CLOSURE OF DRYWELL 3
WORK PLAN
BARTLETT TREE COMPANY SITE
WESTBURY, NEW YORK
NYSDEC SITE REGISTRY NO. 130074

Prepared for

F.A. Bartlett Tree Expert Company,
Charlotte, North Carolina

February 2009

CLOSURE OF DRYWELL 3
WORK PLAN
BARTLETT TREE COMPANY SITE
WESTBURY, NEW YORK
NYSDEC SITE REGISTRY NO. 130074

Prepared for
F.A. Bartlett Tree Expert Company
Charlotte, North Carolina

February 2009

Project Number: 135711.301

BROWN AND CALDWELL
Associates
234 Hudson Avenue
Albany, New York 12210

TABLE OF CONTENTS

APPENDICES

LIST OF FIGURES

1. INTRODUCTION

Brown and Caldwell Associates (BC) has prepared this work plan to present the methodologies to close and investigate Drywell 3, a floor drain, and a former mechanic's pit at the Bartlett Tree Company Site (the Site). Drywell 3 is believed to be currently serving as a cesspool which receives sanitary wastes from the adjacent Office Building. The drywell may also have connections to a floor drain located in the exterior stairwell on the north side of the Office Building, and/or to a potential drain located in a suspected former mechanic's pit located in the ground floor of the Office Building. The purpose of the closure of Drywell 3 is to terminate its use as a cesspool for the receipt of sanitary sewage, to remove accumulated liquids and solids from the drywell, and to investigate and terminate any connections to the stairwell floor drain or a drain in the mechanic's pit. The termination of this usage will be performed after the connection of the Office Building sanitary sewage system into the municipal system servicing the Village of Westbury. Based on the proximity of the drywell to the Office Building, removal of the drywell system could adversely impact the foundation of the Office Building. As such, Bartlett will close the drywell/cesspool in place by removing and properly disposing of its contents and backfilling the structure with certified clean fill. The investigation activities (in addition to the typical closure activities) are deemed necessary due to the discovery of petroleum products and pesticides/herbicides in the materials contained within the drywell/cesspool.

This work plan reflects the approach for the closure of the drywell originally described in BC's letter work plan (December 22, 2008) to Mr. Jamie Ascher of the New York State Department of Environmental Conservation (DEC). The approach has been modified and expanded to address comments received from the DEC and the Nassau County Department of Health (NCDH) based on their review of the December 22, 2008 plan and an inspection of the facility conducted by the NCDH on December 20, 2008. The NCDH inspection was conducted as a result of the facility's plans to connect the Office Building to the municipal sanitary sewer system.

1.1 Background

A remedial investigation is being conducted in accordance with the DEC-approved "Remedial Investigation/Feasibility Study Work Plan" prepared by BC and dated March 2008. As part of the RI, BC obtained architectural plans and building permits from the Westbury Building Department which identified the potential presence of a drywell (i.e., Drywell 3) located on the northern side of the Office Building (Figure 1). The, architectural plans (Knebel, 1964) show a floor drain at the base of a proposed exterior stairway on the north side of the Office Building. The floor drain is shown connecting to a pre-cast dry well (four feet in diameter by three feet deep), located a few feet to the north and west of the stairway (in the approximate location of Drywell 3). Further, a building permit application (Village of Westbury, December 19, 1966) indicates the Office Building restrooms were to be connected to an eight foot diameter cesspool near the north side of the building. At the time of the acquisition of the documents, it had not been determined whether the discharge point of the Office Building restrooms was the municipal sanitary sewer or the drywell/cesspool, or whether the floor drain at the base of the exterior stairwell was connected to the drywell.

As part of the remedial investigation activities, BC personnel removed a cast-iron manhole cover located to the north and west of the stairway of the Office Building. Visual inspection of the interior of the manhole indicated that the manhole structure is approximately four feet in depth and accesses a below grade structure filled with liquids/suspended solids associated with sanitary sewage. A light non-aqueous phase liquid (LNAPL) with a petroleum-like odor was noted on the surface of the liquids/suspended solids. The origin of the LNAPL is unknown. The level of the wastes within the structure were noted to fluctuate, indicating that

the structure is a cesspool and not a contained tank, and that liquid portions of the sanitary wastes were percolating into the subsurface.

BC collected a sample of the LNAPL for laboratory analysis. BC also utilized a GeoProbe®-type direct-push rig to obtain a sample of the solid material at the base of the drywell. Information obtained during the drilling effort indicated the presence of liquids with suspended solids associated with sanitary sewage to a depth of approximately 14-15 feet below ground surface (bgs). At this depth, denser sediments were encountered. A sample of the denser sediment was collected in the 14-15 foot interval; however, the depth of the base of the structure, if any, or the interface between the sanitary sewage sediments and the native soil materials was not determined.

In response to Bartlett's proposal to connect the Office Building's sanitary sewage system to the municipal sanitary sewer system, the NCDH inspected the ground floor of the Office Building on December 30, 2008. The NCDH representative observed a pit in the concrete floor of the building. The pit was filled with coarse aggregate and covered with wooden planks. The former use of the pit is unknown but it is suspected to be a former mechanic's pit that was used for servicing Bartlett's trucks. No records regarding the pit's construction or filling have been identified. It is not known whether this pit could have a drain that connects to Drywell 3.

1.2 Waste Characterization

BC submitted the above-noted sediment and LNAPL samples to Lancaster Laboratories of Lancaster, Pennsylvania. Lancaster Laboratories is certified (Certification Number 10670) under the New York State Department of Health (NYSDOH), Environmental Laboratory Accreditation Program (ELAP). The samples were analyzed for the following parameters:

- TCL VOCs by USEPA SW 846 Method 8260;
- TCL SVOCs by USEPA SW 846 Method 8270C;
- TCL Pesticides by USEPA SW 846 Method 8081A;
- Organophosphorous Pesticides by USEPA SW 846 Method 8141A;
- Chlorinated Herbicides by USEPA SW 846 Method 8151A;
- TAL Metals - USEPA SW 846 Method 6010B/7471A; and
- PCBs by USEPA SW-846 Method 8082.

In addition, the LNAPL sample was submitted for qualitative gas chromatographic (GC) fingerprinting to assess its similarity to known petroleum product types.

The unvalidated laboratory reports (Form 1's) for the sediment and LNAPL samples are attached (Appendix A). The data indicated the presence of a number of organic compounds in the LNAPL and/or sediment samples, including VOCs (e.g., toluene, ethyl benzene, xylenes, etc.), SVOCs (e.g., naphthalene, fluorene, anthracene), pesticides (DDT, DDE, DDD, chlordane, BHC), and herbicides (e.g. MCPP or Mecoprop; 2,4,5-T; 2,4-DB). The fingerprint analysis of the LNAPL sample indicated it most closely resembled diesel/No. 2 fuel oil.

A Data Usability Summary Report (DUSR) for these analyses is currently being prepared. The final results will be included in the subsequent Remedial Investigation Report.

2. CLOSURE ACTIVITIES

2.1 Permits and Notification

The Remedial Contractor will obtain all necessary permits, provide notifications and schedule inspections, as necessary, with the Village of Westbury Building Department as well as the NCDH regarding the closure of the drywell/cesspool system. These agencies have been notified that the closure of the drywell/cesspool, while being performed in conjunction with the connection to the municipal sewer system, is being performed under the overall investigation/remediation program being conducted under the auspices of the DEC. Any resulting soil/groundwater impacts from the drywell/cesspool system will be addressed under the DEC-authorized remedial program.

BC discussed the closure of Drywell 3 with a representative of the NCDH to inform the department of the impacts to the contents of the drywell. The NCDH agreed that any resulting soil/groundwater impacts from the drywell/cesspool system will be addressed under the DEC-authorized remedial program, and stated that the NCDH must be notified a minimum of five (5) days prior to work so a representative can be present to observe the work.

2.2 Additional Waste Characterization

If necessary, additional waste characterization sampling may be conducted prior to the closure activities in order to supplement the waste characterization data previously obtained (Section 1.2) and to fulfill the requirements of permitted disposal facilities being considered for off-site waste disposal. The Remedial Contractor is in the process of assessing whether permitted off-site disposal facilities can utilize the existing waste characterization data or whether additional in-situ waste characterization will be required for the procurement of disposal facility approvals before removal. Pre-approval will allow direct load-out of wastes, minimizing stockpiling and on-site handling, and avoiding delays associated with facility approvals.

Additional waste characterization sampling (if any) will be performed using manual collection and, if necessary, direct-push (GeoProbe®) coring devices to ensure collection of representative samples of the liquids and sediments/soils to be removed. The analyses required for additional waste characterization will be determined by the permit requirements of the prospective disposal facility(ies), but may include VOCs, RCRA characteristics (toxicity, ignitability, corrosivity and reactivity), RCRA metals, and total petroleum hydrocarbons (TPHC). Initial testing of the sediment and LNAPL samples (Section 1.2) indicate that the materials do not contain PCBs. The results of the additional waste characterization sampling and analysis will be provided to the DEC and the NCDH, and the agencies will be notified of the designated disposal facility(ies).

The origins of the organic constituents detected in the contents of Drywell 3 are unknown, and the waste materials that will be removed in conjunction with the closure of the drywell are not considered to be Listed Hazardous Wastes. Therefore, characterization of the waste materials as Hazardous or Non-Hazardous will be based solely on the results of testing for RCRA characteristics (toxicity, ignitability, corrosivity and reactivity).

