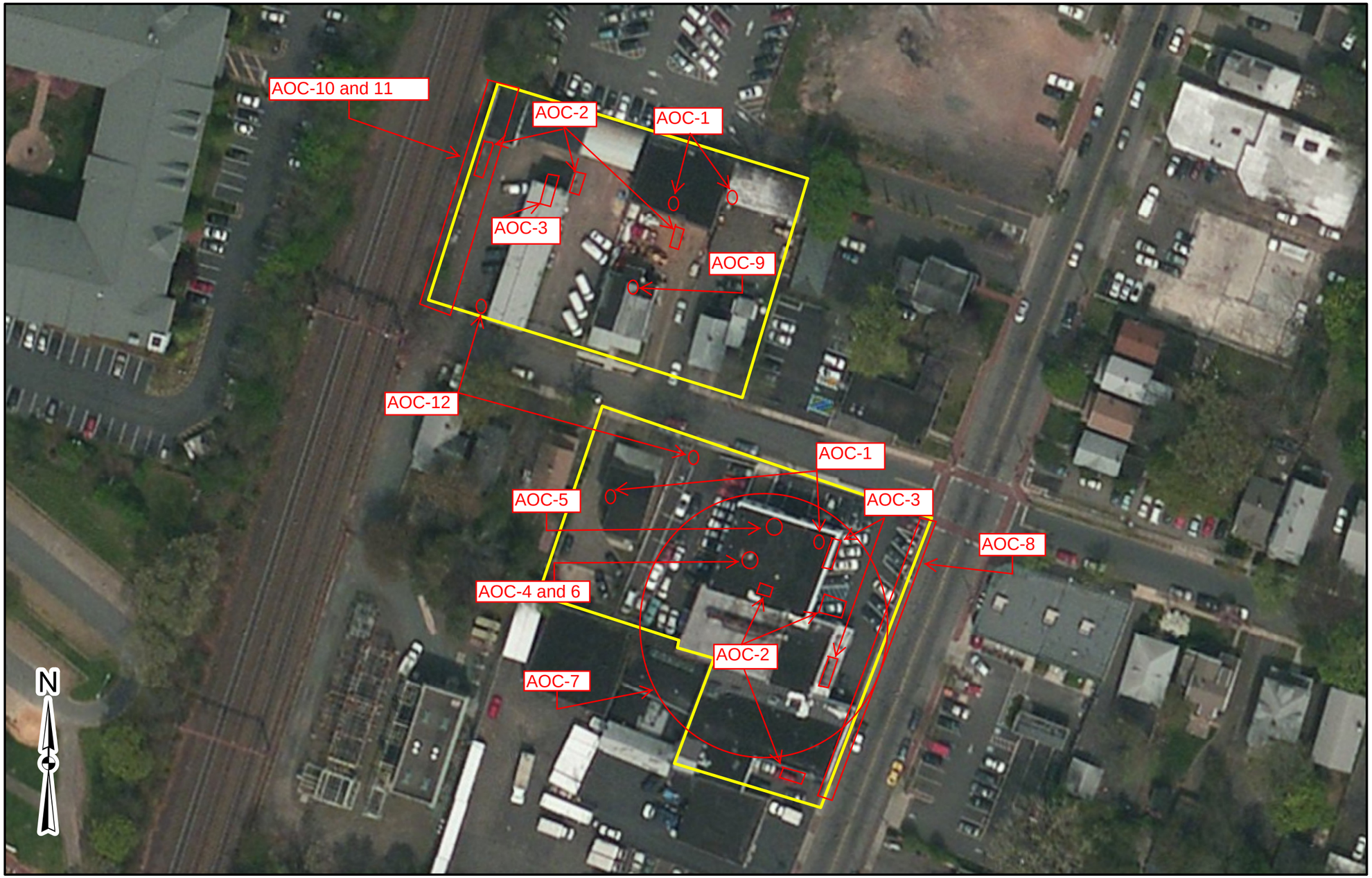
FENNELLY ENVIRONMENTAL ASSOCIATES, LLC
Fennelly Environmental Associates, LLC
116 Village Blvd., Suite 200
Princeton, New Jersey 08540

TAX MAP
1-7, 13, 15, AND 16 FOURTH STREET
AND 209 VALLEY STREET
BLOCK 2304, LOTS 10-12, BLOCK 2303, LOTS 7 AND 8
SOUTH ORANGE, ESSEX COUNTY, NEW JERSEY

DWN: SL
CHKD: MM
Date: 4/16/2015

Figure No: 3

GIS Maps\South Orange - Fourth St Properties\Figure 3 - Tax Map.mxd



Legend

Property Boundary

0 35 70 140 Feet

Sources:
Base Map: ERSI

FENNELLY ENVIRONMENTAL ASSOCIATES, LLC

Fennelly Environmental Associates, LLC
116 Village Blvd., Suite 200
Princeton, New Jersey 08540

AERIAL SITE MAP
1-7, 13, 15, AND 16 FOURTH STREET
AND 209 VALLEY STREET
BLOCK 2304, LOTS 10-12, BLOCK 2303, LOTS 7 AND 8
SOUTH ORANGE, ESSEX COUNTY, NEW JERSEY

DWN: SL
CHKD: MM
Date: 4/16/14

Figure No: 4

GIS Maps\South Orange - Fourth St Properties\Fig 4 Orthoimagery Map.mxd

APPENDIX A

SITE PHOTOGRAPHS

Photo 1 AOC-1 - 275-gallon used oil AST at 13 Fourth Street

Photo 2 AOC-1 - 275-gallon heating oil AST at 15 Fourth Street

Photo 3 AOC-1 - 275-gallon diesel fuel AST at 16 Fourth Street

Photo 4 AOC-1 - 275-gallon used oil AST at 209 Valley Street

Photo 5 AOC-1 - 500+gallon motor oil AST at 209 Valley Street

Photo 6 AOC-3 - Former location of floor drain (D-3) at 1-7 Fourth Street

Photo 7 AOC-3 Curtain Drain at 209 Valley Street

Photo 8 AOC-3 - Curtain Drain in basement at 209 Valley Street

Photo 9 AOC-4 - Chemical Storage Area at 1-7 Fourth Street

Photo 10 AOC-4 - Chemical Storage Area at 209 Valley Street

Photo 11 AOC-5 Parts washing sink at 209 Valley Street

Photo 12 AOC-6 - Spray Booth exhaust system at 209 Valley Street

Photo 13 AOC-7 - Hydraulic Lifts at 209 Valley Street

Photo 14 AOC-8 - Electrical Transformers at 209 Valley Street

Photo 15 AOC-9 - Dry Well at 13 Fourth Street

APPENDIX B

LOCAL GOVERNMENT RECORDS

Township of South Orange Village
101 South Orange Ave
South Orange, NJ 07079
973-378-7715

CERTIFICATE
IDENTIFICATION

Date Issued: 11/03/1995
Control #: 2696
Permit #: 19950565

Block: 2304 Lot: 10 Qual:
Work Site Location: 1-7 4TH STREET
SOUTH ORANGE
Owner in Fee: SCHVEY, ROBERT
Address: 1 FOURTH ST
SOUTH ORANGE NJ 07079
Telephone:
Agent/Contractor: N.A.RAJOPPI
Address: 2 GARY ROAD
UNION NJ 07083
Telephone:
Lic. No./ Bldrs. Reg.No.: 1106 Federal Emp. No.:
Social Security No.:

Home Warranty No:
Type of Warranty Plan: [ ] State [X] Private
Use Group: U
Maximum Live Load:
Construction Classification:
Maximum Occupancy Load:
Certificate Exp Date:
Description of Work/Use:
REMOVE 550 GALLON OIL TANK

Update Desc. of Wk/Use:

[ ] **CERTIFICATE OF OCCUPANCY**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

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ANTHONY GRENCI

ANTHONY GRENCI Construction Official

[ ] **CERTIFICATE OF CLEARANCE-LEAD ABATEMENT 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC 5:17, to the following extent:

[ ] Total removal of lead-based paint hazards in scope of work

[ ] Partial or limited time period(_____ years); see file

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This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

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This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

Fees: $28.00
Paid[X]Check No.: 1162
Collected by: AMG

distributed 6/27/05 V. Admin V. Engineer Air Code Enforcement V. Counsel

State of New Jersey

Richard J. Codey
Acting Governor

Department of Environmental Protection

Bradley M. Campbell
Commissioner

Division of Remediation Management & Response
Northern Bureau of Field Operations
7 Ridgedale Avenue
Cedar Knolls, NJ 07927-1112
(973)-631-6401

June 21, 2005

Mr. Donald Schauger
1-7 Fourth Street LLC
380 Lackwanna Pl
South Orange, NJ 07079

Re: Area of Concern: Two (2) floor drains
Unrestricted Use No Further Action Letter and Covenant Not to Sue
Block: 2304 Lot: 10
1-7 Fourth Street LLC, South Orange, Essex County
Preferred ID: 213875 Activity Number Reference: BFO030001
Communication Center # 03-09-29-1537-52, File # 07-19-183

Dear Mr. Schauger:

Pursuant to N.J.S.A. 58:10B-13.1 and N.J.A.C. 7:26C, the New Jersey Department of Environmental Protection (Department) makes a determination that no further action is necessary for the remediation of the area of concern specifically referenced above, except as noted below, so long as Donald Schauger did not withhold any information from the Department. This action is based upon information in the Department's case file and 1-7 Fourth Street LLC's final certified report dated December 19, 2003. In issuing this No Further Action Determination and Covenant Not to Sue, the Department has relied upon the certified representations and information provided to the Department.

By issuance of this No Further Action Determination, the Department acknowledges the completion of a Remedial Action pursuant to the Technical Requirements for Site Remediation (N.J.A.C. 7:26E) for the **removal of two (2) Floor Drains and associated contaminated soils only,** and no other areas. Post excavation sample analytical results were below the cleanup criteria developed for the site. Ground water was not encountered during remedial activities. The Department reserves its rights to require any person responsible for the contamination at the site to address Natural Resource Injuries.

NO FURTHER ACTION CONDITIONS

As a condition of this No Further Action Determination pursuant to N.J.S.A. 58:10B-12o, Donald Schauger/1-7 Fourth Street LLC and any other person who was liable for the cleanup and removal costs, and remains liable pursuant to the Spill Act, shall inform the Department in writing within 14 calendar days whenever its name or address changes. Any notices submitted pursuant to this paragraph shall reference the above case numbers and shall be sent to: Director, Division of Remediation Management and Response, P.O. Box 28, Trenton, N.J. 08625.

COVENANT NOT TO SUE

The Department issues this Covenant Not to Sue (Covenant) pursuant to N.J.S.A. 58:10B-13.1. That statute requires a Covenant not to sue with each no further action letter. However, in accordance with N.J.S.A. 58:10B-13.1, nothing in this Covenant shall benefit any person who is liable, pursuant to the Spill Compensation and Control Act (Spill Act), N.J.S.A. 58:10-23.11, for cleanup and removal costs and the Department makes no representation by the issuance of this Covenant, either express or implied, as to the Spill Act liability of any person.

The Department covenants, except as provided in the preceding paragraph, that it will not bring any civil action against:

(a) the person who undertook the remediation;
(b) subsequent owners of the subject property;
(c) subsequent lessees of the subject property; and
(d) subsequent operators at the subject property;

for the purposes of requiring remediation to address contamination which existed prior to the date of the Remedial Action Report dated for the real property at the area of concern identified above, identified above, payment of compensation for damages to, or loss of, natural resources, for the restoration of natural resources in connection with the discharge on the property, or payment of cleanup and removal costs for such additional remediation.

Pursuant to N.J.S.A. 58:10B-13.1d, this Covenant does not relieve any person from the obligation to comply in the future with laws and regulations. The Department reserves its right to take all appropriate enforcement for any failure to do so.

The Department may revoke this Covenant at any time after providing notice upon its determination that any person with the legal obligation to comply with any condition in this No Further Action Determination has failed to do so;

This Covenant, which the Department has executed in duplicate, shall take effect immediately once the person who undertook the remediation has signed and dated the Covenant in the lines supplied below and the Department has received one copy of this document bearing original signatures of the Department and the person who undertook the remediation.

Company: 1-7 Fourth Street LLC

By: Donald Schauger

Signature:_____

Title:_____

Dated:_____

NEW JERSEY DEPARTMENT OF
ENVIRONMENTAL PROTECTION

By: Yacoub E. Yacoub

Signature: _____

Title: _____

Dated: 06-21-05

Please be advised that in accordance with the "Department Oversight of the Remediation of Contaminated Sites" (N.J.A.C. 7:26C), Donald Schauger/1-7 Fourth Street LLC is required to reimburse the Department for oversight of the remediation. The Department will be issuing a bill within the next four months.