2.3 Inspection of Former Mechanic's Pit

The pit located on the ground floor of the Office Building will be inspected to determine if it has a solid bottom (with or without a drain) or if it has an earthen bottom. This inspection will be conducted prior to backfilling Drywell 3 so that if a drain is identified in the base of the pit, it can be tested to see if it is connected to Drywell 3.

Inspection of the pit will be performed, in general, as follows. The boards covering the pit will be removed. The fill materials (apparently gravel) will be removed from the pit by means of a vacuum (vac) truck, small excavator, or by hand shovel. The fill will be temporarily staged on and covered with polyethylene sheeting pending either disposal of the material at a permitted facility or reuse as fill in the pit. Assuming that the grain-size distribution of the fill is suitable for laboratory analysis (i.e., not too coarse), a representative sample of the fill will be collected and analyzed for the parameters specified in Section 1.2 of this work plan.

The pit will not be entered unless it is apparent that it was constructed as a mechanic's pit and thus intended for occupancy, and is deemed by the project engineer to be structurally sound. Prior to entering the pit, the atmosphere in the pit will be monitored for VOCs, lower explosive limit (LEL), oxygen, carbon monoxide and hydrogen sulfide to verify that conditions are within acceptable limits in accordance with the site-specific Health and Safety Plan (HASP). If the pit is found to be unsuitable for entry, its contents will be inspected and sampled as practicable from the surface.

The structural condition of the pit will be noted, including the presence of cracks and the condition of mortar repairs (if any). The contents of the pit will be sampled as follows and analyzed for the parameters specified in Section 1.2 of this work plan. All sampling and laboratory analysis will be performed in accordance with the requirements and quality assurance methods in the July 2007 RI/FS Work Plan.

1. If the base of the pit is earthen, a representative sample of the soil will be collected from the base of the pit at a depth of approximately six (6) inches below the base of the pit. The sample will be collected with a pre-cleaned trowel (if the pit is has been deemed safe to enter) or from the surface by means of a pre-cleaned hand auger, shovel, dredge, GeoProbe® or similar device.
2. If the base of the pit is concrete, a sample of accumulated sediment or soil (if any) will be collected, as practicable, from the surface of the concrete using a pre-cleaned trowel, shovel, dredge or similar device. If the concrete base of the pit is cracked, or otherwise appears to be porous, and if the depth of the pit permits, a soil sample will be collected from the 0-12" interval below the base of the concrete by means of a GeoProbe®, or by removing some of the concrete and using a trowel or handauger.
3. If a drain is present in the pit, a sample of accumulated sediment (if any) will be collected from the interior of the drain. The sample will be collected with a pre-cleaned trowel (if the pit is has been deemed safe to enter) or from the surface (if practicable) by means of a pre-cleaned hand auger, shovel, or similar device.

If a drain is present, water (dyed or undyed) will be introduced into the drain (after sample collection) while the interior of Drywell 3 is observed for evidence of drainage. If no drainage is observed in Drywell 3, BC will attempt to observe flow from the drain in a sanitary sewer cleanout (if accessible). If the mechanic's pit is found to discharge to a leaching structure other than Drywell 3, a bottom sample will be collected (as feasible) from that leaching structure.

Following inspection and sampling of the pit, it will be temporarily covered with a road plate pending receipt and evaluation of analytical results for the above noted samples. The analytical results will be provided to the DEC along with recommendations for further action (e.g., sealing any drain, backfilling the pit).

2.4 Inspection of Stairway Floor Drain

As noted in Section 1.0 of this letter work plan, a floor drain is located at the base of the exterior stairway located on the north side of the Office Building (adjacent to Drywell 3). As previously noted, historical architectural plans indicate this floor drain was to connect to a pre-cast dry well located a few feet to the north and west of the stairway. This pre-cast dry well may actually be Drywell 3.

At the request of the NCDH, a sample of sediment from inside the stairway floor drain will be obtained (as feasible) and submitted for laboratory analysis for the parameters listed in Section 1.2. The sample will be collected (after removing the steel grate over the floor drain) with a dedicated or pre-cleaned spoon, trowel or similar device. All sampling and laboratory analysis will be performed in accordance with the requirements and quality assurance methods in the July 2007 RI/FS Work Plan.

After the contents of Drywell 3 are removed, but before the drywell is backfilled, water (dyed or undyed) will be introduced into the stairway floor drain while the interior of Drywell 3 is observed for evidence of drainage. If no drainage is observed in Drywell 3, BC will attempt to observe flow from the drain in a sanitary sewer cleanout (if accessible). If the stairway floor drain is found to discharge to a leaching structure other than Drywell 3, a bottom sample will be collected (as feasible) from that leaching structure.

It is not permissible for a stormwater discharge to be connected into the municipal sanitary sewer system. The termination of any connection to Drywell 3 or to the sanitary sewer system will be evaluated during the closure activities. Continued use of Drywell 3 is contingent on satisfactory endpoint sample results (Section 2.6) and authorization by the DEC. If discharge of the stairway floor drain to Drywell 3 is deemed inappropriate, alternatives for redirecting the discharge will be evaluated.

2.5 Removal of Drywell 3 Contents

After the contents of Drywell 3 have been properly characterized, profiled and acceptance has been acquired from the waste disposal facility(ies), equipment will be mobilized to conduct the closure activities and the removal of the liquids/sediments/soils from Drywell 3. As no information regarding the as-built condition of Drywell 3 has been obtained and the actual construction of the system is unknown, the methods to remove the materials from the drywell will be largely dependent on visual observations made in the field during the closure activities.

The contents of the drywell will be removed to the extent practicable using a vacuum (vac) truck. Initially, the asphalt paving around the manhole and over the drywell will be sawcut and removed along with the subsurface materials to expose the cover of the drywell structure. The access manhole will be removed and either a larger opening cut in the cover of the drywell structure or the entire cover removed to facilitate removal of the materials, inspection of the drywell interior, and other closure activities. The extent of the removal of the cover will be largely dependent on the logistics of the structure's proximity to the adjacent Office Building as well as to the adjacent active driveway. This driveway is located immediately west of the Office Building and is the primary route for Bartlett to access the property and conduct its daily operations.

After the lid of the drywell structure is accessed and either breached or removed, the approximately fifteen feet of liquids/suspended solids will be removed from the drywell/cesspool via vacuum truck. After this removal, the sediments/soils underlying the liquids/suspended solids will be removed. It is anticipated that approximately four feet of sediment/soil will be removed. The depth of the removal of the sediment/soil

will be determined in the field largely based on the depth of the drywell structure (currently unknown). BC will work in conjunction with the Remedial Contractor to remove as much of the sediment/soil as possible without undermining the concrete ring of the drywell structure. Excess removal beneath the base of the drywell ring structure may undermine the structure and result in settlement of the structure, which could affect the integrity of adjacent Office Building and driveway.

The final depth of the sediment/soil removal will be measured in the field from ground surface. If possible, the base of the removal will be lined with a demarcation liner (e.g., permeable geotextile) prior to backfill to demarcate the removal depth. This depth will serve as the benchmark base elevation for future investigation activities.

2.6 Drywell Inspection and Endpoint Sampling

After the contents of the drywell have been removed, the interior will be inspected to determine if there are any additional overflow pipes. Any overflow pools that are discovered will be investigated and closed in accordance with the procedures in this work plan. In addition, as described in Sections 2.3 and 2.4, the stairway floor drain and any drain in the former Mechanic's Pit will be tested to determine if they discharge to Drywell 3. The inspection will be conducted from the ground surface; the drywell will not be entered as it is considered to be a confined space.

Based on the aforementioned analyses of LNAPL and sediment, the potential exists for organic constituents to have impacted the underlying soils through the operation of the system. Therefore, after the removal activities are completed and before backfilling the drywell, BC will collect a representative endpoint sample from the remaining sediments/native soil located at the base of the removal effort. The sample will be obtained via manual device (e.g. pre-cleaned hand auger, dredge) or by GeoProbe®.

If this base sample cannot be successfully collected at the time of the closure due to the depth and logistics, the sample will be obtained after completion of the backfill by either drilling through the backfill materials (with a direct-push blind point sampler) or through a "sleeve" installed through the backfill materials. The sleeve, if necessary, will consist of a length of polyvinylchloride (PVC) piping, which will be installed during the backfill activities. After the completion of the drilling the sleeve will either be removed or grouted and closed in-place. The soil sample will be submitted to a NYSDOH-ELAP approved laboratory for VOC, SVOC, pesticide, herbicide, and metals analysis by the methods listed above in Section 1.2. All drilling, sampling and laboratory analysis will be performed in accordance with the requirements and quality assurance methods in the July 2007 RI/FS Work Plan.

If the analytical results for the base soil indicate significant impacts, additional sampling of soil and/or groundwater below the closed drywell may be proposed as part of the RI.

2.7 Backfill Acceptance Criteria and Paving

The drywell will be backfilled with clean fill consisting of either pea gravel or a coarse aggregate meeting New York State Department of Transportation (NYSDOT) Standard Specifications for Coarse Aggregate Size designation Type 1 or Type 2.

All fill material delivered to the Site shall be obtained from a source approved by the NYSDOT and accompanied by documentation from the source stating the fill is certified "clean" from a virgin source and free of contaminants. The facility name, owner name and street address of the fill source(s) will be provided to the NYSDEC, for review and approval, prior to on-site use. As discussed with the NYSDEC, no sampling

of the backfill materials will be required as the materials will be naturally occurring stone and/or crushed stone.

After Drywell 3 is backfilled, appropriate paving subbase will be installed and the asphalt paving will be restored to pre-remediation conditions.

If it was not possible to remove the entire dome of Drywell 3, a pre-cast or poured concrete cover will be placed over the drywell opening (before paving) to prevent settling of the paving in the event that the backfill settles.

3. WASTE MANAGEMENT

All waste materials generated from the closure activities (i.e., liquids/suspended solids, soil/sediments, fluids generated from decontamination activities, personal protective equipment, etc.) will be properly containerized, labeled, stored, transported and disposed of at off-site facilities permitted to accept these materials. It is anticipated that all waste materials generated as part of the closure activities will be characterized as non-hazardous waste. As such, liquids/suspended solids, sanitary waste sludges and associated soils will be removed via vacuum trucks or guzzler/vactor trucks and transported via these vehicles to the designated disposal facilities.

As noted above, the origins of the organic constituents detected in the contents of Drywell 3 are unknown, and the waste materials that will be removed in conjunction with the closure of the drywell are not considered to be Listed Hazardous Wastes. Therefore, characterization of the waste materials as Hazardous or Non-Hazardous will be based solely on the results of testing for RCRA characteristics (e.g. toxicity, ignitability, corrosivity and reactivity).

If the results of any additional, in-situ waste characterization sampling (Section 2.2) indicate the wastes must be classified as hazardous waste, waste management practices may be modified. These modifications may include removal of the wastes from the vacuum trucks and placement into alternate containers for transportation to permitted hazardous waste treatment/storage/disposal facilities.

4. HEALTH AND SAFETY

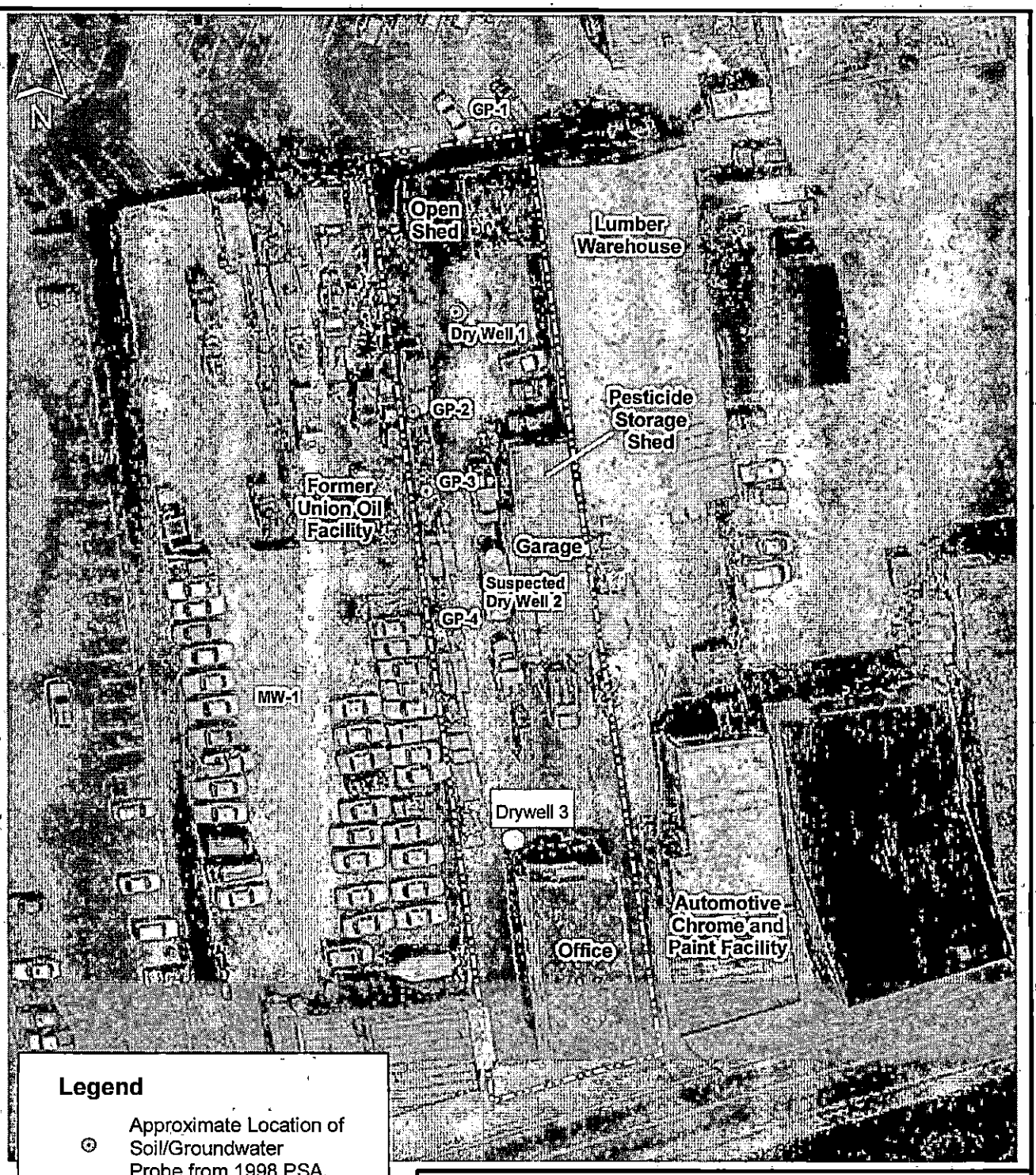
All work will be performed in accordance with all OSHA, state and industry safety standards. The activities will be performed in accordance with the Health and Safety Plan entitled "Health and Safety Plan, Remedial Investigation and Feasibility Study Work Plan, Bartlett Tree Company Site, 345 Union Avenue, Westbury, Nassau County, New York, prepared by BC and dated July 2007. This Health and Safety Plan was previously submitted to the NYSDEC as part of the Remedial Investigation/Feasibility Study Work Plan prepared by BC and dated March 2008. The plan will be updated to specifically address the health and safety practices that will be employed by site workers participating in the drywell closure activities. All closure activities are expected to be performed using Level D personal protective equipment.

A Community Air Monitoring Plan (CAMP) will be implemented during all closure field activities (i.e., in-situ waste characterization, removal of sediments/soils from Drywell 3, investigation borings, etc.). The requirements of the CAMP are contained in Appendix C of the HASP.

5. SCHEDULE

Closure activities are anticipated to commence approximately two (2) weeks following approval of this work plan and completion of the sanitary sewer connection, and take approximately one week to complete. BC will provide oversight of the Remedial Contractor to ensure compliance with this letter work plan, monitor for health and safety, and conduct the CAMP. BC will also serve as the Site Health and Safety Officer to ensure that the requirements of the HASP are adhered to.

FIGURES



Legend

- Approximate Location of Soil/Groundwater Probe from 1998 PSA
- Former Union Oil Monitoring Well
- Dry Wells
- Approximate Site Boundary

0 25 50 100 Feet

FIGURE 1

SITE PLAN

BARTLETT TREE COMPANY SITE
WESTBURY, NASSAU COUNTY
NEW YORK, 11590

DATE	PROJECT NUMBER
1/09	135711.301

BROWN AND CALDWELL ASSOCIATES

P:/GIS/Bartlett_Tree/Site_Plan.mxd

APPENDIX A

Preliminary Waste Characterization Data

Analytical Laboratory Reports

LNAPL (DW-3-OIL)

Sediment (DW-3-SOIL)

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTOIL SDG#: BTR03-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
02012	Qualitative GC Fingerprint	n.a.	N.D.			see below	1
	The GC fingerprint for this sample is most similar to our Diesel/ #2 Fuel oil reference chromatogram. When we calculate total sample area in the C8-C40 normal hydrocarbon range as petroleum distillate, it is present at 84% by weight.						
00159	Mercury	7439-97-6	N.D.		0.0311	mg/kg	1
01643	Aluminum	7429-90-5	14.9	J	3.28	mg/kg	1
01650	Calcium	7440-70-2	69.0		5.95	mg/kg	1
01654	Iron	7439-89-6	26.5		4.62	mg/kg	1
01657	Magnesium	7439-95-4	N.D.		2.49	mg/kg	1
01662	Potassium	7440-09-7	N.D.		3.25	mg/kg	1
01667	Sodium	7440-23-5	N.D.		36.6	mg/kg	1
06925	Thallium	7440-28-0	N.D.		6.23	mg/kg	5
	Due to the rigorous nature of the SW-846 3050B digestion for oil samples, the Laboratory Control Sample that was digested with this sample was out of specification low for thallium with a recovery of 33%.						
	The quantitation limit for thallium was raised due to the nature of the sample matrix.						
06935	Arsenic	7440-38-2	4.67		0.931	mg/kg	1
	Due to the rigorous nature of the SW-846 3050B digestion for oil samples, the Laboratory Control Sample that was digested with this sample was out of specification low for arsenic with a recovery of 72%.						
06936	Selenium	7782-49-2	4.73		0.961	mg/kg	1
	Due to the rigorous nature of the SW-846 3050B digestion for oil samples, the Laboratory Control Sample that was digested with this sample was out of specification low for selenium with a recovery of 62%.						
06944	Antimony	7440-36-0	N.D.		0.980	mg/kg	1
	Due to the rigorous nature of the SW-846 3050B digestion for oil samples, the Laboratory Control Sample that was digested with this sample was out of specification low for antimony with a recovery of 21%.						
06946	Barium	7440-39-3	1.19		0.0392	mg/kg	1
06947	Beryllium	7440-41-7	N.D.		0.0667	mg/kg	1
06949	Cadmium	7440-43-9	N.D.		0.137	mg/kg	1
06951	Chromium	7440-47-3	N.D.		0.578	mg/kg	1
06952	Cobalt	7440-48-4	N.D.		0.186	mg/kg	1
06953	Copper	7440-50-8	2.58		0.196	mg/kg	1
06955	Lead	7439-92-1	0.617	J	0.588	mg/kg	1
06961	Nickel	7440-02-0	N.D.		0.598	mg/kg	1
06966	Silver	7440-22-4	N.D.		0.167	mg/kg	1