Thank you for your attention to these matters. If you have any questions, please contact Brent Vonroth at (973)-656-4431

Sincerely,

Yacoub E. Yacoub, Chief
Bureau of Field Operations

c: AquaTek Environmental Consulting, Inc.
South Orange Health Department
File # 07-19-183

New Jersey Department of Environmental Protection
COMMUNICATION CENTER NOTIFICATION REPORT

Received: 9/29/03 15:37:52 Comm. Center #: 03-09-29-1537-52

Operator: 28 Reviewed By:_____

Reporter Type: Other

Reported By: MARY KAY MORELLI Affiliation: AQUATEK Phone: 973-716-9110

Street Address: 5 REGENT STREET, SUITE 511 Municipality: Livingston Twp State: NJ

Incident Category: Other

Location Description: FOURTH STREET LLC

Address: 1-7 FOURTH STREET

Municipality: South Orange Village County: Essex State: NJ Zip Code:

Location Type: Commercial Occurred Date: 11/01/2001 Occurred Time: 12:00 AM

Substance Released: ARSENIC METAL Amount Released: 150 Units: ppm Actual

ID: Known State: Solid CAS#: 7440382 Incident Status at Time of Report: Terminated

Substance Contained: Yes HAZMAT: Yes TCPA: No Haz Waste: No

Incident Type: Soil Contamination Incident Type 2:

Injuries: No Public Evac: No Facility Evac: No Public Exposure: No Police At Scene: No

Firemen At Scene: No Dep Requested: No Road Closure: No Wind Speed/Direction:

Contamination Of: Land

Watershed: Other Watershed:

Incident Description: RECENT SOIL ANALYSIS SHOWS TWO YEAR OLD DISCHARGE TO SOIL OF ARSENIC ABOUT ONE FOOT DOWN. REMEDIATION PENDING.

Responsible Party Name: DON SHAUGER Responsible Party Phone: 973-313-1100

Responsible Party Street Address: 380 LACKWANNA PLACE,

Municipality: South Orange Village County: Essex State: NJ Zip Code:

Officials Notified

Name	Affiliation	Phone	Date	Time	Action
	Case Assignment Section		09/29/2003	0:00	Notification - Fax
OPR 542	SOUTH ORANGE VILLAGE TWP	973-763-3000	09/29/2003	15:45	Notification - A310
	NJDOH - HAZMAT		09/29/2003	0:00	Notification - Fax
	Haz Waste - North		09/29/2003	0:00	Notification - Fax

Comments:

Township of South Orange Village
101 South Orange Ave
South Orange, NJ 07079
973-3787715

CERTIFICATE
IDENTIFICATION

Date Issued: 12/21/2000
Control #: 6351
Permit #: 20000263

Block: 2304 Lot: 11 Qual: _____
Work Site Location: 13 FOURTH ST
SOUTH ORANGE
Owner in Fee: IANTOSCA, JOHN
Address: 3 ROSEMONT HILLS DRIVE
FLORHAM PARK NJ 07932
Telephone: 973 214-3924
Agent/Contractor: ENVIROTACTICS INC.
Address: 2517 HWAY 35 BLDG-D SUITE 202
MANASQUAN NJ 08736
Telephone: 732 292-0100
Lic. No./ Bldrs. Reg.No.: _____ Federal Emp. No.: _____
Social Security No.: _____

Home Warranty No: _____
Type of Warranty Plan: [ ] State [ ] Private
Use Group: U
Maximum Live Load: _____
Construction Classification: _____
Maximum Occupancy Load: _____
Certificate Exp Date: _____
Description of Work/Use:
REMOVAL OF ONE 1000 GALLON DIESEL UST AND ONE 1000 GALLON GASOLINE UST.

Update Desc. of Wk/Use:

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Fees: $0.00
Paid[X]Check No.: 3917
Collected by: MEL

envirotactics

• 2517 Highway 35
• Building D, Suite 202
• Manasquan, NJ 08736
• Phone 732.292.0100
• Fax 732.292.2808

January 19, 2001

JAN 22 2001

John Iantosca
South Orange Construction
13 Fourth Street
South Orange, NJ 07079

Re: 1,000 Gallon Diesel and 1,000 Gallon Gasoline Tank Removal
Block 2304 Lot 11
13 Fourth Street, South Orange, New Jersey

Dear Mr. Iantosca:

On December 21, 2000, Envirotactics oversaw the removal of one non-regulated 1,000 gallon diesel underground storage tank (UST) and one non-regulated 1,000 gallon gasoline UST located at 13 Fourth Street, South Orange, New Jersey. The tanks were single wall steel tanks located near the northeast corner of the on-site residential dwelling. A tank location map is provided with this report.

The tank removals were conducted by Resource Contracting Services Inc. located in Bridgewater, New Jersey. Prior to removal, the tanks were uncovered and cut open to allow access. The clean soil overlying both USTs was excavated to expose the top of each tank. Since no evidence of contamination (i.e. stained soils, petroleum odor, or elevated OVM readings) was encountered in the soils overlying the USTs, these soils were stockpiled for reuse as backfill material. All remaining product was removed and the tanks were wiped clean. Approximately 223 gallons of gasoline/diesel product was removed from the two 1,000 gallon USTs and was properly disposed by Active Tank & Environmental Services of Newark, New Jersey. The sludge disposal receipt is provided with this report.

After the tanks were removed from the excavation, Envirotactics field screened and visually inspected the soil within the excavation for evidence of contamination (i.e. stained soils, petroleum odor, or elevated OVM readings). Since no evidence of contamination was encountered, post excavation soil samples were collected immediately following each tank removal. Two soil samples were collected at the base of each tank excavation at approximately 6.5 feet below grade to document the condition of the surrounding soils.

01-22-01

The 1,000 gallon diesel tank excavation samples (D-1 and D-2) were analyzed for Total Petroleum Hydrocarbons (TPH). TPH was not detected in either soil sample.

The 1,000 gallon gasoline tank excavation samples (G-1 and G-2) were analyzed for volatile organics plus an additional 10 peaks (V0+10). The results of the soil sampling are outlined in Table 1, below.

TABLE 2
1,000 Gallon Gasoline UST
Post Excavation Soil Sample Results
VO+10

Sample ID	G-1	G-2	NJDEP
Depth (feet)	6.5	6.5	MSSCC
Toluene	2.6	1.5	500
Ethylbenzene	0.9	1.9	100
Isopropylbenzene	0.36 J	0.16 J	NS
n-Propyl benzene	0.86	0.40 J	NS
1,3,5-Trimethylbenzene	2.5	1.8	NS
1,2,4-Trimethylbenzene	9.7	4.6	NS
Sec-Butylbenzene	0.65 J	0.33 J	NS
p-Isopropyltoluene	0.55 J	0.20 J	NS
n-Butylbenzene	1.6	0.88	NS
Naphthalene	1.7 B	0.92 B	100
Total Xylenes	9.7	3.9	67
Total TICs	38.1	27.7	1,000

Results are in parts per million (ppm)
NJDEP MSSCC- NJDEP Most Stringent Soil Cleanup Criteria
NS - No standard
J - Indicates compound concentration found below MDL
B - Indicates compound found in associated blank.

As outlined in Table 1 above, no VO+10 constituents were detected in the area of former 1,000-gallon gasoline UST above NJDEP's Most Stringent Soil Cleanup Criteria. The laboratory report is provided with this report.

The tanks were inspected and approved by the South Orange Construction Official. A copy of inspector's approval is attached. The excavation was then filled with quarry process stone and the tanks were removed from the site for disposal at a scrap metal facility. The tank scrap receipts are also provided with this report.

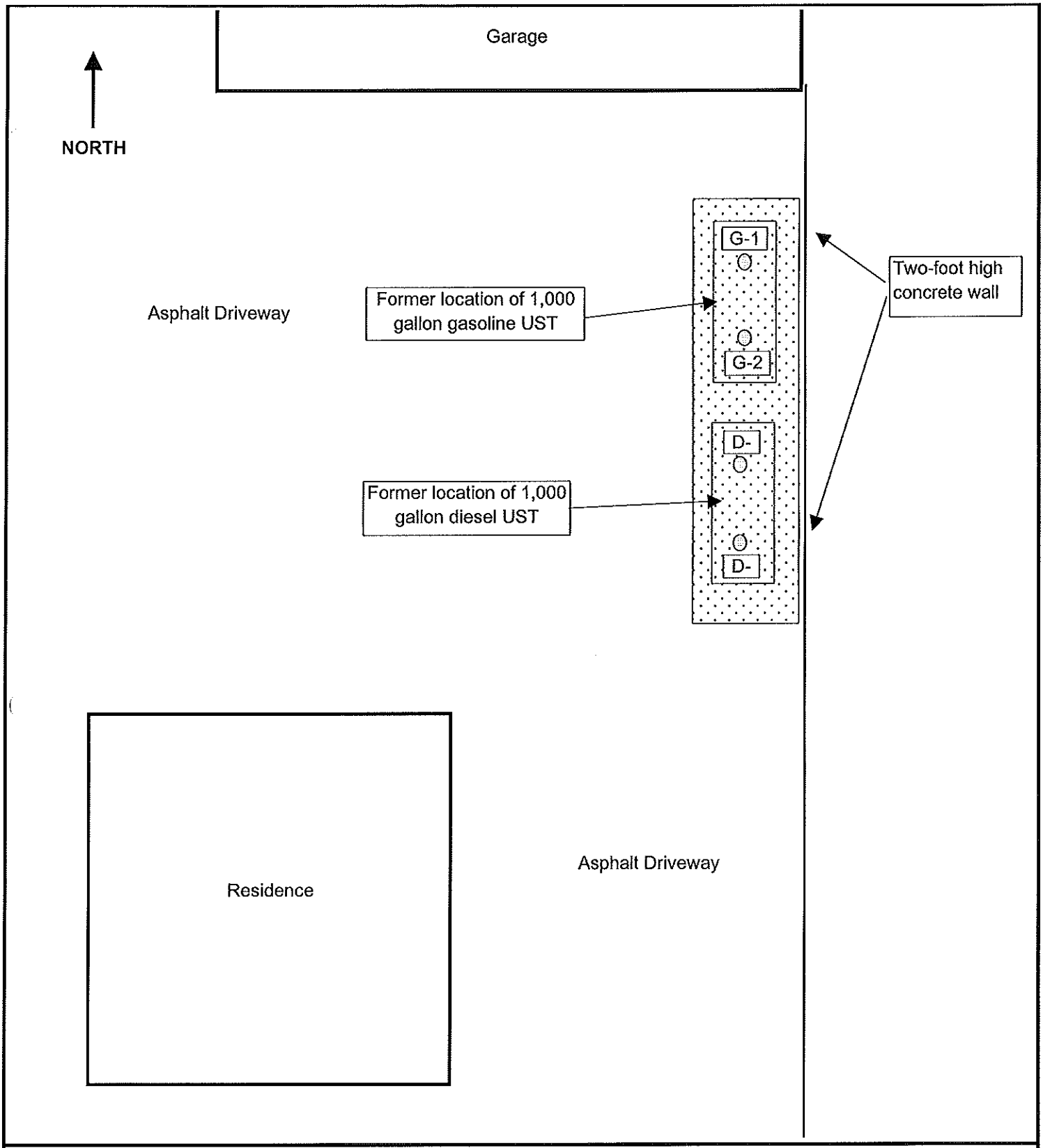
In conclusion, based on no evidence of a discharge and the results of sampling, no further action regarding the tanks is recommended or required. Please note, if the client wishes to obtain a No Further Action Letter from the NJDEP for this UST, the client would be required enter into a Memorandum of Agreement with the NJDEP and sample the UST in accordance with NJDEP protocol. If you have any questions, please call me at 732-292-0100.

Sincerely,

Basil Ellmers

Basil Ellmers
Project Manager

c. Anthony Grenci, South Orange Construction Official



Legend

Scale: 1 inch = 10 feet (approximately)

= SOILSAMPLE LOCATION

= SOIL EXCAVATION LOCATION

Envirotactics, Inc.

Figure 3: Soil Sample Location Map

TILCON

MATERIAL TICKET

TILCON NEW JERSEY
A Div. of Tilcon New York Inc.
P.O. BOX 407, MILLINGTON, NJ 07946

LOC#:11
CLIFTON QUARRY

1St---PT"1B"5B0t---DC"1B"5B0;7;1;2;6;2;6;2;0;0;0;1}---C-S

MATERIAL ORDERS 1-800-789-ROCK (7625)

BILLING INQUIRIES (908) 580-3910

CUSTOMER NO.	P.O. NUMBER	TRUCK NO.
200422		1143

CUSTOMER NAME:
ENVIRO-TACTICS

TIME	OUR ORDER NUMBER	TICKET NUMBER
11:36	11-0459	11 533987

GROSS TONS	TARE TONS	NET TONS	WEIGHED BY
31.90	13.53	18.37	16.66 Mg. VJT

DATE	TAX CODE	HAULER CODE	MAT'L CODE
12-21-2000	N	006869	11-027

MATERIAL DESCRIPTION:
QUARRY PROCESS

DIRECTIONS:
80E 280E LT OFF RAMP RT VALLEY TO SCOTTLAND LT OR RT ON 4TH S T SEE CREW @ # 13 P/U CK

DELIVERY ADDRESS
13 4TH ST
SOUTH ORANGE

TOTAL TODAY	
18.37	TONS SHIPPED THIS ORDER TODAY 16.66 Mg.
1	LOADS SHIPPED THIS ORDER TODAY

CARRIER _____ PRINT NAME X _____ CARRIER SIGNATURE

CUSTOMER _____ PRINT NAME X _____ CUSTOMER SIGNATURE

CUSTOMER COPY

OFFICE USE ONLY			
MATL AMT.:	7.00 /TN	128.59	
FUEL CHRG:		82.00	
SALES TAX:	6.000 %	7.72	
TOTAL:		218.31	$218.31

DUBLIN SCRAP METAL, INC.