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany.NY 12210

BTOIL SDG#: BTR03-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
06971	Vanadium	7440-62-2	N.D.		0.167	mg/kg	1
06972	Zinc	7440-66-6	16.6		0.647	mg/kg	1
00174	PCBs in Oil						
04815	PCB-1016	12674-11-2	N.D.		1,000	ug/kg	1
04816	PCB-1221	11104-28-2	N.D.		600	ug/kg	1
04817	PCB-1232	11141-16-5	N.D.		800	ug/kg	1
04818	PCB-1242	53469-21-9	N.D.		500	ug/kg	1
04819	PCB-1248	12672-29-6	N.D.		1,300	ug/kg	1
04820	PCB-1254	11097-69-1	N.D.		600	ug/kg	1
04821	PCB-1260	11096-82-5	N.D.		1,000	ug/kg	1
01865	Herbicides in Soils						
04174	2,4-D	94-75-7	N.D.		36	ug/kg	1
04175	Dinoseb	88-85-7	N.D.		24	ug/kg	1
04176	2,4,5-TP	93-72-1	N.D.		2.3	ug/kg	1
04177	2,4,5-T	93-76-5	3.0	J	2.5	ug/kg	1
04249	Dalapon	75-99-0	N.D.		90	ug/kg	1
04250	Dicamba	1918-00-9	N.D.		12	ug/kg	1
04251	MCPP (Mecoprop)	93-65-2	N.D.		2,300	ug/kg	1
04252	MCPA	94-74-6	N.D.		11,000	ug/kg	1
04253	2,4-DP (Dichloroprop)	120-36-5	N.D.		24	ug/kg	1
04254	2,4-DB	94-82-6	46	J	19	ug/kg	1

Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

06000	TCL Pesticides in Solids						
01218	Gamma BHC - Lindane	58-89-9	N.D.		20	ug/kg	20
01219	Heptachlor	76-44-8	N.D.		20	ug/kg	20
01220	Aldrin	309-00-2	N.D.		40	ug/kg	20
01221	p,p-DDT	50-29-3	N.D.		40	ug/kg	20
01222	Dieldrin	60-57-1	N.D.		40	ug/kg	20
01223	Endrin	72-20-8	N.D.		40	ug/kg	20
01859	Methoxychlor	72-43-5	N.D.		200	ug/kg	20
01981	Alpha BHC	319-84-6	N.D.		20	ug/kg	20
01982	Beta BHC	319-85-7	N.D.		23	ug/kg	20
01983	Delta BHC	319-86-8	N.D.		37	ug/kg	20

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTOIL SDG#: BTR03-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
01984	Heptachlor Epoxide	1024-57-3	N.D.		20	ug/kg	20
01985	p,p-DDE	72-55-9	N.D.		40	ug/kg	20
01986	p,p-DDD	72-54-8	N.D.		40	ug/kg	20
01988	Toxaphene	8001-35-2	N.D.		1,300	ug/kg	20
01989	Endosulfan I	959-98-8	N.D.		26	ug/kg	20
01990	Endosulfan II	33213-65-9	N.D.		40	ug/kg	20
01991	Endosulfan Sulfate	1031-07-8	N.D.		44	ug/kg	20
01992	Endrin Aldehyde	7421-93-4	N.D.		40	ug/kg	20
03017	Endrin Ketone	53494-70-5	N.D.		40	ug/kg	20
03025	Alpha Chlordane	5103-71-9	89	J	20	ug/kg	20
03026	Gamma Chlordane	5103-74-2	N.D.		100	ug/kg	100
	Due to the nature of the sample matrix, a reduced aliquot and a dilution were used for analysis. The reporting limits were raised accordingly.						
06678	OP Pesticides in Solids						
03077	Ethion	563-12-2	N.D.		6,600	ug/kg	1
03078	Trithion	786-19-6	N.D.		6,600	ug/kg	1
03081	Ethyl Parathion	56-38-2	N.D.		6,600	ug/kg	1
03082	Malathion	121-75-5	N.D.		6,600	ug/kg	1
03657	Famphur	52-85-7	N.D.		6,600	ug/kg	1
06679	Dichlorvos	62-73-7	N.D.		6,600	ug/kg	1
06680	Mevinphos	7786-34-7	N.D.		6,600	ug/kg	1
06681	Demeton-O	298-03-3	N.D.		6,600	ug/kg	1
06682	Ethoprop	13194-48-4	N.D.		6,600	ug/kg	1
06683	Naled	300-76-5	N.D.		6,600	ug/kg	1
06684	Phorate	298-02-2	N.D.		6,600	ug/kg	1
06685	Demeton-S	126-75-0	N.D.		6,600	ug/kg	1
06686	Diazinon	333-41-5	N.D.		6,600	ug/kg	1
06687	Disulfoton	298-04-4	N.D.		6,600	ug/kg	1
06688	Methyl Parathion	298-00-0	N.D.		6,600	ug/kg	1
06689	Ronnel	299-84-3	N.D.		6,600	ug/kg	1
06690	Fenthion	55-38-9	N.D.		6,600	ug/kg	1
06691	Dursban (Chlorpyrifos)	2921-88-2	N.D.		6,600	ug/kg	1
06692	Trichloronate	327-98-0	N.D.		6,600	ug/kg	1
06693	Merphos	150-50-5	N.D.		6,600	ug/kg	1
06694	Stirofos	961-11-5	N.D.		6,600	ug/kg	1
06695	Tokuthion	34643-46-4	N.D.		6,600	ug/kg	1
06696	Fensulfothion	115-90-2	N.D.		15,000	ug/kg	1
06697	Bolstar	35400-43-2	N.D.		6,600	ug/kg	1
06698	Guthion (Azinphos-methyl)	86-50-0	N.D.		6,600	ug/kg	1
06699	Coumaphos	56-72-4	N.D.		6,600	ug/kg	1

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTOIL SDG#: BTR03-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
08342	EPN	2104-64-5	N.D.		6,600	ug/kg	1
	The holding time was not met. The sample was submitted to the laboratory outside of the extraction holding time. The client was notified and approved proceeding with the analysis. Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The reporting limits were raised accordingly.						
04688	TCL SW846 Semivolatiles Soil						
01185	Phenol	108-95-2	N.D.		100,000	ug/kg	20
01186	2-Chlorophenol	95-57-8	N.D.		100,000	ug/kg	20
01187	1,4-Dichlorobenzene	106-46-7	N.D.		100,000	ug/kg	20
01188	N-Nitroso-di-n-propylamine	621-64-7	N.D.		100,000	ug/kg	20
01189	1,2,4-Trichlorobenzene	120-82-1	N.D.		100,000	ug/kg	20
01190	4-Chloro-3-methylphenol	59-50-7	N.D.		200,000	ug/kg	20
01191	Acenaphthene	83-32-9	N.D.		100,000	ug/kg	20
01192	4-Nitrophenol	100-02-7	N.D.		500,000	ug/kg	20
01193	2,4-Dinitrotoluene	121-14-2	N.D.		200,000	ug/kg	20
01194	Pentachlorophenol	87-86-5	N.D.		500,000	ug/kg	20
01195	Pyrene	129-00-0	N.D.		100,000	ug/kg	20
03746	2-Nitrophenol	88-75-5	N.D.		100,000	ug/kg	20
03747	2,4-Dimethylphenol	105-67-9	N.D.		200,000	ug/kg	20
03748	2,4-Dichlorophenol	120-83-2	N.D.		100,000	ug/kg	20
03749	2,4,6-Trichlorophenol	88-06-2	N.D.		100,000	ug/kg	20
03750	2,4-Dinitrophenol	51-28-5	N.D.		2,000,000	ug/kg	20
03751	4,6-Dinitro-2-methylphenol	534-52-1	N.D.		500,000	ug/kg	20
03753	bis(2-Chloroethyl)ether	111-44-4	N.D.		100,000	ug/kg	20
03754	1,3-Dichlorobenzene	541-73-1	N.D.		100,000	ug/kg	20
03755	1,2-Dichlorobenzene	95-50-1	N.D.		100,000	ug/kg	20
03757	Hexachloroethane	67-72-1	N.D.		100,000	ug/kg	20
03758	Nitrobenzene	98-95-3	N.D.		100,000	ug/kg	20
03759	Isophorone	78-59-1	N.D.		100,000	ug/kg	20
03760	bis(2-Chloroethoxy)methane	111-91-1	N.D.		100,000	ug/kg	20
03761	Naphthalene	91-20-3	580,000		100,000	ug/kg	20
03762	Hexachlorobutadiene	87-68-3	N.D.		200,000	ug/kg	20
03763	Hexachlorocyclopentadiene	77-47-4	N.D.		500,000	ug/kg	20
03764	2-Chloronaphthalene	91-58-7	N.D.		100,000	ug/kg	20
03765	Acenaphthylene	208-96-8	N.D.		100,000	ug/kg	20
03766	Dimethylphthalate	131-11-3	N.D.		200,000	ug/kg	20
03767	2,6-Dinitrotoluene	606-20-2	N.D.		100,000	ug/kg	20
03768	Fluorene	86-73-7	150,000	J	100,000	ug/kg	20
03769	4-Chlorophenyl-phenylether	7005-72-3	N.D.		100,000	ug/kg	20

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTOIL SDG#: BTR03-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
03770	Diethylphthalate	84-66-2	N.D.		200,000	ug/kg	20
03772	N-Nitrosodiphenylamine	86-30-6	N.D.		100,000	ug/kg	20
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
03773	4-Bromophenyl-phenylether	101-55-3	N.D.		100,000	ug/kg	20
03774	Hexachlorobenzene	118-74-1	N.D.		100,000	ug/kg	20
03775	Phenanthrene	85-01-8	270,000	J	100,000	ug/kg	20
03776	Anthracene	120-12-7	N.D.		100,000	ug/kg	20
03777	Di-n-butylphthalate	84-74-2	N.D.		200,000	ug/kg	20
03778	Fluoranthene	206-44-0	N.D.		100,000	ug/kg	20
03780	Butylbenzylphthalate	85-68-7	N.D.		200,000	ug/kg	20
03781	Benzo(a)anthracene	56-55-3	N.D.		100,000	ug/kg	20
03782	Chrysene	218-01-9	N.D.		100,000	ug/kg	20
03783	3,3'-Dichlorobenzidine	91-94-1	N.D.		300,000	ug/kg	20
03784	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		200,000	ug/kg	20
03785	Di-n-octylphthalate	117-84-0	N.D.		200,000	ug/kg	20
03786	Benzo(b)fluoranthene	205-99-2	N.D.		100,000	ug/kg	20
03787	Benzo(k)fluoranthene	207-08-9	N.D.		100,000	ug/kg	20
03788	Benzo(a)pyrene	50-32-8	N.D.		100,000	ug/kg	20
03789	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		100,000	ug/kg	20
03790	Dibenz(a,h)anthracene	53-70-3	N.D.		100,000	ug/kg	20
03791	Benzo(g,h,i)perylene	191-24-2	N.D.		100,000	ug/kg	20
04690	2-Methylphenol	95-48-7	N.D.		200,000	ug/kg	20
04691	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.		100,000	ug/kg	20
04692	4-Methylphenol	106-44-5	N.D.		200,000	ug/kg	20
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04693	4-Chloroaniline	106-47-8	N.D.		200,000	ug/kg	20
04694	2-Methylnaphthalene	91-57-6	1,900,000		100,000	ug/kg	20
04695	2,4,5-Trichlorophenol	95-95-4	N.D.		200,000	ug/kg	20
04696	2-Nitroaniline	88-74-4	N.D.		100,000	ug/kg	20
04697	3-Nitroaniline	99-09-2	N.D.		200,000	ug/kg	20
04698	Dibenzofuran	132-64-9	N.D.		100,000	ug/kg	20
04700	4-Nitroaniline	100-01-6	N.D.		200,000	ug/kg	20
04702	Carbazole	86-74-8	N.D.		100,000	ug/kg	20

Due to sample matrix interferences observed during the extraction, the normal reporting limits were not attained.

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTOIL SDG#: BTR03-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
06292	TCL by 8260 (soil)						
05444	Chloromethane	74-87-3	N.D.		5,000	ug/kg	2500
05445	Vinyl Chloride	75-01-4	N.D.		2,500	ug/kg	2500
05446	Bromomethane	74-83-9	N.D.		5,000	ug/kg	2500
05447	Chloroethane	75-00-3	N.D.		5,000	ug/kg	2500
05449	1,1-Dichloroethene	75-35-4	N.D.		2,500	ug/kg	2500
05450	Methylene Chloride	75-09-2	7,600	J	5,000	ug/kg	2500
05451	trans-1,2-Dichloroethene	156-60-5	N.D.		2,500	ug/kg	2500
05452	1,1-Dichloroethane	75-34-3	N.D.		2,500	ug/kg	2500
05454	cis-1,2-Dichloroethene	156-59-2	N.D.		2,500	ug/kg	2500
05455	Chloroform	67-66-3	N.D.		2,500	ug/kg	2500
05457	1,1,1-Trichloroethane	71-55-6	N.D.		2,500	ug/kg	2500
05458	Carbon Tetrachloride	56-23-5	N.D.		2,500	ug/kg	2500
05460	Benzene	71-43-2	N.D.		1,300	ug/kg	2500
05461	1,2-Dichloroethane	107-06-2	N.D.		2,500	ug/kg	2500
05462	Trichloroethene	79-01-6	N.D.		2,500	ug/kg	2500
05463	1,2-Dichloropropane	78-87-5	N.D.		2,500	ug/kg	2500
05465	Bromodichloromethane	75-27-4	N.D.		2,500	ug/kg	2500
05466	Toluene	108-88-3	45,000		2,500	ug/kg	2500
05467	1,1,2-Trichloroethane	79-00-5	N.D.		2,500	ug/kg	2500
05468	Tetrachloroethene	127-18-4	N.D.		2,500	ug/kg	2500
05470	Dibromochloromethane	124-48-1	N.D.		2,500	ug/kg	2500
05472	Chlorobenzene	108-90-7	N.D.		2,500	ug/kg	2500
05474	Ethylbenzene	100-41-4	68,000		2,500	ug/kg	2500
05477	Styrene	100-42-5	N.D.		2,500	ug/kg	2500
05478	Bromoform	75-25-2	N.D.		2,500	ug/kg	2500
05480	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		2,500	ug/kg	2500
06293	Acetone	67-64-1	N.D.		18,000	ug/kg	2500
06294	Carbon Disulfide	75-15-0	N.D.		2,500	ug/kg	2500
06296	2-Butanone	78-93-3	N.D.		10,000	ug/kg	2500
06297	trans-1,3-Dichloropropene	10061-02-6	N.D.		2,500	ug/kg	2500
06298	cis-1,3-Dichloropropene	10061-01-5	N.D.		2,500	ug/kg	2500
06299	4-Methyl-2-pentanone	108-10-1	N.D.		7,500	ug/kg	2500
06300	2-Hexanone	591-78-6	N.D.		7,500	ug/kg	2500
06301	Xylene (Total)	1330-20-7	2,600,000		25,000	ug/kg	25000

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTOIL SDG#: BTR03-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
02012	Qualitative GC Fingerprint	SW-846 8015B modified	1	10/13/2008 17:52	Heather E Williams	1
00159	Mercury	SW-846 7471A	1	10/14/2008 10:01	Damary Valentin	1
01643	Aluminum	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	10/31/2008 03:36	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06925	Thallium	SW-846 6010B	1	10/31/2008 06:13	Joanne M Gates	5
06935	Arsenic	SW-846 6010B	1	10/26/2008 00:48	Thomas F McLamb Sr	1
06936	Selenium	SW-846 6010B	1	10/26/2008 00:48	Thomas F McLamb Sr	1
06944	Antimony	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06946	Barium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06947	Beryllium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06949	Cadmium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06951	Chromium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06952	Cobalt	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06953	Copper	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06955	Lead	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06961	Nickel	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06966	Silver	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06971	Vanadium	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
06972	Zinc	SW-846 6010B	1	10/20/2008 01:24	Tara L Snyder	1
00174	PCBs in Oil	SW-846 8082	1	10/10/2008 05:27	Jamie L Brillhart	1
01865	Herbicides in Soils	SW-846 8151A	1	10/15/2008 09:15	Tricia M Gusbar	1
06000	TCL Pesticides in Solids	SW-846 8081A	1	10/20/2008 23:13	Lindsey K Lafferty	20
06000	TCL Pesticides in Solids	SW-846 8081A	1	10/20/2008 23:24	Lindsey K Lafferty	100
06678	OP Pesticides in Solids	SW-846 8141A	1	10/23/2008 23:04	Michele D Hamilton	1
04688	TCL SW846 Semivolatiles Soil	SW-846 8270C	1	10/15/2008 15:12	Joseph M Gambler	20
06292	TCL by 8260 (soil)	SW-846 8260B	1	10/15/2008 16:27	Angela D Sneeringer	2500
06292	TCL by 8260 (soil)	SW-846 8260B	1	10/15/2008 16:50	Angela D Sneeringer	25000
00373	DP 21 Bulk Prep of Oil Samples	SW-846 5030A	1	10/14/2008 10:03	Lori L Reilling	n.a.
00381	BNA Soil Extraction	SW-846 3550B	2	10/14/2008 22:40	Patricia L Foreman	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/08/2008 11:30	Heidi L Ortenzi	1
01015	Oil Metals Digestion	SW-846 3050B modified	1	10/13/2008 18:00	Annamaria Stipkovits	1
01015	Oil Metals Digestion	SW-846 3050B modified	2	10/29/2008 18:20	Annamaria Stipkovits	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. G55489386 **Group No. 1113441**

DW-3-OIL Grab Oil Sample
Bartlett Tree

Collected:10/03/2008 12:20 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 11/07/2008 at 10:49
Discard: 11/22/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTOIL SDG#: BTR03-14

04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	10/09/2008 22:30	Olivia I Santiago	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	10/13/2008 22:45	Annamaria Stipkovits	1
06006	PPL Pesticide Solid Extraction	SW-846 3550B	1	10/13/2008 09:00	Deborah M Zimmerman	1
06677	OP Pesticides Solid Extraction	SW-846 3540C	1	10/21/2008 09:00	Deborah M Zimmerman	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW5489367 **Group No. 1113440**