INDUSTRIAL METAL SPECIALISTS

489 Frelinghuysen Avenue
Newark, NJ 07114
Phone: 973-622-0400
Fax: 973-622-4014

Shipper E-Gen Const.

Reference No. _____

Carrier _____

Customer Dsm Yard

Destination _____

Loading Address _____

City _____ State _____ Zip _____

Product Steel

Remarks _____

Driver _____

Weightmaster _____

PAID

9020
7180
1840

7805

DUBLIN SCRAP METAL, INC.

INDUSTRIAL METAL SPECIALISTS

489 Frelinghuysen Avenue
Newark, NJ 07114
Phone: 973-622-0400
Fax: 973-622-4014

Shipper E-CON

Reference No.

Carrier

Customer

Destination DSm yrd

Loading Address

City State Zip

Product Steel

Remarks

Driver

Weightmaster JR

7980
6940
6940

7810

ACTIVE TANK & ENVIRONMENTAL SERVICES

110 Riverside Avenue, Newark, New Jersey 07104 • (973) 482-4600 • Fax: (973) 482-2192

7211

WORK ORDER

Site Location:

Name: Bldg.

Address: 13 4th St

So Orange

Phone: (732) 392-0100

Contact:

Bill To:

Name: Envirotactics

Address:

Phone: ( )

Manifest #:

Job No.:

Job Date:

Order Date:

Tank No.	Tank Size	Waste Code	Diameter	Start	Finish	Gallonage	Price	Extended
1	10001K	GAS		10	0			
2	10001K	Diesel		6	0			
3								
4								
5								
6								

TOTAL: $

Hose Ft.: Manhole: ❑ Yes ❑ No ❑ Unknown

Payment Method: ❑ Cash ❑ Check/Check No. Received $

Scope of Work:

- ❑ UST Removal
- ❑ Soil Borings
- ❑ Scanning
- ❑ Phase I
- ❑ Site Visit / Activity
- ❑ Monitoring Well Installation
- ❑ Ground Water Samples
- ❑ Soil Samples
- ❑ Emergency Spills
- ❑ Other:

Personnel and Equipment O/S:

Departure / Return Time: to Field Tech:
(Signature)

Services Rendered:

Squeegee	❑	Pump Out	❑ X mid	Dig	❑
Wash	❑	Bottom Only	❑	Reweld	❑
Coils	❑	Clean	❑	Cut Manhole	❑

Other: Split Bbl 881

❑ Drum Pick Up ❑ Product: Gas ___ Oil ___ Other ___ ❑ Solid ___ Liquid ___

1.43 1.50

Total: $

Arrival Time: 9.10 Departure Time: 11.30 Grand Total: $

Work Performed:

ACTIVE OIL REPRESENTATIVE

Thurs 12/21/00
DATE

930

GENERATOR/CUSTOMER

ACCREDITED LABORATORIES, INC.
Implementing Tomorrow's Technology, Today™....

Analytical Data Report

for

Envirotactics
2517 Rt. 35, Bldg. D Suite 202
Manasquan, NJ 08736

Project: 416 South Orange

Accredited Laboratories Case No.: 1404
Date Received: 12/22/00

Field ID	Laboratory Sample #
D-1	200015230
D-2	200015231
G-1	200015232
G-2	200015233

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos
Technical Director

TABLE OF CONTENTS

ACCREDITED LABORATORIES, INC.

20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE (732) 541-2025 FAX (732) 541-1383

CHAIN OF CUSTODY FORM

STATE AGENCY (NJ) NY PA CT DE OTHER

CLIENT	Envirotactics
ADDRESS	2517 Hwy 35 Bldg Ste202
CITY	Manasquan
STATE	NJ ZIP 08736

PROJECT	416 South Orange
CONTACT	Basil Ellmers
PHONE	732-292-0100
FAX	732 292-2808

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0015230	D-1	1	S	12/21 10:30		TPH
0015231	D-2	1	S	12/21 10:30		TPH
0015232	G-1	1	S	12/21 1:30		VO +10 per H
0015233	G-2	1	S	12/21 1:30		VO +10 ↓

**M = MATRIX A=AQUEOUS S=SOIL, G=SLUDGE P=POTABLE WATER O=OIL F=FILTER K=SOLID X=OTHER

*C = NO. CONTAINERS TURNAROUND: Std - Fax (If Blank, Std. 3 weeks)

DELIVERABLES (circle one) STD (REDUCED) FULL OTHER

RELINQUISHED BY: PRINT	RELINQUISHED BY: SIGN	RECEIVED BY: PRINT	RECEIVED BY: SIGN	ORGANIZATION	DATE	TIME	REASON
B. Ellmers	B. Ellmers	K. Roberts	Kristy Roberts	ALL	12/22	9:15	TRANSPORT
K. Roberts	Kristy Roberts	Jason Mills		ALL	12/22	10:30	Analysis

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: B. Ellmers SIGN: B. Ellmers

COMMENTS	Cooler Temp 5°

ALI QUOTE#	
ALI CASE#	1404
P.O.#	

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: [illegible] Title: Tech
Field Sample Seal No. [illegible]	Date Broken: __/__/__ Military Time Seal Broken _____
Case No. 1404	Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
G-1	200015232	MEVO10	12/21/00	12/22/00
G-2	200015233	MEVO10	12/21/00	12/22/00

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
1/4/01		Printed Name [illegible]	Printed Name R.M. HORN	ANALYSIS
		Signature [illegible]	Signature R.M. Horn	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM:
291COC

2

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: JASON MILLER	Title: Geo
Field Sample Seal No. None	Date Broken: __/__/__	Military Time Seal Broken _____
Case No. 1404	Check if No Seal on Sample Shuttle.	

Field #	Laboratory #	Test Name	Date Sampled	Date Received
D-1	200015230	TPHC	12/21/00	12/22/00
D-2	200015231	TPHC	12/21/00	12/22/00

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/26/00	11:00	Printed Name JASON MILLER	Printed Name R Bautista	Extraction
		Signature	Signature	
12/26/00	13:30	Printed Name R Bautista	Printed Name JASON MILLER	cold storage
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	

FORM: 291COC

METHODOLOGY SUMMARY

Volatile Organics - EPA 8260 (soil)

An inert gas is purged through a 5 g sample at elevated temperature. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the purgeables onto a GC column. The GC is temperature programmed to separate the purgeables which are then detected with a mass spectrometer.

Petroleum Hydrocarbons - Modified EPA 418.1 (soil)

A 30 gram portion of soil is extracted with fluorocarbon 113. Interferences are removed with silica gel adsorbent. Infrared analysis of the extract is performed by direct comparison with standards.

Date: 12/22/00 ACCREDITED LABORATORIES, INC. Time: 10:41:09

ORGANIC ANALYSIS LABORATORY CHRONICLE

USE % SOLIDS FROM 5230 FOR 5232, 5231 FOR 5233

Client: Envirotactics
Test Date Due: 01/04/01
Fax Data Due: **01/05/01**
Hard Copy Due: **01/05/01**
Client Project Name: 416 South Orange

Date Sampled:12/21/00 Date Received:12/22/00 Report Package: Reduced

Test: MEVO10 QC#: _____
Test Description:Methanol Preserved Volatiles+10 (MEVO10)

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
G-1	1404	200015232	S				01-04-01	10:58	W.L.	
G-2	1404	200015233	S				1		/	

Reviewed by: _____ Date: 1/5/01

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other
RPT:Report0

Date: 12/22/00 ACCREDITED LABORATORIES, INC. Time: 10:41:10

ORGANIC ANALYSIS LABORATORY CHRONICLE

USE % SOLIDS FROM 5230 FOR 5232, 5231 FOR 5233

Client: Envirotactics Test Date Due: 12/28/00
Fax Data Due: **01/05/01** Hard Copy Due: **01/05/01**
Client Project Name: 416 South Orange Case #: 1404

Date Sampled:12/21/00 Date Received:12/22/00 Report Pkg: Reduced

Test: TPHC Sample Matrix: S
Test Description:Total Petroleum Hydrocarbons (TPHC)

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid By Method: _____
:F=Filters:P=Potable Water:G=Sludge:X=Other

SAMPLE IDENTIFICATION		ANALYTICAL DATA			LABORATORY CHRONICLE EXTRACTION		ANALYSIS		
Field#	Sample#	RESULT	MDL	UNITS	DATE	TIME	DATE	TIME	INIT
D-1	200015230	ND	43	MG/KG	12/26/00		12/26/00		RB
D-2	200015231	ND	42	"	"		"		"

QUALITY CONTROL:

Method Blank : _____
Mean Percent Spike Recovery : _____
Relative Percent Difference of Duplicate Spikes : _____

Reviewed by: _____ Date: 01-05-01 RPT:Report0?

CONFORMANCE/NON-CONFORMANCE SUMMARY

Accredited Labs received 4 soil samples (Project: 416 South Orange; ALI Case #1404) from Envirotactics, Inc. on 12/22/00 for the analyses of Volatile Organics +10 and Total Petroleum Hydrocarbons.

All analyses were performed within the required holding time.

All analyses were reported on a dry weight basis.

In the Volatile Organic analysis, the MDL levels were elevated due to the methanol preservation technique used at the time of sampling.

"The laboratory has reviewed the quality assurance and quality control measurements for the sample analysis stated above."

T Gaydos

Theodore C. Gaydos
Technical Director

State of New Jersey
Department of Environmental Protection

Certifies That

ACCREDITED LABORATORIES, INCORPORATED

LABORATORY CERTIFICATION ID # 12007

is hereby found to meet the requirements of the

Regulations Governing The Certification Of
Laboratories And Environmental Measurements, N.J.A.C. 7:18 et. seq.

is hereby approved as a

State Certified Environmental Laboratory

To perform the analyses as indicated on the Annual Certified Parameter List
which must accompany this certificate to be valid

Expiration Date June 30, 2001

Joseph F. Aiello, Chief
Office of Quality Assurance

THIS CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AT THE LABORATORY WITH THE ANNUAL CERTIFIED PARAMETER LIST IN A LOCATION ON THE PREMISES VISIBLE TO THE PUBLIC

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	1404	MATRIX	Soil
SAMPLE NUMBER	0015232	DILUTION FACTOR	140
A FILE	>C4302	DATE EXTRACTED	
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	01/04/01
FIELD ID	G-1	ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	U	3800
107131	Acrylonitrile	U	3800
75718	Dichlorodifluoromethane	U	750
74873	Chloromethane	U	750
75014	Vinyl Chloride	U	750
74839	Bromomethane	U	750
75003	Chloroethane	U	750
75694	Trichlorofluoromethane	U	750
75354	1,1-Dichloroethene	U	750
75092	Methylene Chloride	U	750
156605	trans-1,2-Dichloroethene	U	750
75343	1,1-Dichloroethane	U	750
590207	2,2-Dichloropropane	U	750
156592	cis-1,2-dichloroethene	U	750
67663	Chloroform	U	750
74975	Bromochloromethane	U	750
71556	1,1,1-Trichloroethane	U	750
563586	1,1-Dichloropropene	U	750
235	Carbon Tetrachloride	U	750
07062	1,2-Dichloroethane	U	750
71432	Benzene	U	750
79016	Trichloroethene	U	750
78875	1,2-Dichloropropane	U	750
75274	Bromodichloromethane	U	750
74953	Dibromomethane	U	750
10061015	cis-1,3-dichloropropene	U	750
108883	Toluene	2600	750
10061026	trans-1,3-Dichloropropene	U	750
79005	1,1,2-Trichloroethane	U	750
142289	1,3-dichloropropane	U	750
127184	Tetrachloroethene	U	750
124481	Dibromochloromethane	U	750
106934	1,2-Dibromoethane	U	750
100414	Ethylbenzene	900	750

CAS #	COMPOUND	UG/KG	MDL
108907	Chlorobenzene	U	750
630206	1,1,1,2-Tetrachloroethane	U	750
1330207	m,p-Xylene	6100	1500
100425	Styrene	U	750
98828	Isopropylbenzene	360 J	750
75252	Bromoform	U	750
79345	1,1,2,2-Tetrachloroethane	U	750
96184	1,2,3-Trichloropropane	U	750
103651	n-Propyl benzene	860	750
108861	Bromobenzene	U	750
108678	1,3,5-Trimethylbenzene	2500	750
95498	2-Chlorotoluene	U	750
106434	4-Chlorotoluene	U	750
98066	tert-Butylbenzene	U	750
95636	1,2,4-Trimethylbenzene	9700	750
135988	sec-Butylbenzene	650 J	750
99876	p-Isopropyltoluene	550 J	750
541731	1,3-Dichlorobenzene	U	750
106467	1,4-Dichlorobenzene	U	750
104518	n-Butylbenzene	1600	750
95501	1,2-Dichlorobenzene	U	750
96128	1,2-Dibromo-3-Chloropropane	U	750
120821	1,2,4-Trichlorobenzene	U	750
87683	Hexachlorobutadiene	U	750
91203	Naphthalene	1700 B	750
87616	1,2,3-Trichlorobenzene	U	750
95476	o-Xylene	3600	750
75150	Carbon disulfide	U	750
110758	2-Chloroethylvinylether	U	750
67641	Acetone	U	750
108054	Vinyl acetate	U	750
789333	2-Butanone	U	750
108101	4-Methyl-2-pentanone	U	750
591786	2-Hexanone	U	750