DW-3 Grab Soil Sample
Bartlett Tree

Collected:10/01/2008 15:35 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 10/29/2008 at 09:35
Discard: 11/13/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTDW3 SDG#: BTR02-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Units	Dilution Factor
00159	Mercury	7439-97-6	0.510		0.0204	mg/kg	1
01643	Aluminum	7429-90-5	641		5.95	mg/kg	1
01650	Calcium	7440-70-2	714		10.9	mg/kg	1
01654	Iron	7439-89-6	1,420		8.37	mg/kg	1
01657	Magnesium	7439-95-4	116		4.51	mg/kg	1
01662	Potassium	7440-09-7	91.1		5.88	mg/kg	1
01667	Sodium	7440-23-5	73.3	J	66.3	mg/kg	1
06925	Thallium	7440-28-0	N.D.		2.26	mg/kg	1
06935	Arsenic	7440-38-2	N.D.		1.69	mg/kg	1
06936	Selenium	7782-49-2	N.D.		1.74	mg/kg	1
06944	Antimony	7440-36-0	N.D.		1.78	mg/kg	1
06946	Barium	7440-39-3	33.7		0.0711	mg/kg	1
06947	Beryllium	7440-41-7	N.D.		0.121	mg/kg	1
06949	Cadmium	7440-43-9	2.50		0.249	mg/kg	1
06951	Chromium	7440-47-3	4.27		1.05	mg/kg	1
06952	Cobalt	7440-48-4	N.D.		0.338	mg/kg	1
06953	Copper	7440-50-8	188		0.356	mg/kg	1
06955	Lead	7439-92-1	59.0		1.07	mg/kg	1
06958	Manganese	7439-96-5	8.33		0.0995	mg/kg	1
06961	Nickel	7440-02-0	4.91		1.08	mg/kg	1
06966	Silver	7440-22-4	0.608	J	0.302	mg/kg	1
06971	Vanadium	7440-62-2	1.24		0.302	mg/kg	1
06972	Zinc	7440-66-6	108		1.17	mg/kg	1
00111	Moisture	n.a.	44.3		0.50	%	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						
01865	Herbicides in Soils						
04174	2,4-D	94-75-7	N.D.		22	ug/kg	1
04175	Dinoseb	88-85-7	N.D.		14	ug/kg	1
04176	2,4,5-TP	93-72-1	N.D.		1.3	ug/kg	1
04177	2,4,5-T	93-76-5	N.D.		1.5	ug/kg	1
04249	Dalapon	75-99-0	N.D.		54	ug/kg	1
04250	Dicamba	1918-00-9	N.D.		7.2	ug/kg	1
04251	MCPP (Mecoprop)	93-65-2	29,000		1,300	ug/kg	1
04252	MCPA	94-74-6	N.D.		1,400	ug/kg	1
04253	2,4-DP (Dichloroprop)	120-36-5	N.D.		14	ug/kg	1
04254	2,4-DB	94-82-6	N.D.		11	ug/kg	1
02033	PCBs in Soil						

Lancaster Laboratories Sample No. SW5489367 Group No. 1113440

DW-3 Grab Soil Sample
Bartlett Tree

Collected:10/01/2008 15:35 by CM Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 10/29/2008 at 09:35
Discard: 11/13/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTDW3 SDG#: BTR02-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Units	Dilution Factor
01993	PCB-1016	12674-11-2	N.D.	296	ug/kg	50
01994	PCB-1221	11104-28-2	N.D.	1,260	ug/kg	50
01995	PCB-1232	11141-16-5	N.D.	476	ug/kg	50
01996	PCB-1242	53469-21-9	N.D.	691	ug/kg	50
01997	PCB-1248	12672-29-6	N.D.	503	ug/kg	50
01998	PCB-1254	11097-69-1	N.D.	1,530	ug/kg	50
01999	PCB-1260	11096-82-5	N.D.	566	ug/kg	50
	Due to interfering peaks on the chromatogram, the value reported for PCB-1254 represents the lowest reporting limit attainable. Despite numerous cleanup methods, our usual reporting limit was not attained. Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.					
06000	TCL Pesticides in Solids					
01218	Gamma BHC - Lindane	58-89-9	N.D.	6.0	ug/kg	10
01219	Heptachlor	76-44-8	N.D.	6.0	ug/kg	10
01220	Aldrin	309-00-2	N.D.	12	ug/kg	10
01221	p,p-DDT	50-29-3	380	12	ug/kg	10
01222	Dieldrin	60-57-1	N.D.	12	ug/kg	10
01223	Endrin	72-20-8	N.D.	12	ug/kg	10
01859	Methoxychlor	72-43-5	N.D.	60	ug/kg	10
01981	Alpha BHC	319-84-6	N.D.	6.0	ug/kg	10
01982	Beta BHC	319-85-7	46	6.7	ug/kg	10
01983	Delta BHC	319-86-8	N.D.	11	ug/kg	10
01984	Heptachlor Epoxide	1024-57-3	N.D.	6.0	ug/kg	10
01985	p,p-DDE	72-55-9	420	12	ug/kg	10
01986	p,p-DDD	72-54-8	760	120	ug/kg	100
01988	Toxaphene	8001-35-2	N.D.	390	ug/kg	10
01989	Endosulfan I	959-98-8	N.D.	7.8	ug/kg	10
01990	Endosulfan II	33213-65-9	N.D.	12	ug/kg	10
01991	Endosulfan Sulfate	1031-07-8	N.D.	12	ug/kg	10
01992	Endrin Aldehyde	7421-93-4	N.D.	12	ug/kg	10
03017	Endrin Ketone	53494-70-5	N.D.	12	ug/kg	10
03025	Alpha Chlordane	5103-71-9	1,300	60	ug/kg	100
03026	Gamma Chlordane	5103-74-2	1,500	60	ug/kg	100
	Due to insufficient sample size, we were unable to report our usual reporting limits. The values reported represent the lowest reporting limits attainable.					
06678	OP Pesticides in Solids					

Lancaster Laboratories Sample No. SW5489367 **Group No. 1113440**

DW-3 Grab Soil Sample
Bartlett Tree

Collected:10/01/2008 15:35 by CM Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 10/29/2008 at 09:35
Discard: 11/13/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTDW3 SDG#: BTR02-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Units	Dilution Factor
03077	Ethion	563-12-2	N.D.	39	ug/kg	1
03078	Trithion	786-19-6	N.D.	39	ug/kg	1
03081	Ethyl Parathion	56-38-2	N.D.	39	ug/kg	1
03082	Malathion	121-75-5	N.D.	39	ug/kg	1
03657	Famphur	52-85-7	N.D.	39	ug/kg	1
06679	Dichlorvos	62-73-7	N.D.	39	ug/kg	1
06680	Mevinphos	7786-34-7	N.D.	39	ug/kg	1
06681	Demeton-O	298-03-3	N.D.	39	ug/kg	1
06682	Ethoprop	13194-48-4	N.D.	39	ug/kg	1
06683	Naled	300-76-5	N.D.	39	ug/kg	1
06684	Phorate	298-02-2	N.D.	39	ug/kg	1
06685	Demeton-S	126-75-0	N.D.	39	ug/kg	1
06686	Diazinon	333-41-5	N.D.	39	ug/kg	1
06687	Disulfoton	298-04-4	N.D.	39	ug/kg	1
06688	Methyl Parathion	298-00-0	N.D.	39	ug/kg	1
06689	Ronnel	299-84-3	N.D.	39	ug/kg	1
06690	Fenthion	55-38-9	N.D.	39	ug/kg	1
06691	Dursban (Chlorpyrifos)	2921-88-2	N.D.	39	ug/kg	1
06692	Trichloronate	327-98-0	N.D.	39	ug/kg	1
06693	Merphos	150-50-5	N.D.	39	ug/kg	1
06694	Stirophos	961-11-5	N.D.	39	ug/kg	1
06695	Tokuthion	34643-46-4	N.D.	39	ug/kg	1
06696	Fensulfothion	115-90-2	N.D.	90	ug/kg	1
06697	Bolstar	35400-43-2	N.D.	39	ug/kg	1
06698	Guthion (Azinphos-methyl)	86-50-0	N.D.	39	ug/kg	1
06699	Coumaphos	56-72-4	N.D.	39	ug/kg	1
08342	EPN	2104-64-5	N.D.	39	ug/kg	1
	Due to a laboratory error, the sample was inadvertently spiked with the wrong compounds. A reextraction was performed outside the sample hold time, so all results are reported from the original extract. Similar results were obtained in both extracts.					
04688	TCL SW846 Semivolatiles Soil					
01185	Phenol	108-95-2	N.D.	60	ug/kg	1
01186	2-Chlorophenol	95-57-8	N.D.	60	ug/kg	1
01187	1,4-Dichlorobenzene	106-46-7	N.D.	60	ug/kg	1
01188	N-Nitroso-di-n-propylamine	621-64-7	N.D.	60	ug/kg	1
01189	1,2,4-Trichlorobenzene	120-82-1	N.D.	60	ug/kg	1
01190	4-Chloro-3-methylphenol	59-50-7	N.D.	120	ug/kg	1
01191	Acenaphthene	83-32-9	N.D.	60	ug/kg	1