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	90 %	70-121	OK
Toluene-d8	96 %	81-117	OK
Bromofluorobenzene	91 %	74-121	OK

Percent solid of 92.9 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
- Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*

B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Accredited Labs, Inc. Lab Sample ID: 0015232

Client Name: ENVIROTACTICS Field ID: G-1

Case No.: 1404 Date Extracted:

Lab File ID: >C4302 Date Analyzed: 01/04/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	611143	*** See below	29.10	3600	
2.	535773	*** See below	32.79	3800	
3.		Unknown aromatic	33.30	3400	
4.		Unknown aromatic	33.52	3100	
5.	488233	*** See below	33.94	3200	
6.	527537	*** See below	34.16	4300	
7.		Unknown aromatic	35.12	3300	
8.		Unknown aromatic	35.30	3200	
9.	824226	*** See below	35.58	3300	
10.		Unknown aromatic	36.17	6900	

***

1. Benzene, 1-ethyl-2-methyl- (9CI)
2. Benzene, 1-methyl-3-(1-methylethyl)- (9CI)
5. Benzene, 1,2,3,4-tetramethyl- (8CI9CI)
6. Benzene, 1,2,3,5-tetramethyl- (8CI9CI)
9. 1H-Indene, 2,3-dihydro-4-methyl- (9CI)

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	1404	MATRIX	Soil
SAMPLE NUMBER	0015233	DILUTION FACTOR	117
A FILE	>C4303	DATE EXTRACTED	
CLIENT NAME	ENVIROTACTICS	DATE ANALYZED	01/04/01
FIELD ID	G-2	ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG		MDL
107028	Acrolein	U		3200
107131	Acrylonitrile	U		3200
75718	Dichlorodifluoromethane	U		630
74873	Chloromethane	U		630
75014	Vinyl Chloride	U		630
74839	Bromomethane	U		630
75003	Chloroethane	U		630
75694	Trichlorofluoromethane	U		630
75354	1,1-Dichloroethene	U		630
75092	Methylene Chloride	U		630
156605	trans-1,2-Dichloroethene	U		630
75343	1,1-Dichloroethane	U		630
590207	2,2-Dichloropropane	U		630
156592	cis-1,2-dichloroethene	U		630
67663	Chloroform	U		630
74975	Bromochloromethane	U		630
71556	1,1,1-Trichloroethane	U		630
563586	1,1-Dichloropropene	U		630
735	Carbon Tetrachloride	U		630
7062	1,2-Dichloroethane	U		630
71432	Benzene	U		630
79016	Trichloroethene	U		630
78875	1,2-Dichloropropane	U		630
75274	Bromodichloromethane	U		630
74953	Dibromomethane	U		630
10061015	cis-1,3-dichloropropene	U		630
108883	Toluene	1500		630
10061026	trans-1,3-Dichloropropene	U		630
79005	1,1,2-Trichloroethane	U		630
142289	1,3-dichloropropane	U		630
127184	Tetrachloroethene	U		630
124481	Dibromochloromethane	U		630
106934	1,2-Dibromoethane	U		630
100414	Ethylbenzene	520	J	630

CAS #	COMPOUND	UG/KG		MDL
108907	Chlorobenzene	U		630
630206	1,1,1,2-Tetrachloroethane	U		630
1330207	m,p-Xylene	2500		1300
100425	Styrene	U		630
98828	Isopropylbenzene	160	J	630
75252	Bromoform	U		630
79345	1,1,2,2-Tetrachloroethane	U		630
96184	1,2,3-Trichloropropane	U		630
103651	n-Propyl benzene	400	J	630
108861	Bromobenzene	U		630
108678	1,3,5-Trimethylbenzene	1800		630
95498	2-Chlorotoluene	U		630
106434	4-Chlorotoluene	U		630
98066	tert-Butylbenzene	U		630
95636	1,2,4-Trimethylbenzene	4600		630
135988	sec-Butylbenzene	330	J	630
99876	p-Isopropyltoluene	170	J	630
541731	1,3-Dichlorobenzene	U		630
106467	1,4-Dichlorobenzene	U		630
104518	n-Butylbenzene	860		630
95501	1,2-Dichlorobenzene	U		630
96128	1,2-Dibromo-3-Chloropropane	U		630
120821	1,2,4-Trichlorobenzene	U		630
87683	Hexachlorobutadiene	U		630
91203	Naphthalene	920	B	630
87616	1,2,3-Trichlorobenzene	U		630
95476	o-Xylene	1400		630
75150	Carbon disulfide	U		630
110758	2-Chloroethylvinylether	U		630
67641	Acetone	U		630
108054	Vinyl acetate	U		630
789333	2-Butanone	U		630
108101	4-Methyl-2-pentanone	U		630
591786	2-Hexanone	U		630

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	83 %	70-121	OK
Toluene-d8	94 %	81-117	OK
Bromofluorobenzene	93 %	74-121	OK

Percent solid of 92.3 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
- Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*

B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Accredited Labs, Inc. Lab Sample ID: 0015233

Client Name: ENVIROTACTICS Field ID: G-2

Case No.: 1404 Date Extracted:

Lab File ID: >C4303 Date Analyzed: 01/04/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	535773	*** See below	32.76	2700	
2.	874419	*** See below	32.99	2000	
3.		Unknown aromatic	33.26	2200	
4.		Unknown aromatic	33.49	2500	
5.	527537	*** See below	33.90	2400	
6.		Unknown aromatic	34.13	3100	
7.		Unknown aromatic	35.13	2900	
8.	488233	*** See below	35.31	2000	
9.		Unknown aromatic	35.59	2300	
10.		Unknown aromatic	36.18	5600	

***

1. Benzene, 1-methyl-3-(1-methylethyl)- (9CI)
2. Benzene, 1-ethyl-2,4-dimethyl- (9CI)
5. Benzene, 1,2,3,5-tetramethyl- (8CI9CI)
8. Benzene, 1,2,3,4-tetramethyl- (8CI9CI)

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

Accredited Laboratories, Inc.
Total Petroleum Hydrocarbon Analysis

Client: ENVIROTACT
Case #: 1404
Analyst: RB

Matrix: Soil
Date Received: 12/22/00
Date Analyzed: 12/26/00

Field #	Sample #	Amount Used (g)	% S	DF	ABS	Result mg/Kg	MDL mg/Kg
D-1	0015230	15.04	92.9	1	2	ND	43
D-2	0015231	15.31	92.3	1	4	ND	42

Response Factor = .13310669

% S = Percent Solids
DF = Dilution Factor
ABS = Absorbance

Method Blank: < 20 mg/Kg

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >C8788 BFB Injection Date: 02/18/00

Instrument ID: HP5970BC BFB Injection Time: 16:01

GC Column: RTX-502 Column ID: 0.53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 60.0% of mass 95	49.2
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	89.3
175	5.0 - 9.0% of mass 174	6.5(7.3)1
176	95.0 - 101.0% of mass 174	87.1(97.4)1
177	5.0 - 9.0% of mass 176	5.5(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		VSTD050	>C8789	02/18/00	16:25
02		VSTD020	>C8790	02/18/00	17:13
03		VSTD010	>C8791	02/18/00	18:02
04		VSTD100	>C8792	02/18/00	18:50
05		VSTD200	>C8793	02/18/00	19:38
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

14

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >C4091 BFB Injection Date: 12/19/00

Instrument ID: HP5970BC BFB Injection Time: 09:10

GC Column: RTX-502 Column ID: 0.53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.3
75	30.0 - 60.0% of mass 95	50.0
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	91.8
175	5.0 - 9.0% of mass 174	6.2(6.7)1
176	95.0 - 101.0% of mass 174	89.0(97.0)1
177	5.0 - 9.0% of mass 176	5.7(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		VSTD050	>C4092	12/19/00	09:30
02		VBLKC59	>C4093	12/19/00	10:32
03		0014937DL	>C4094	12/19/00	11:39
04		0014625MS	>C4095	12/19/00	12:20
05		0014625MSD	>C4096	12/19/00	13:07
06		0014625	>C4097	12/19/00	13:56
07		0014612	>C4098	12/19/00	14:45
08		0014609	>C4099	12/19/00	15:36
09		0014610	>C4100	12/19/00	16:27
10		0014611	>C4101	12/19/00	17:16
11		0014629DL	>C4102	12/19/00	18:07
12		0014632DL	>C4103	12/19/00	18:48
13		0014633DL	>C4104	12/19/00	19:29
14		0014639DL	>C4105	12/19/00	20:11
15		0014775	>C4106	12/19/00	20:54
16					
17					
18					
19					
20					
21					
22					

15

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >C4299 BFB Injection Date: 01/04/01

Instrument ID: HP5970BC BFB Injection Time: 08:26

GC Column: RTX-502 Column ID: 0.53

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.6
75	30.0 - 60.0% of mass 95	44.2
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	86.0
175	5.0 - 9.0% of mass 174	5.6(6.5)1
176	95.0 - 101.0% of mass 174	85.1(98.9)1
177	5.0 - 9.0% of mass 176	5.4(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

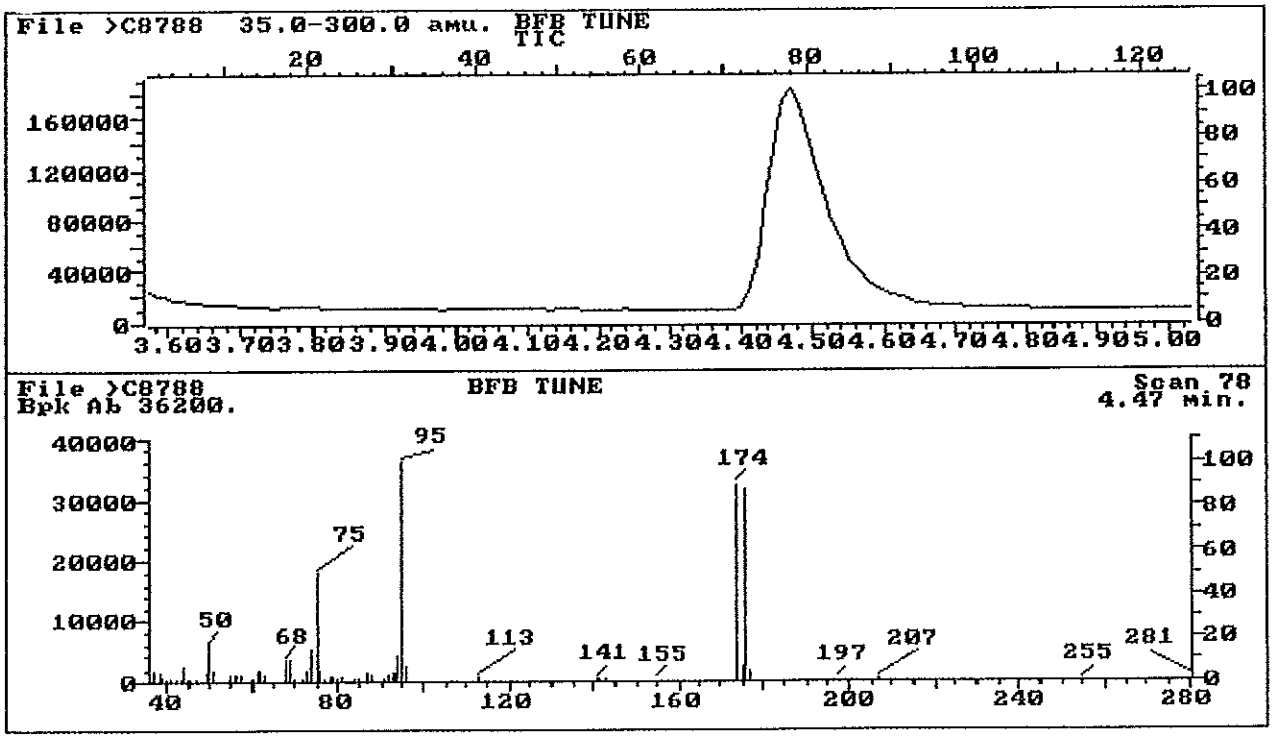
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	_____	VSTD050	>C4300	01/04/01	08:51
2	_____	VBLKC71	>C4301	01/04/01	09:49
03	_____	0015232	>C4302	01/04/01	10:58
04	_____	0015233	>C4303	01/04/01	11:44
05	_____	001511 8	>C4304	01/04/01	12:31
06	_____	001511 6	>C4305	01/04/01	13:10
07	_____	001511 7	>C4306	01/04/01	13:53
08	_____	001511 5	>C4307	01/04/01	14:35
09	_____	001511 9	>C4308	01/04/01	15:16
10	_____	001512 0	>C4309	01/04/01	15:58
11	_____	001511 3DL	>C4310	01/04/01	16:38
12	_____	001511 4	>C4311	01/04/01	17:20
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	16.81	16.81	OK
75	30-60% of mass 95	49.24	49.24	OK
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	7.06	7.06	OK
173	Less than 2% of mass 174	0.00	0.00	OK
174	Greater than 50% of mass 95	89.35	89.35	OK
175	5-9% of mass 174	6.53	7.31	OK
176	95-101% of mass 174	87.05	97.43	OK
177	5-9% of mass 176	5.47	6.29	OK