Lancaster Laboratories Sample No. SW5489367 **Group No. 1113440**

DW-3 Grab Soil Sample
Bartlett Tree

Collected:10/01/2008 15:35 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 10/29/2008 at 09:35
Discard: 11/13/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTDW3 SDG#: BTR02-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Units	Dilution Factor
01192	4-Nitrophenol	100-02-7	N.D.	300	ug/kg	1
01193	2,4-Dinitrotoluene	121-14-2	N.D.	120	ug/kg	1
01194	Pentachlorophenol	87-86-5	N.D.	300	ug/kg	1
01195	Pyrene	129-00-0	N.D.	60	ug/kg	1
03746	2-Nitrophenol	88-75-5	N.D.	60	ug/kg	1
03747	2,4-Dimethylphenol	105-67-9	N.D.	120	ug/kg	1
03748	2,4-Dichlorophenol	120-83-2	N.D.	60	ug/kg	1
03749	2,4,6-Trichlorophenol	88-06-2	N.D.	60	ug/kg	1
03750	2,4-Dinitrophenol	51-28-5	N.D.	1,200	ug/kg	1
03751	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	300	ug/kg	1
03753	bis(2-Chloroethyl)ether	111-44-4	N.D.	60	ug/kg	1
03754	1,3-Dichlorobenzene	541-73-1	N.D.	60	ug/kg	1
03755	1,2-Dichlorobenzene	95-50-1	N.D.	60	ug/kg	1
03757	Hexachloroethane	67-72-1	N.D.	60	ug/kg	1
03758	Nitrobenzene	98-95-3	N.D.	60	ug/kg	1
03759	Isophorone	78-59-1	N.D.	60	ug/kg	1
03760	bis(2-Chloroethoxy)methane	111-91-1	N.D.	60	ug/kg	1
03761	Naphthalene	91-20-3	5,100	60	ug/kg	1
03762	Hexachlorobutadiene	87-68-3	N.D.	120	ug/kg	1
03763	Hexachlorocyclopentadiene	77-47-4	N.D.	300	ug/kg	1
03764	2-Chloronaphthalene	91-58-7	N.D.	60	ug/kg	1
03765	Acenaphthylene	208-96-8	N.D.	60	ug/kg	1
03766	Dimethylphthalate	131-11-3	N.D.	120	ug/kg	1
03767	2,6-Dinitrotoluene	606-20-2	N.D.	60	ug/kg	1
03768	Fluorene	86-73-7	N.D.	60	ug/kg	1
03769	4-Chlorophenyl-phenylether	7005-72-3	N.D.	60	ug/kg	1
03770	Diethylphthalate	84-66-2	N.D.	120	ug/kg	1
03772	N-Nitrosodiphenylamine	86-30-6	N.D.	60	ug/kg	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
03773	4-Bromophenyl-phenylether	101-55-3	N.D.	60	ug/kg	1
03774	Hexachlorobenzene	118-74-1	N.D.	60	ug/kg	1
03775	Phenanthrene	85-01-8	440	60	ug/kg	1
03776	Anthracene	120-12-7	N.D.	60	ug/kg	1
03777	Di-n-butylphthalate	84-74-2	N.D.	120	ug/kg	1
03778	Fluoranthene	206-44-0	N.D.	60	ug/kg	1
03780	Butylbenzylphthalate	85-68-7	N.D.	120	ug/kg	1
03781	Benzo(a)anthracene	56-55-3	N.D.	60	ug/kg	1
03782	Chrysene	218-01-9	N.D.	60	ug/kg	1
03783	3,3'-Dichlorobenzidine	91-94-1	N.D.	180	ug/kg	1
03784	bis(2-Ethylhexyl)phthalate	117-81-7	1,600	120	ug/kg	1

Lancaster Laboratories Sample No. SW5489367 Group No. 1113440

DW-3 Grab Soil Sample
Bartlett Tree

Collected:10/01/2008 15:35 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 10/29/2008 at 09:35
Discard: 11/13/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTDW3 SDG#: BTR02-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Units	Dilution Factor
03785	Di-n-octylphthalate	117-84-0	N.D.	120	ug/kg	1
03786	Benzo(b)fluoranthene	205-99-2	N.D.	60	ug/kg	1
03787	Benzo(k)fluoranthene	207-08-9	N.D.	60	ug/kg	1
03788	Benzo(a)pyrene	50-32-8	N.D.	60	ug/kg	1
03789	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	60	ug/kg	1
03790	Dibenz(a,h)anthracene	53-70-3	N.D.	60	ug/kg	1
03791	Benzo(g,h,i)perylene	191-24-2	N.D.	60	ug/kg	1
04690	2-Methylphenol	95-48-7	N.D.	120	ug/kg	1
04691	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	60	ug/kg	1
04692	4-Methylphenol	106-44-5	N.D.	120	ug/kg	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04693	4-Chloroaniline	106-47-8	N.D.	120	ug/kg	1
04694	2-Methylnaphthalene	91-57-6	4,500	60	ug/kg	1
04695	2,4,5-Trichlorophenol	95-95-4	N.D.	120	ug/kg	1
04696	2-Nitroaniline	88-74-4	N.D.	60	ug/kg	1
04697	3-Nitroaniline	99-09-2	N.D.	120	ug/kg	1
04698	Dibenzofuran	132-64-9	N.D.	60	ug/kg	1
04700	4-Nitroaniline	100-01-6	N.D.	120	ug/kg	1
04702	Carbazole	86-74-8	N.D.	60	ug/kg	1
06292	TCL by 8260 (soil)					
05444	Chloromethane	74-87-3	N.D.	180	ug/kg	49.5
05445	Vinyl Chloride	75-01-4	N.D.	89	ug/kg	49.5
05446	Bromomethane	74-83-9	N.D.	180	ug/kg	49.5
05447	Chloroethane	75-00-3	N.D.	180	ug/kg	49.5
05449	1,1-Dichloroethene	75-35-4	N.D.	89	ug/kg	49.5
05450	Methylene Chloride	75-09-2	N.D.	180	ug/kg	49.5
05451	trans-1,2-Dichloroethene	156-60-5	N.D.	89	ug/kg	49.5
05452	1,1-Dichloroethane	75-34-3	N.D.	89	ug/kg	49.5
05454	cis-1,2-Dichloroethene	156-59-2	N.D.	89	ug/kg	49.5
05455	Chloroform	67-66-3	N.D.	89	ug/kg	49.5
05457	1,1,1-Trichloroethane	71-55-6	N.D.	89	ug/kg	49.5
05458	Carbon Tetrachloride	56-23-5	N.D.	89	ug/kg	49.5
05460	Benzene	71-43-2	N.D.	44	ug/kg	49.5
05461	1,2-Dichloroethane	107-06-2	N.D.	89	ug/kg	49.5
05462	Trichloroethene	79-01-6	N.D.	89	ug/kg	49.5
05463	1,2-Dichloropropane	78-87-5	N.D.	89	ug/kg	49.5
05465	Bromodichloromethane	75-27-4	N.D.	89	ug/kg	49.5
05466	Toluene	108-88-3	3,700	89	ug/kg	49.5

Lancaster Laboratories Sample No. SW5489367 **Group No. 1113440**

DW-3 Grab Soil Sample
Bartlett Tree

Collected:10/01/2008 15:35 by CM Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 10/29/2008 at 09:35
Discard: 11/13/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTDW3 SDG#: BTR02-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Units	Dilution Factor
05467	1,1,2-Trichloroethane	79-00-5	N.D.	89	ug/kg	49.5
05468	Tetrachloroethene	127-18-4	N.D.	89	ug/kg	49.5
05470	Dibromochloromethane	124-48-1	N.D.	89	ug/kg	49.5
05472	Chlorobenzene	108-90-7	N.D.	89	ug/kg	49.5
05474	Ethylbenzene	100-41-4	2,900	89	ug/kg	49.5
05477	Styrene	100-42-5	N.D.	89	ug/kg	49.5
05478	Bromoform	75-25-2	N.D.	89	ug/kg	49.5
05480	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	89	ug/kg	49.5
06293	Acetone	67-64-1	N.D.	620	ug/kg	49.5
06294	Carbon Disulfide	75-15-0	N.D.	89	ug/kg	49.5
06296	2-Butanone	78-93-3	N.D.	360	ug/kg	49.5
06297	trans-1,3-Dichloropropene	10061-02-6	N.D.	89	ug/kg	49.5
06298	cis-1,3-Dichloropropene	10061-01-5	N.D.	89	ug/kg	49.5
06299	4-Methyl-2-pentanone	108-10-1	N.D.	270	ug/kg	49.5
06300	2-Hexanone	591-78-6	N.D.	270	ug/kg	49.5
06301	Xylene (Total)	1330-20-7	34,000	89	ug/kg	49.5

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00159	Mercury	SW-846 7471A	1	10/13/2008 11:42	Damary Valentin	1
01643	Aluminum	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
01650	Calcium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
01654	Iron	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
01657	Magnesium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
01662	Potassium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
01667	Sodium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06925	Thallium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06935	Arsenic	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06936	Selenium	SW-846 6010B	1	10/16/2008 17:29	Eric L Eby	1
06944	Antimony	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06946	Barium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06947	Beryllium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06949	Cadmium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06951	Chromium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06952	Cobalt	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1