Injection Date: 02/18/00
Injection Time: 16:01
Data File: >C8788
Scan: 78



>C8788 BFB TUNE
78

File: >C8788 Scan #: 78 Retn. time: 4.47

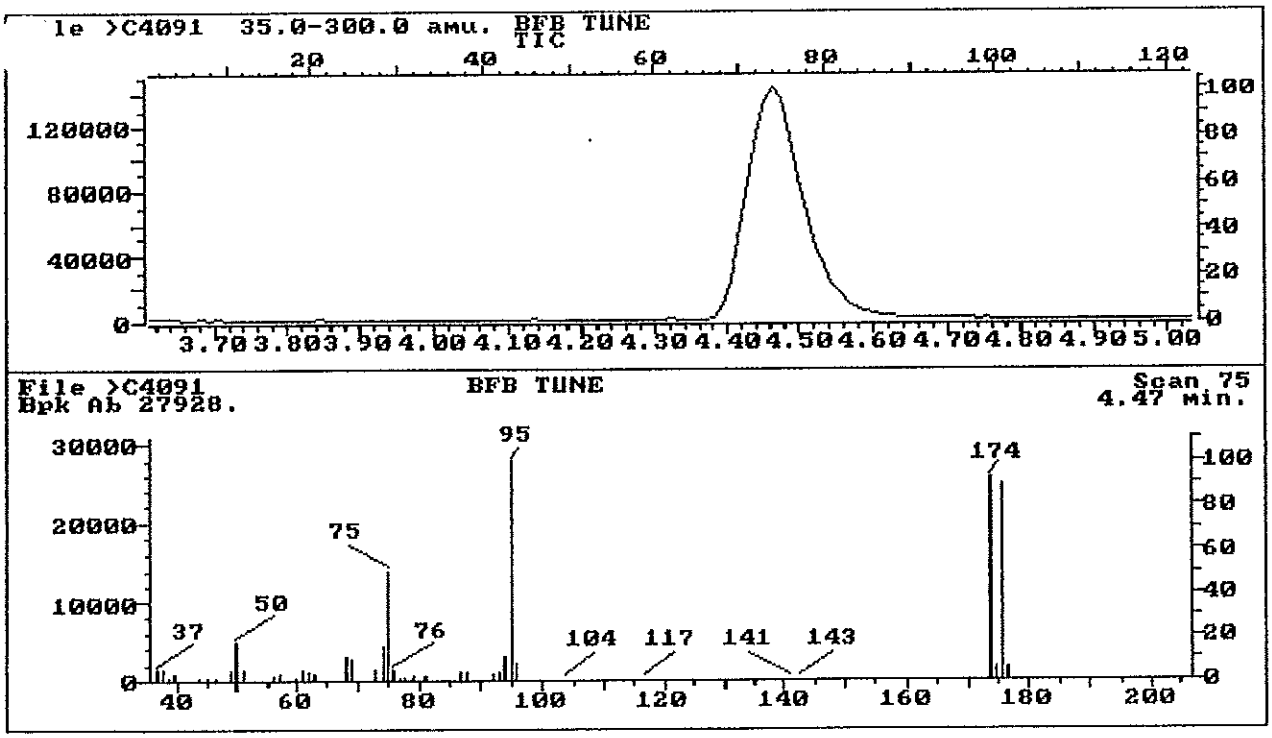
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	428.0	52.05	154.0	73.95	5217.0	92.95	1374.0	137.00	104.0
37.05	1605.0	54.95	908.0	74.95	17824.1	93.95	4025.0	140.90	276.0
38.05	1326.0	55.95	1035.0	75.95	1587.0	94.95	36200.1	142.90	246.0
39.05	789.0	57.05	963.0	76.95	263.0	95.95	2557.0	147.00	86.0
39.95	452.0	59.95	348.0	77.95	201.0	103.95	141.0	154.90	98.0
41.05	399.0	61.05	1516.0	78.85	810.0	104.85	164.0	173.90	32344.1
42.05	378.0	61.95	1481.0	79.85	280.0	105.95	115.0	174.90	2365.0
43.15	351.0	63.05	941.0	80.95	744.0	112.95	606.0	175.90	31512.1
43.95	2392.0	64.05	132.0	81.85	229.0	115.85	114.0	176.90	1981.0
45.05	437.0	66.95	218.0	84.05	360.0	116.95	144.0	191.00	81.0
46.95	430.0	67.95	3479.0	84.95	332.0	117.95	121.0	197.00	86.0
47.95	160.0	68.95	3403.0	86.95	1197.0	118.95	179.0	207.00	380.0
48.95	1236.0	70.05	266.0	87.85	1109.0	127.90	157.0	208.00	102.0
50.05	6084.0	71.95	257.0	90.95	275.0	130.00	135.0	254.90	70.0
50.95	1914.0	72.95	1526.0	91.95	922.0	135.00	159.0	281.00	101.0

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	17.29	17.29	OK
75	30-60% of mass 95	49.99	49.99	OK
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	7.38	7.38	OK
173	Less than 2% of mass 174	0.00	0.00	OK
174	Greater than 50% of mass 95	91.78	91.78	OK
175	5-9% of mass 174	6.18	6.74	OK
176	95-101% of mass 174	89.00	96.97	OK
177	5-9% of mass 176	5.74	6.45	OK

Injection Date: 12/19/00
Injection Time: 09:10
Data File: >C4091
Scan: 75



>C4091 BFB TUNE
75

File: >C4091 Scan #: 75 Retn. time: 4.47

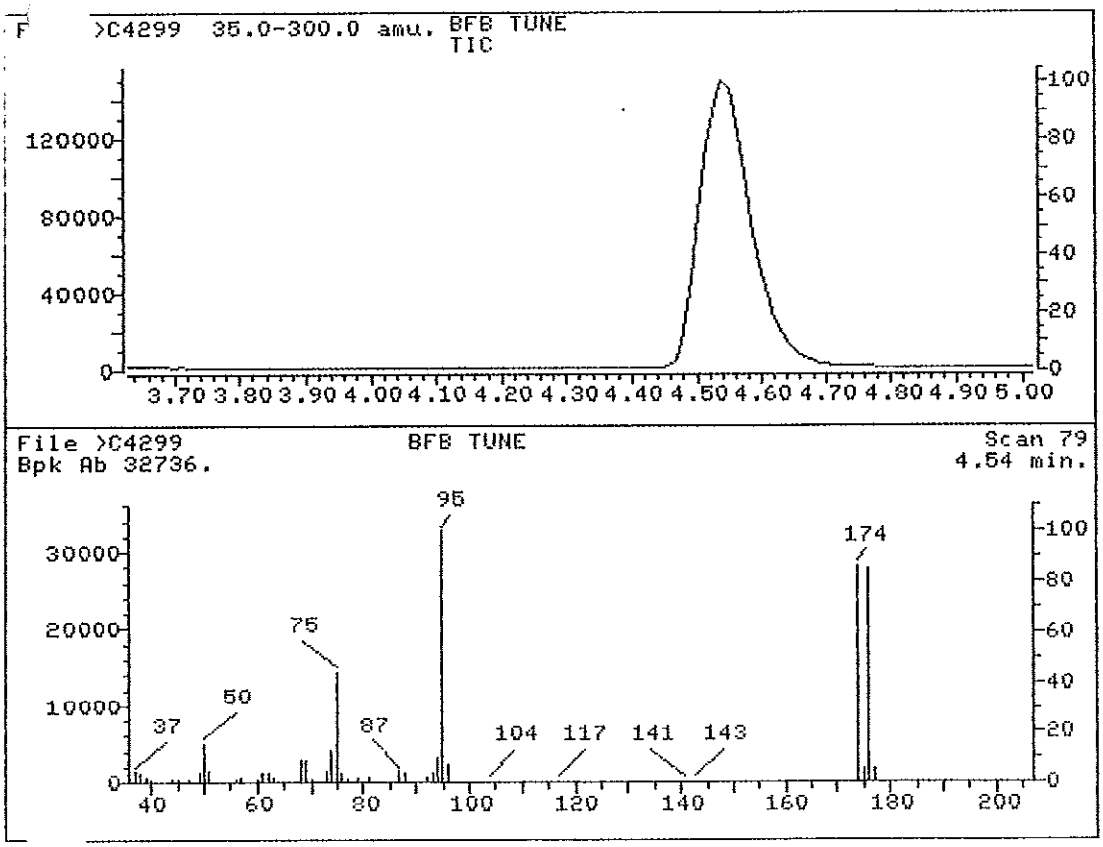
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.85	224.0	50.90	1443.0	71.90	125.0	86.80	1019.0	117.70	82.0
36.85	1262.0	55.90	428.0	72.90	1147.0	87.80	999.0	118.80	130.0
37.85	1226.0	57.00	665.0	73.90	4169.0	90.60	77.0	127.95	60.0
38.85	407.0	59.80	242.0	74.90	13960.0	91.90	730.0	129.85	72.0
39.75	671.0	60.90	1181.0	75.90	1281.0	92.90	972.0	140.75	164.0
43.80	379.0	61.80	1021.0	76.90	233.0	93.90	2931.0	142.75	176.0
44.90	257.0	62.90	800.0	77.80	184.0	94.90	27928.1	173.75	25632.1
46.80	342.0	63.90	98.0	78.80	533.0	95.80	2060.0	174.75	1727.0
47.80	119.0	67.90	2836.0	79.80	152.0	103.80	128.0	175.75	24856.1
48.90	1168.0	68.90	2595.0	80.80	501.0	105.80	112.0	176.75	1604.0
49.90	4828.0	69.70	141.0	81.70	107.0	116.80	143.0	207.00	159.0

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	15.62	15.62	Ok
75	30-60% of mass 95	44.23	44.23	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.66	6.66	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	85.97	85.97	Ok
175	5-9% of mass 174	5.61	6.52	Ok
176	95-101% of mass 174	85.07	98.95	Ok
177	5-9% of mass 176	5.41	6.36	Ok

Injection Date: 01/04/01
Injection Time: 08:26
Data File: >C4299
Scan: 79



>C4299 BFB TUNE
79

F >: >C4299 Scan #: 79 Retn. time: 4.54

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	243.0	51.85	90.0	69.95	237.0	81.85	113.0	115.90	86.0
36.95	1318.0	54.95	92.0	71.95	147.0	86.85	1399.0	116.80	110.0
37.95	1118.0	55.95	391.0	72.95	1395.0	87.85	1077.0	118.90	104.0
38.95	504.0	56.95	704.0	73.95	4314.0	90.95	122.0	127.90	82.0
39.85	262.0	59.95	220.0	74.95	14479.0	91.95	731.0	140.90	148.0
43.95	278.0	60.95	1180.0	75.95	1188.0	92.95	1035.0	142.90	144.0
44.95	240.0	61.95	1087.0	76.85	218.0	93.95	3168.0	173.95	28144.1
46.95	396.0	62.95	751.0	77.85	168.0	94.95	32736.1	174.95	1836.0
47.85	160.0	66.95	83.0	78.85	488.0	96.00	2179.0	175.95	27848.1
49.05	1172.0	67.95	2893.0	79.95	131.0	103.90	126.0	176.95	1770.0
49.95	5114.0	68.95	2784.0	80.85	484.0	105.90	97.0	207.05	159.0
50.95	1558.0								

Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: MSD#D

ntractor: Accredited Labs

Calibration Date: 02/18/00

Contract No: CACS04

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 30%

Laboratory ID:	>C8791	>C8790	>C8789	>C8792	>C8793						
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Acrolein	.02869	.02921	.02699	.02660	.02727	.589	.02775	4.089			(Conc=50.0,100.0,250.0,50
Acrylonitrile	.08168	.08003	.08027	.07784	.07935	.749	.07983	1.754			(Conc=50.0,100.0,250.0,50
Acetone	.09028	.05535	.04958	.05569	.05730	.605	.06164	26.404			
Dichlorodifluoromethane	.21481	.21609	.22582	.19041	.16763	.317	.20295	11.664			
Chloromethane	.19342	.16913	.14465	.14928	.14199	.357	.15969	13.557		**	
Vinyl Chloride	.17296	.16147	.13801	.13373	.12387	.375	.14601	13.996	*		
Bromomethane	.28717	.26935	.27528	.28927	.26964	.449	.27814	3.426			
Chloroethane	.18685	.16896	.17889	.18307	.17439	.448	.17843	3.949			
Trichlorofluoromethane	.87787	.80756	.82418	.85680	.79796	.494	.83288	4.042			
1,1-Dichloroethene	.50601	.47986	.48483	.47981	.48320	.624	.48674	2.257	*		
Carbon disulfide	.40351	.35517	.36577	.34975	.34719	.721	.36428	6.330			
Methylene Chloride	1.01860	.67678	.49119	.43171	.39769	.721	.60319	42.442			
trans-1,2-Dichloroethene	.50927	.47733	.47758	.48428	.47987	.775	.48567	2.777			
1,1-Dichloroethane	.64528	.60508	.60043	.61037	.62221	.853	.61667	2.908		**	
inyl acetate	.56211	.46577	.47864	.49117	.51261	.859	.50206	7.520			
,2-Dichloropropane	.52373	.48183	.46200	.46335	.42607	.951	.47140	7.542			
2-Butanone	.16485	.13561	.10804	.10462	.10853	.931	.12433	20.792			
cis-1,2-dichloroethene	.57537	.54296	.53563	.54557	.54726	.958	.54936	2.767			
Chloroform	.81574	.76420	.75595	.77263	.78386	.984	.77848	2.987	*		
Bromochloromethane	.38131	.34562	.33517	.33876	.34785	1.010	.34974	5.253			
1,1,1-Trichloroethane	.81082	.74351	.73506	.75222	.74500	1.048	.75732	4.030			
T-butyl alcohol	.02955	.02863	.02857	.02717	.02738	.653	.02826	3.486			(Conc=100.0,200.0,500.0,1
1,2-Dichloroethane-d4	.43015	.39978	.38573	.39801	.40030	.948	.40280	4.075			
1,1-Dichloropropene	.61246	.58216	.56806	.57537	.56645	.925	.58090	3.223			
Carbon Tetrachloride	.78106	.73681	.73112	.75277	.73432	.939	.74722	2.767			
1,2-Dichloroethane	.53880	.51132	.50057	.51376	.51332	.960	.51556	2.727			
Benzene	1.12325	1.05117	1.01996	1.03095	1.01472	.962	1.04801	4.229			
Trichloroethene	.56654	.52748	.51605	.53114	.52507	1.043	.53326	3.642			
1,2-Dichloropropane	.41730	.39298	.38189	.39698	.39549	1.067	.39693	3.234	*		
Bromodichloromethane	.82556	.78945	.77661	.78980	.79010	1.098	.79430	2.314			

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

23

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: MSD#D

ntractor: Accredited Labs Calibration Date: 02/18/00

Contract No: CACS04

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 30%

Laboratory ID:	>C8791	>C8790	>C8789	>C8792	>C8793					
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Dibromomethane	.50156	.48117	.47118	.48018	.48778	1.104	.48437	2.329			
2-Chloroethylvinylether	.17094	.17662	.18401	.19634	.20650	1.138	.18688	7.763			
cis-1,3-dichloropropene	.68706	.67381	.66725	.67919	.68759	1.169	.67898	1.283			(Conc=9.5,18.9,47.3,94.5,
Toluene-d8	1.30426	1.20937	1.18482	1.19682	1.19618	1.200	1.21829	4.009			
Toluene	1.44890	1.35169	1.32455	1.34249	1.33570	1.211	1.36066	3.697	*		
trans-1,3-Dichloropropene	.55348	.54316	.54976	.56054	.57197	1.235	.55578	1.982			(Conc=10.5,21.1,52.8,105.
1,1,2-Trichloroethane	.35693	.33264	.32711	.33543	.33758	1.255	.33794	3.350			
4-Methyl-2-pentanone	.47925	.47255	.46205	.45625	.47873	1.141	.46977	2.182			
1,2-Dibromoethane	.61544	.58915	.59353	.60689	.61294	1.351	.60359	1.940			
Bromofluorobenzene	.85980	.79474	.76770	.77314	.75447	1.562	.78997	5.272			
2-Hexanone	.24690	.24544	.25519	.22479	.22361	.897	.23919	5.929			
1,3-dichloropropane	.83213	.75345	.76082	.74980	.70970	.920	.76118	5.828			
Tetrachloroethene	.91644	.82733	.83166	.81163	.73331	.926	.82408	7.909			
Dibromochloromethane	.97671	.90651	.91773	.90057	.83945	.946	.90819	5.387			
thylbenzene	2.37373	2.11082	2.22321	1.94949	2.41085	1.010	2.21362	8.600	*		
nlorobenzene	1.34181	1.22374	1.24530	1.19672	1.11150	1.004	1.22381	6.804		**	
1,1,1,2-Tetrachloroethane	.74224	.67520	.68146	.66522	.59760	1.008	.67234	7.662			
m,p-Xylene	1.91069	1.70877	1.67208	1.70406	1.20394	1.015	1.63991	15.939			(Conc=20.0,40.0,100.0,200
o-Xylene	1.72267	1.54335	1.55713	1.49493	1.14526	1.057	1.49267	14.224			(Conc=20.0,40.0,100.0,200
Styrene	1.19394	1.10085	1.13201	1.08160	.96346	1.061	1.09437	7.736			(Conc=20.0,40.0,100.0,200
Bromoform	.76300	.72299	.74798	.72134	.66909	1.094	.72488	4.933		**	
Isopropylbenzene	3.82657	3.24174	3.28247	3.25110	3.06490	.886	3.33336	8.657			
1,1,2,2-Tetrachloroethane	1.02726	.94231	.95279	.92612	.93013	.901	.95572	4.326		**	
1,2,3-Trichloropropane	.36918	.34058	.34641	.33658	.34126	.912	.34680	3.746			
n-Propyl benzene	4.32856	3.80415	3.92850	3.88885	3.40481	.918	3.87098	8.517			
Bromobenzene	1.75063	1.59641	1.64826	1.81326	1.75702	.923	1.71312	5.155			
1,3,5-Trimethylbenzene	3.21104	2.65769	2.69330	2.67845	2.43269	.930	2.73463	10.486			
2-Chlorotoluene	3.22553	2.79850	3.00573	3.43210	2.57961	.933	3.00829	11.206			
4-Chlorotoluene	2.78390	2.53731	2.41399	1.93650	2.55646	.936	2.44563	12.855			
tert-Butylbenzene	3.13091	2.62944	2.54910	2.49932	2.19930	.959	2.60161	12.978			

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: MSD#D

ntractor: Accredited Labs Calibration Date: 02/18/00

Contract No: CACS04

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 30%

Compound	Laboratory ID: >C8791 RF 10.00	>C8790 RF 20.00	>C8789 RF 50.00	>C8792 RF 100.00	>C8793 RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
1,2,4-Trimethylbenzene	3.18528	2.64406	2.73204	2.70700	2.51733	.962	2.75714	9.189			
sec-Butylbenzene	3.76448	3.13384	3.12435	3.11640	2.74757	.975	3.17733	11.541			
p-Isopropyltoluene	3.45028	2.91655	2.91741	2.87993	2.60512	.986	2.95386	10.383			
1,3-Dichlorobenzene	1.87134	1.70308	1.73466	1.77876	1.75552	.994	1.76867	3.606			
1,4-Dichlorobenzene	2.04583	1.80503	1.84640	1.84845	1.80086	1.003	1.86931	5.412			
n-Butylbenzene	3.06557	2.71719	2.84380	2.93576	2.75711	1.019	2.86389	4.912			
1,2-Dichlorobenzene	1.90742	1.65623	1.64433	1.66958	1.63173	1.033	1.70186	6.802			
1,2-Dibromo-3-Chloropropane	.26634	.26911	.28683	.28656	.28633	1.096	.27903	3.716			
1,2,4-Trichlorobenzene	1.15577	1.04194	1.15642	1.16827	.86840	1.167	1.07816	11.876			
Hexachlorobutadiene	.94083	.84098	.84652	.83980	.63976	1.178	.82158	13.418			
Naphthalene	1.08308	1.05186	1.32255	1.27556	.70305	1.189	1.08722	22.516			
1,2,3-Trichlorobenzene	.48321	.46209	.59890	.51885	.19285	1.212	.45118	34.028			
Methyl t-butyl ether	1.22026	1.10174	1.11905	1.00933	.91740	.377	1.07356	10.712			{Conc=100.0,200.0,500.0,1

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 01/04/01

Contractor: Accredited Labs Time: 08:51

Contract No: CACS04 Laboratory ID: >C4300

Instrument ID: MSD#D Initial Calibration Date: 02/18/00

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 20%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Acrolein	.02775	.01376	50.41			(Conc=250.00)
Acrylonitrile	.07983	.09305	16.55			(Conc=250.00)
Acetone	.06164	.06783	10.05			
Dichlorodifluoromethane	.20295	.18259	10.03			
Chloromethane	.15969	.20694	29.59		**	
Vinyl Chloride	.14601	.15762	7.95	*		
Bromomethane	.27814	.26278	5.52			
Chloroethane	.17843	.17542	1.69			
Trichlorofluoromethane	.83288	.56503	32.16			
1,1-Dichloroethene	.48674	.54858	12.70	*		
Carbon disulfide	.36428	.63575	74.52			
Methylene Chloride	.60319	.44292	26.57			
trans-1,2-Dichloroethene	.48567	.55267	13.80			
1,1-Dichloroethane	.61667	.68686	11.38		**	
nyl acetate	.50206	.67901	35.25			
,2-Dichloropropane	.47140	.43684	7.33			
2-Butanone	.12433	.12571	1.11			
cis-1,2-dichloroethene	.54936	.58632	6.73			
Chloroform	.77848	.78890	1.34	*		
Bromochloromethane	.34974	.38841	11.06			
1,1,1-Trichloroethane	.75732	.65815	13.10			
T-butyl alcohol	.02826	.03924	38.86			(Conc=500.00)
1,2-Dichloroethane-d4	.40280	.37831	6.08			
1,1-Dichloropropene	.58090	.56753	2.30			
Carbon Tetrachloride	.74722	.58467	21.75			
1,2-Dichloroethane	.51556	.43956	14.74			
Benzene	1.04801	1.13061	7.88			
Trichloroethene	.53326	.47975	10.03			
1,2-Dichloropropane	.39693	.40901	3.04	*		
Bromodichloromethane	.79430	.71684	9.75			
Dibromomethane	.48437	.47663	1.60			
2-Chloroethylvinylether	.18688	.23316	24.77			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 01/04/01

ontractor: Accredited Labs

Time: 08:51

Contract No: CACS04

Laboratory ID: >C4300

Instrument ID: MSD#D

Initial Calibration Date: 02/18/00

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 20%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
cis-1,3-dichloropropene	.67898	.68402	.74			(Conc=47.30)
Toluene-d8	1.21829	1.30616	7.21			
Toluene	1.36066	1.37463	1.03	*		
trans-1,3-Dichloropropene	.55578	.52451	5.63			(Conc=52.80)
1,1,2-Trichloroethane	.33794	.33419	1.11			
4-Methyl-2-pentanone	.46977	.55042	17.17			
1,2-Dibromoethane	.60359	.56737	6.00			
Bromofluorobenzene	.78997	.72807	7.84			
2-Hexanone	.23919	.29757	24.41			
1,3-dichloropropane	.76118	.79434	4.36			
Tetrachloroethene	.82408	.85136	3.31			
Dibromochloromethane	.90819	.86653	4.59			
Ethylbenzene	2.21362	2.02859	8.36	*		
Chlorobenzene	1.22381	1.29247	5.61		**	
,1,1,2-Tetrachloroethane	.67234	.62011	7.77			
,p-Xylene	1.63991	1.68734	2.89			(Conc=100.00)
o-Xylene	1.49267	1.64151	9.97			(Conc=100.00)
Styrene	1.09437	1.21580	11.10			(Conc=100.00)
Bromoform	.72488	.64195	11.44		**	
Isopropylbenzene	3.33336	3.80966	14.29			
1,1,2,2-Tetrachloroethane	.95572	1.25841	31.67		**	
1,2,3-Trichloropropane	.34680	.37343	7.68			
n-Propyl benzene	3.87098	4.49236	16.05			
Bromobenzene	1.71312	2.03651	18.88			
1,3,5-Trimethylbenzene	2.73463	3.21046	17.40			
2-Chlorotoluene	3.00829	3.04579	1.25			
4-Chlorotoluene	2.44563	3.00999	23.08			
tert-Butylbenzene	2.60161	3.17736	22.13			
1,2,4-Trimethylbenzene	2.75714	3.16816	14.91			
sec-Butylbenzene	3.17733	4.25113	33.80			
p-Isopropyltoluene	2.95386	3.72440	26.09			
1,3-Dichlorobenzene	1.76867	1.97138	11.46			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No:
Calibration Date: 01/04/01

ntractor: Accredited Labs
Time: 08:51

Contract No: CACS04
Laboratory ID: >C4300

Instrument ID: MSD#D
Initial Calibration Date: 02/18/00

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % Diff for CCC is 20%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
1,4-Dichlorobenzene	1.86931	2.04328	9.31			
n-Butylbenzene	2.86389	3.41860	19.37			
1,2-Dichlorobenzene	1.70186	1.86860	9.80			
1,2-Dibromo-3-Chloropropane	.27903	.30470	9.20			
1,2,4-Trichlorobenzene	1.07816	1.18482	9.89			
Hexachlorobutadiene	.82158	.71318	13.19			
Naphthalene	1.08722	1.23285	13.40			
1,2,3-Trichlorobenzene	.45118	.37186	17.58			
Methyl t-butyl ether	1.07356	1.44163	34.29			(Conc=500.00)

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ACCREDITED LABORATORIES, INC.
WATER/SOIL VOLATILE SURROGATE RECOVERY

	ALI Sample No.	Mtx	S1 (DCE-d4)	S2 (TOL-d8)	S3 (BFB)	TOTAL OUT
1	VBLKC71	S	92	102	98	0
2	0015232	S	90	96	91	0
3	0015233	S	83	94	93	0
4	0014625MS	S	107	103	108	0
5	0014625MSD	S	101	102	103	0

EPA CLP QC Limits for:	WATER	SOIL
S1 (DCE-d4) = 1,2-Dichloroethane-d4	(76-114)	(70-121)
S2 (TOL-d8) = Toluene-d8	(88-110)	(81-117)
S3 (BFB) = Bromofluorobenzene	(86-115)	(74-121)

* Values outside of EPA contract laboratory QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: SAS No.: _____ SDG No.:

Lab File ID (Standard): >C4092 Date Analyzed: 12/19/00

Instrument ID: HP5970BC Time Analyzed: 09:30

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(DFB)		IS2(CBZ)		IS3(PFB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	462661	18.20	360553	25.54	461826	15.74
	UPPER LIMIT	925322	18.70	721106	26.04	923652	16.24
	LOWER LIMIT	231331	17.70	180276	25.04	230913	15.24
	LAB SAMPLE NO.						
01	VBLKC59	286891	18.25	224904	25.49	287132	15.79
02	0014625MS	398124	18.30	323230	25.50	425263	15.79
03	0014625MSD	400773	18.28	330420	25.53	405889	15.82
04							
05							
06							
07							
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11							
12							
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14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: SAS No.: _____ SDG No.:

Lab File ID (Standard): >C4092 Date Analyzed: 12/19/00

Instrument ID: HP5970BC Time Analyzed: 09:30

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS4(DCB) AREA #	IS4(DCB) RT #				
	12 HOUR STD	208422	31.38				
	UPPER LIMIT	416844	31.88				
	LOWER LIMIT	104211	30.88				
	LAB SAMPLE NO.						
01	VBLKC59	109882	31.37				
02	0014625MS	183753	31.38				
03	0014625MSD	189371	31.41				
04							
05							
06							
07							
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09							
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14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 1404 SAS No.: _____ SDG No.:

Lab File ID (Standard): >C4300 Date Analyzed: 01/04/01

Instrument ID: HP5970BC Time Analyzed: 08:51

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(DFB)			IS2(CBZ)			IS3(PFB)	
		AREA	#	RT	#	AREA	#	RT	#	AREA	#	RT	#
	12 HOUR STD	505656		18.32		404314		25.56		486539		15.85	
	UPPER LIMIT	1011312		18.82		808628		26.06		973078		16.35	
	LOWER LIMIT	252828		17.82		202157		25.06		243269		15.35	
	LAB SAMPLE NO.												
01	VBLKC71	482694		18.31		380820		25.55		462790		15.85	
02	0015232	541221		18.29		436353		25.54		518448		15.83	
03	0015233	511599		18.30		419023		25.55		495213		15.79	
04													
05													
06													
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18													
19													
20													
21													
22													

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: 1404 SAS No.: _____ SDG No.:

Lab File ID (Standard): >C4300 Date Analyzed: 01/04/01

Instrument ID: HP5970BC Time Analyzed: 08:51

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS4(DCB) AREA #	RT #					
	12 HOUR STD	228396	31.45					
	UPPER LIMIT	456792	31.95					
	LOWER LIMIT	114198	30.95					
	LAB SAMPLE NO.							
01	VBLKC71	191486	31.43					
02	0015232	230639	31.42					
03	0015233	227980	31.39					
04								
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17								
18								
19								
20								
21								
22								

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Accredited Labs, Inc. Contract: _____

Lab Code: GC/MS Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix Spike - ALI Sample No.: 0014625

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	47	94	59-172
Trichloroethene	50	0	39	77	62-137
Benzene	50	0	45	90	66-142
Toluene	50	0	41	81	59-139
Chlorobenzene	50	0	42	85	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	49	97	3	22	59-172
Trichloroethene	50	38	75	3	24	62-137
Benzene	50	43	87	4	21	66-142
Toluene	50	41	81	0	21	59-139
Chlorobenzene	50	42	85	0	21	60-133

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of qc limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	V8LKC71	DILUTION FACTOR	125
DATA FILE	>C4301	DATE EXTRACTED	
CLIENT NAME		DATE ANALYZED	01/04/01
FIELD ID		ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	U	3100
107131	Acrylonitrile	U	3100
75718	Dichlorodifluoromethane	U	630
74873	Chloromethane	U	630
75014	Vinyl Chloride	U	630
74839	Bromomethane	U	630
75003	Chloroethane	U	630
75694	Trichlorofluoromethane	U	630
75354	1,1-Dichloroethene	U	630
75092	Methylene Chloride	U	630
156605	trans-1,2-Dichloroethene	U	630
75343	1,1-Dichloroethane	U	630
590207	2,2-Dichloropropane	U	630
156592	cis-1,2-dichloroethene	U	630
67663	Chloroform	U	630
74975	Bromochloromethane	U	630
71556	1,1,1-Trichloroethane	U	630
563586	1,1-Dichloropropene	U	630
56235	Carbon Tetrachloride	U	630
107062	1,2-Dichloroethane	U	630
71432	Benzene	U	630
79016	Trichloroethene	U	630
78875	1,2-Dichloropropane	U	630
75274	Bromodichloromethane	U	630
74953	Dibromomethane	U	630
10061015	cis-1,3-dichloropropene	U	630
108883	Toluene	U	630
10061026	trans-1,3-Dichloropropene	U	630
79005	1,1,2-Trichloroethane	U	630
142289	1,3-dichloropropane	U	630
127184	Tetrachloroethene	U	630
124481	Dibromochloromethane	U	630
106934	1,2-Dibromoethane	U	630
100414	Ethylbenzene	U	630

CAS #	COMPOUND	UG/KG	MDL
108907	Chlorobenzene	U	630
630206	1,1,1,2-Tetrachloroethane	U	630
1330207	m,p-Xylene	U	1300
100425	Styrene	U	630
98828	Isopropylbenzene	U	630
75252	Bromoform	U	630
79345	1,1,2,2-Tetrachloroethane	U	630
96184	1,2,3-Trichloropropane	U	630
103651	n-Propyl benzene	U	630
108861	Bromobenzene	U	630
108678	1,3,5-Trimethylbenzene	U	630
95498	2-Chlorotoluene	U	630
106434	4-Chlorotoluene	U	630
98066	tert-Butylbenzene	U	630
95636	1,2,4-Trimethylbenzene	U	630
135988	sec-Butylbenzene	U	630
99876	p-Isopropyltoluene	U	630
541731	1,3-Dichlorobenzene	U	630
106467	1,4-Dichlorobenzene	U	630
104518	n-Butylbenzene	U	630
95501	1,2-Dichlorobenzene	U	630
96128	1,2-Dibromo-3-Chloropropane	U	630
120821	1,2,4-Trichlorobenzene	U	630
87683	Hexachlorobutadiene	U	630
91203	Naphthalene	140 J	630
87616	1,2,3-Trichlorobenzene	U	630
95476	o-Xylene	U	630
75150	Carbon disulfide	U	630
110758	2-Chloroethylvinylether	U	630
67641	Acetone	U	630
108054	Vinyl acetate	U	630
789333	2-Butanone	U	630
108101	4-Methyl-2-pentanone	U	630
591786	2-Hexanone	U	630

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	92 %	70-121	OK
Toluene-d8	102 %	81-117	OK
Bromofluorobenzene	98 %	74-121	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected,
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*
B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Accredited Labs, Inc. Lab Sample ID: VBLKC71

Client Name: Field ID:

Case No.: Date Extracted:

Lab File ID: >C4301 Date Analyzed: 01/04/01

CONCENTRATION UNITS: (ug/L or ug/Kg): ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* Unknowns are defined as: Compounds that are less than 80% probability or have no database entries from the library.

FORM I SV-TIC

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ACCREDITED LABS, INC. Contract:_____

Lab Code: Case No.: SAS No.: _____ SDG No.:

Lab File ID: >C4093 Lab Sample ID: VBLKC59

Date Analyzed: 12/19/00 Time Analyzed: 10:32

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) Y

Instrument ID: HP5970C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		0014625MS	>C4095	12:20
02		0014625MSD	>C4096	13:07
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ACCREDITED LABS, INC. Contract:_____

Lab Code: Case No.: 1404 SAS No.: _____ SDG No.:

Lab File ID: >C4301 Lab Sample ID: VBLKC71

Date Analyzed: 01/04/01 Time Analyzed: 09:49

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) Y

Instrument ID: HP5970C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		0015232	>C4302	10:58
02		0015233	>C4303	11:44
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
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16				
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19				
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22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS: _____

ACCREDITED LABORATORIES, INC.

TOTAL PETROLEUM HYDROCARBONS
SOIL DUPLICATE AND MATRIX SPIKE SUMMARY

DUPLICATE SAMPLE #:200015131

ORIGINAL CONCENTRATION (mg/Kg)	DUPLICATE CONCENTRATION (mg/Kg)	RPD	RPD QC LIMIT
ND	ND	0	25

MATRIX SPIKE SAMPLE #:200015131

SPIKE ADDED (mg/Kg)	SAMPLE CONC (mg/Kg)	MS CONC (mg/Kg)	% RECOVERY	RECOVERY QC LIMITS
205	ND	198	97	75-125

QUANT REPORT

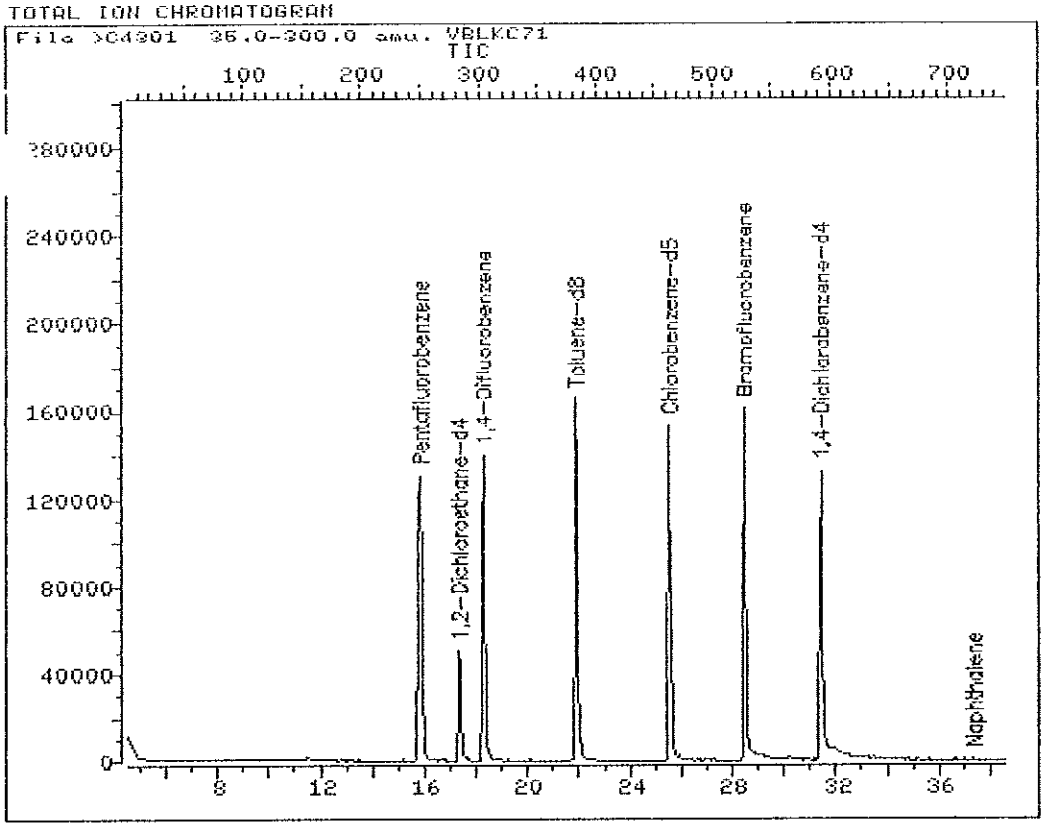
Operator ID: WILLIAM Quant Rev: 6 Quant Time: 010104 10:29
Output File: ^C4301::D2 Injected at: 010104 09:49
D ta File: >C4301::C1 Dilution Factor: 1.00000
l e: VBLKC71
Misc:

ID File: IDCS04::D2
Title: Accredited Labs ID file for 8260
Last Calibration: 001219 09:08

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	15.85	250	462790	50.00	ug/l	99
24)	*1,4-Difluorobenzene	18.31	304	482694	50.00	ug/l	92
25)	1,2-Dichloroethane-d4	17.35	283	139516	45.86	ug/l	88
36)	Toluene-d8	21.91	383	468095	51.12	ug/l	98
42)	Bromofluorobenzene	28.47	527	258622	49.23	ug/l	93
43)	*Chlorobenzene-d5	25.55	463	380820	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	31.43	592	191486	50.00	ug/l	95
75)	Naphthalene	37.36	722	4738	1.14	ug/l	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C4301::C1 Quant Output File: ^C4301::D2
Name: VBLKC71
Misc:

Id File: IDCS04::D2
Title: Accredited Labs ID file for 8260
Last Calibration: 001219 09:08

Operator ID: WILLIAM
Quant Time: 010104 10:29
Injected at: 010104 09:49

QUANT REPORT

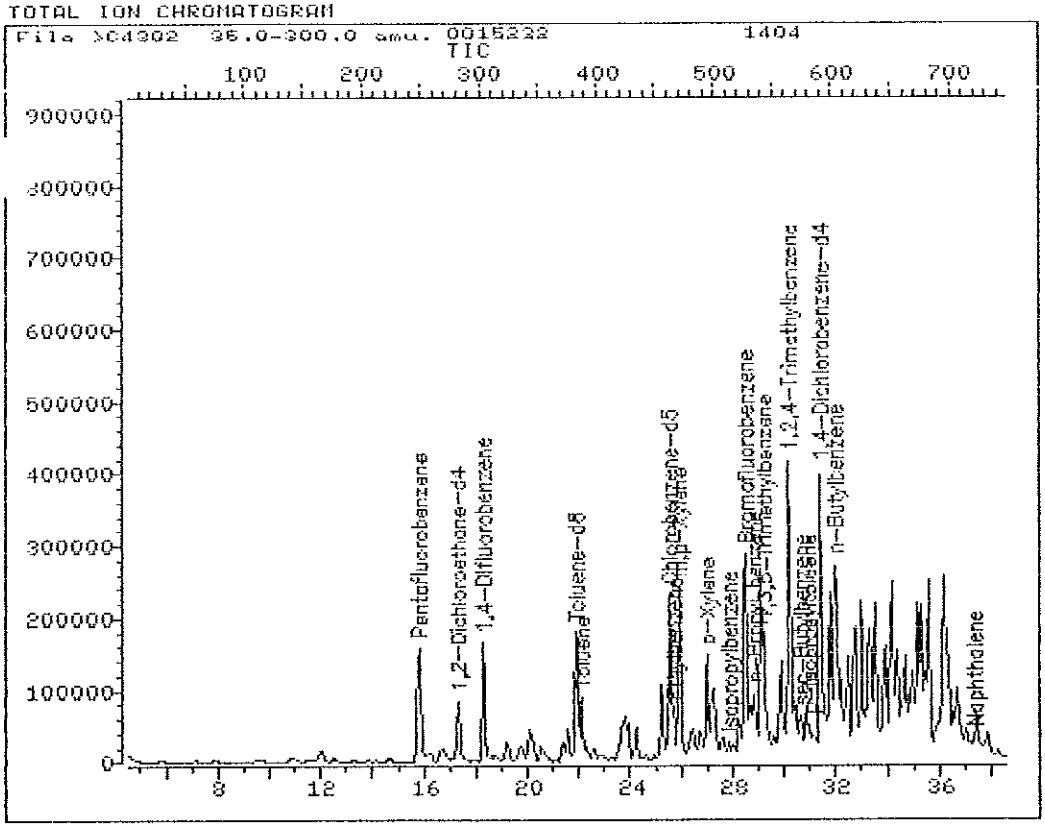
Operator ID: WILLIAM Quant Rev: 6 Quant Time: 010108 08:17
Output File: ^C4302::QT Injected at: 010104 10:58
Data File: >C4302::C1 Dilution Factor: 1.00000
N : 0015232
Misc: 1404 ENVIROTACTICS G-1

ID File: IDCS04::D2
Title: Accredited Labs ID file for 8260
Last Calibration: 001219 09:08

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	15.83	249	518448	50.00	ug/l	99
24)	*1,4-Difluorobenzene	18.29	303	541221	50.00	ug/l	93
25)	1,2-Dichloroethane-d4	17.33	282	153660	45.05	ug/l	89
36)	Toluene-d8	21.89	382	491571	47.88	ug/l	98
37)	Toluene	22.12	387	249942	16.97	ug/l	92
42)	Bromofluorobenzene	28.50	527	267563	45.43	ug/l	84
43)	*Chlorobenzene-d5	25.54	462	436353	50.00	ug/l	100
48)	Ethylbenzene	25.72	466	115904M	6.00	ug/l	67
51)	m,p-Xylene	25.90	470	577035	40.32	ug/l	95
52)	o-Xylene	27.00	494	307323	23.59	ug/l	100
55)	*1,4-Dichlorobenzene-d4	31.42	591	230639	50.00	ug/l	93
56)	Isopropylbenzene	27.87	513	36820	2.39	ug/l	76
59)	n-Propyl benzene	28.82	534	101810	5.70	ug/l	91
61)	1,3,5-Trimethylbenzene	29.23	543	210531M	16.69	ug/l	81
65)	1,2,4-Trimethylbenzene	30.19	564	815320	64.11	ug/l	85
66)	sec-Butylbenzene	30.65	574	63381	4.32	ug/l	94
[illegible]	p-Isopropyltoluene	30.97	581	50074M	3.68	ug/l	91
[illegible]	n-Butylbenzene	31.97	603	143219M	10.84	ug/l	75
75)	Naphthalene	37.36	721	55706	11.11	ug/l	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C4302::C1 Quant Output File: ^C4302::QT
Name: 0015232
Misc: 1404 ENVIROTACTICS G-1

Id File: IDCS04::D2
Title: Accredited Labs ID file for 8260
Last Calibration: 001219 09:08

Operator ID: WILLIAM
Quant Time: 010108 08:17
Injected at: 010104 10:58

QUANT REPORT

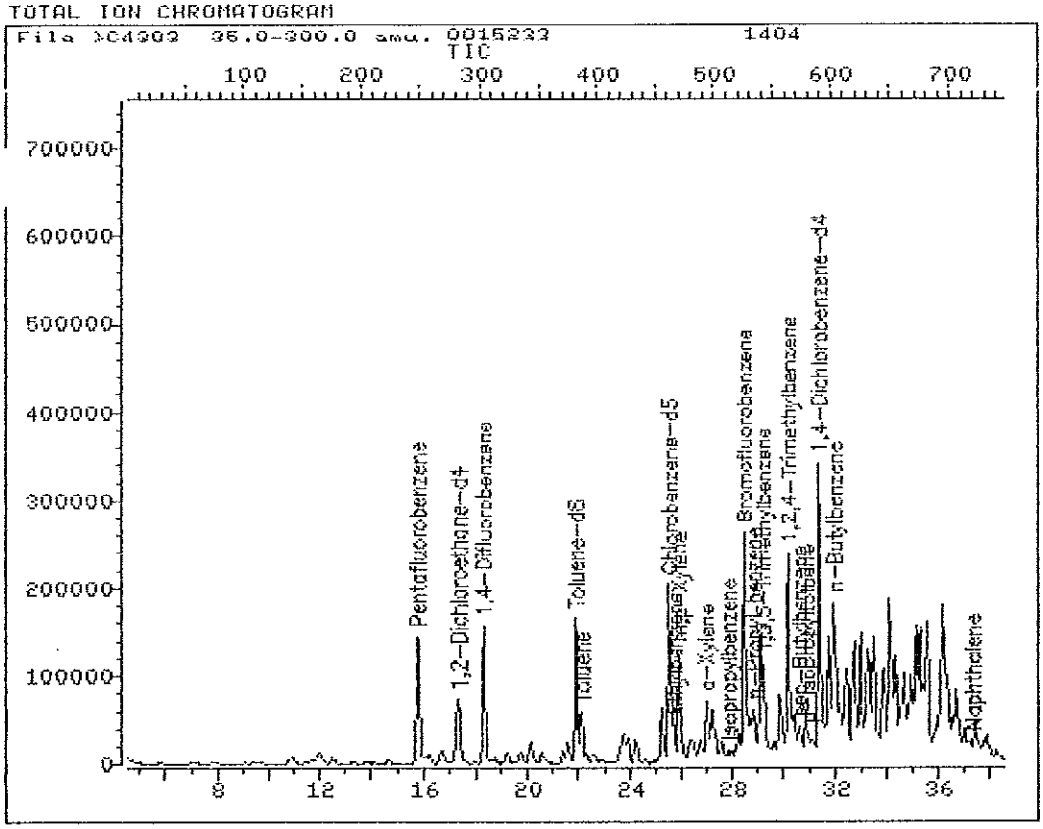
Operator ID: WILLIAM Quant Rev: 6 Quant Time: 010108 08:19
Output File: ^C4303::QT Injected at: 010104 11:44
Data File: >C4303::C1 Dilution Factor: 1.00000
Name: 0015233
Misc: 1404 ENVIROTACTICS G-2

ID File: IDCS04::D2
Title: Accredited Labs ID file for 8260
Last Calibration: 001219 09:08

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Pentafluorobenzene	15.79	248	495213	50.00	ug/l	90
24)	*1,4-Difluorobenzene	18.30	303	511599	50.00	ug/l	92
25)	1,2-Dichloroethane-d4	17.34	282	133281	41.34	ug/l	89
36)	Toluene-d8	21.90	382	454260	46.81	ug/l	98
37)	Toluene	22.13	387	166781	11.98	ug/l	92
42)	Bromofluorobenzene	28.47	526	259682	46.64	ug/l	91
43)	*Chlorobenzene-d5	25.55	462	419023	50.00	ug/l	100
48)	Ethylbenzene	25.73	466	75858M	4.09	ug/l	69
51)	m,p-Xylene	25.91	470	275959	20.08	ug/l	97
52)	o-Xylene	26.96	493	140100	11.20	ug/l	100
55)	*1,4-Dichlorobenzene-d4	31.39	590	227980	50.00	ug/l	96
56)	Isopropylbenzene	27.83	512	18974	1.25	ug/l	78
59)	n-Propyl benzene	28.83	534	55448	3.14	ug/l	94
61)	1,3,5-Trimethylbenzene	29.20	542	175345M	14.06	ug/l	84
65)	1,2,4-Trimethylbenzene	30.20	564	455715	36.25	ug/l	83
[illegible]	sec-Butylbenzene	30.61	573	37723	2.60	ug/l	93
6.)	p-Isopropyltoluene	30.93	580	17909M	1.33	ug/l	87
70)	n-Butylbenzene	31.98	603	88637M	6.79	ug/l	75
75)	Naphthalene	37.32	720	36164	7.30	ug/l	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >C4303::C1 Quant Output File: ^C4303::QT
Name: 0015233
Misc: 1404 ENVIROTACTICS G-2

Id File: IDCS04::D2
Title: Accredited Labs ID file for 8260
Last Calibration: 001219 09:08

Operator ID: WILLIAM
Quant Time: 010108 08:19
Injected at: 010104 11:44

Township of South Orange Village
101 South Orange Ave
South Orange, NJ 07079
973-3787715

CERTIFICATE
IDENTIFICATION

Date Issued: 08/12/2010
Control #: 19142
Permit #: 20100573

Block: 2303 Lot: 7 Qual:
Work Site Location: 209 VALLEY ST
SOUTH ORANGE
Owner in Fee: LEE & ASSOCIATES
Address: 150 CLOVE ROAD
LITTLE FALLS NJ 07424
Telephone: 866 379-4928
Agent/Contractor: ENVIRONMENTAL WASTE MANAGEMENT ASSOC. LLC
Address: 100 MISTY LANE
PARSIPPANY NJ 07054
Telephone: 973 560-1400
Lic. No./ Bldrs. Reg.No.: US00113 Federal Emp. No.:
Social Security No.:

Home Warranty No:
Type of Warranty Plan: [ ] State [ ] Private
Use Group: R-3
Maximum Live Load:
Construction Classification:
Maximum Occupancy Load:
Certificate Exp Date:
Description of Work/Use:
Tank Removal-550 GALLON UST OIL TANK

Update Desc. of Wk/Use:

[ ] **CERTIFICATE OF OCCUPANCY**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

[X] **CERTIFICATE OF APPROVAL**

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

[ ] **TEMPORARY CERTIFICATE OF OCCUPANCY/COMPLIANCE**

If this is a temporary Certificate of Occupancy or Compliance, the following conditions must be met no later than or will be subject to fine or order to vacate:

[ ] **CERTIFICATE OF CLEARANCE-LEAD ABATEMENT 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC 5:17, to the following extent:

[ ] Total removal of lead-based paint hazards in scope of work

[ ] Partial or limited time period(_____ years); see file

[ ] **CERTIFICATE OF CONTINUED OCCUPANCY**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

[ ] **CERTIFICATE OF COMPLIANCE**

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

ANTHONY GRENCI

ANTHONY GRENCI Construction Official

Fees: $0.00
Paid[X]Check No.: 025328
Collected by: OD

U.C.C 260 (rev. 5/03) 1 - APPLICANT 2 - OFFICE 3 - TAX ASSESSOR