Lancaster Laboratories Sample No. SW5489367 **Group No. 1113440**

DW-3 Grab Soil Sample
Bartlett Tree

Collected:10/01/2008 15:35 by CM

Account Number: 09286

Submitted: 10/04/2008 10:30
Reported: 10/29/2008 at 09:35
Discard: 11/13/2008

Brown & Caldwell
234 Hudson Ave.
Albany NY 12210

BTDW3 SDG#: BTR02-07

06953	Copper	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06955	Lead	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06958	Manganese	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06961	Nickel	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06966	Silver	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06971	Vanadium	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
06972	Zinc	SW-846 6010B	1	10/15/2008 22:14	Thomas F McLamb Sr	1
00111	Moisture	SM20 2540 G	1	10/08/2008 16:45	Scott W Freisher	1
01865	Herbicides in Soils	SW-846 8151A	1	10/09/2008 02:32	Tricia M Gusbar	1
02033	PCBs in Soil	SW-846 8082	1	10/15/2008 02:34	Jamie L Brillhart	50
06000	TCL Pesticides in Solids	SW-846 8081A	1	10/16/2008 21:17	Lindsey K Lafferty	10
06000	TCL Pesticides in Solids	SW-846 8081A	1	10/16/2008 21:28	Lindsey K Lafferty	100
06678	OP Pesticides in Solids	SW-846 8141A	1	10/13/2008 03:09	Michele D Hamilton	1
04688	TCL SW846 Semivolatiles Soil	SW-846 8270C	1	10/14/2008 15:07	Joseph M Gambler	1
06292	TCL by 8260 (soil)	SW-846 8260B	1	10/09/2008 14:42	Angela D Sneeringer	49.5
00374	GC/MS VOCs - Bulk Sample Prep	SW-846 5035A Modified	1	10/06/2008 17:24	Eric L Vera	n.a.
00374	GC/MS VOCs - Bulk Sample Prep	SW-846 5035A Modified	2	10/06/2008 17:23	Eric L Vera	n.a.
00381	BNA Soil Extraction	SW-846 3550B	1	10/08/2008 00:00	Olivia Arosemena	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	10/07/2008 23:40	Olivia I Santiago	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	10/12/2008 11:20	Mirit S Shenouda	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	10/12/2008 15:30	Mirit S Shenouda	1
06006	PPL Pesticide Solid Extraction	SW-846 3550B	1	10/09/2008 09:00	Kerrie A Freeburn	1
06006	PPL Pesticide Solid Extraction	SW-846 3550B	2	10/09/2008 11:00	Olivia Arosemena	1
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	10/06/2008 17:22	Eric L Vera	n.a.
06677	OP Pesticides Solid Extraction	SW-846 3540C	1	10/08/2008 16:45	Wanda F Oswald	1

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region One
50 Circle Road, SUNY @ Stony Brook, New York 11790-3409
Phone: (631) 444-0240 • **FAX:** (631) 444-0248
Website: www.dec.state.ny.us

Alexander B. Grannis
Commissioner

February 23, 2009

Mr. Frank Williams
Supervising Hydrogeologist
Brown and Caldwell Environmental Engineering & Consultants
234 Hudson Avenue
Albany, NY 12210

Re: Bartlett Tree Company #1-30-074
Draft Closure Plan for Drywell #3: February 2009

Dear Mr. Williams,

The New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Health and the Nassau County Department of Health (NCDH) have reviewed the referenced plan and provide the following comment:

- Sections 2.3 & 2.4: The Departments have no objection to collecting and analyzing bottom sediments from the mechanic's pit or the stairway floor drain. However, if these structures are determined to have solid bottoms, it must be determined where their contents discharge to. If the mechanic's pit or stairway floor drain discharge to a leaching structure other than Drywell #3, a bottom sample should be collected from that structure for laboratory analysis in accordance with the work plan.

The NYSDEC hereby approves the work plan. Please remove the word draft from its cover and re-submit it electronically. Please notify the NYSDEC and the NCDH five days prior to field activities so that representatives can be present to oversee the field work. If you should have any questions, please feel free to contact me at (631) 444-0246.

Sincerely,

Jamie Ascher
Engineering Geologist 2

cc: C. Vasudevan
W. Parish
D. Miles
S. Messier
R. Weitzman
J. Lovejoy

From: "Williams, Frank" <FWilliams@Brwncald.com>
To: "Jamie Ascher" <jxascher@gw.dec.state.ny.us>
CC: "Weitzman, Robert A (NASSAU)" <Robert.Weitzman@hhsnassaucountyny.us>, "L...
Date: 2/23/2009 3:57 PM
Subject: Bartlett Tree Company Site - Closure of Drywell 3
Attachments: WP022309_clos_drywell_3_wrk_pln_.pdf

Jamie,

We received the DEC's letter dated 2/23/09 approving the work plan for closure of Drywell 3, and are hereby submitting the final work plan. We added a specification under Sections 2.3 and 2.4 that, if the mechanic's pit or floor drain is found to discharge to a leaching structure other than Drywell 3, a bottom sample will be collected (as feasible) from that leaching structure.

We will notify you and the NCDH five days prior to startup of field activities.

The hook-up of the office building to the municipal sanitary sewer was completed last week and concrete should be poured this week, after which final approval is expected.

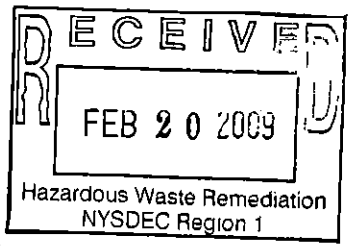
Frank
<<WP022309_clos_drywell_3_wrk_pln_.pdf>>
Frank J. Williams, PG
Brown and Caldwell
234 Hudson Avenue
Albany, NY 12210
phone (518) 472-1988
fax (518) 472-1986
mailto:fwilliams@brwncald.com

MEMORANDUM

NASSAU COUNTY DEPARTMENT OF HEALTH

106 Charles Lindbergh Blvd. Uniondale, NY 11553

To: New York State Department of Health
Bureau of Environmental Exposure Investigation
Attn: Don Miles



From: Department of Health

Date: February 19, 2009

Subject: Draft Closure of Drywell #3 Work Plan
Bartlett Tree Company Site
345 Union Avenue
Westbury, NY 11590
DEC Registry ID# 130074

Department staff has reviewed the Draft Closure of Drywell #3 Work Plan dated February, 2009 prepared by Brown and Caldwell Associates. The plan is acceptable to this Department with the following conditions:

1. In Section 2.3, Inspection of Former Mechanic's Pit, Item #3: If the bottom of the pit has a drain, the Department requires that the discharge point of the drain be located and sampled. The proposal to collect a sample of sediment from the drain is not necessary. If the discharge point of the drain is not observed in Drywell #3, or in the sanitary sewer clean-out, additional investigation will be required.

2. In Section 2.4, Inspection of Stairway Floor Drain: Please be advised the Department did not request that a sample of sediment be collected from inside the stairway floor drain. The Department did request that the discharge point of the drain be located and sampled. If the discharge point of the drain is not observed in Drywell #3, or in the sanitary sewer clean-out, additional investigation will be required.

3. NCHD must be notified 5 days prior to all field work so a representative can be present to observe the work.

4. A $125 plan review fee payable to the "Nassau County Department of Health" is required to be paid by the facility.

Please call me at (516) 227-9538 if you have any questions.

Robert Weitzman

Robert Weitzman, P.E.
Public Health Engineer II
Division of Environmental Health

RW:al

cc: NYSDEC
Attn: Walter Parish, P.E.
Jamie Ascher

NCHD
Attn: Michael J. Alarcon, P.E.
Don Irwin
Joseph DeFranco
John Lovejoy

(1038)

From: "Lovejoy, John (NASSAU)" <John.Lovejoy@hhsnassaucountyny.us>
To: "Jamie Ascher" <jxascher@gw.dec.state.ny.us>
CC: "Weitzman, Robert A (NASSAU)" <Robert.Weitzman@hhsnassaucountyny.us>
Date: 2/18/2009 11:46 AM
Subject: RE: Bartlett Tree Site #1-30-074: Closure Plan for Drywell 3

Hi Jamie:

I've reviewed the revised "Closure of Drywell 3 Work Plan" dated February 2009. Based on my review, the revisions look good and address all the comments made by this Department in our January 5 and 6, 2009 memorandums to the DEC and NYSDOH.

My only minor comment is that bottom sediment samples do not have to be collected from either the interior floor pit or the exterior stairwell drain if it is determined that the structures have solid, intact concrete bottoms with drain discharges that are "hard-piped" to other drainage locations (sampling is needed for disposal or re-use of the backfill in the pit). A sample is required of the sediments from the ultimate drainage location (as the plan discusses) if the pit or exterior drain discharge to a structure with an earthen bottom.

Note that Bob Weitzman is out of the office today and wanted to go over the plan with me before sending out an official comment memo to you. I do not anticipate that he will have any further comments, but can't say for certain. I will let you know tomorrow afternoon after I meet with Bob if he has any additional comments, at which point will send you the formal comment memorandum.

John Lovejoy
Public Health Sanitarian II
Bureau of Environmental Protection
Nassau County Department of Health
106 Charles Lindbergh Blvd.
Uniondale, New York 11553
516-227-9564
John.Lovejoy@hhsnassaucountyny.us

-----Original Message-----
From: Jamie Ascher [mailto:jxascher@gw.dec.state.ny.us]
Sent: Thursday, February 12, 2009 9:02 AM
To: Weitzman, Robert A (NASSAU)
Cc: Frank Williams; Walter Parish; Lovejoy, John (NASSAU); DeFranco, Joseph (NASSAU)
Subject: Bartlett Tree Site #1-30-074: Closure Plan for Drywell 3

Good Morning
Does anyone have any additional comments on the revised closure plan for Drywell 3? Please email your concurrence or comments. Thanks

Jamie

>>> "Williams, Frank" <FWilliams@Brwncald.com> 2/10/2009 7:21 PM >>>
Jamie,

The attached work plan has been revised and expanded to address your comments as well as those received from Robert Weitzman, PE and John Lovejoy of the Nassau County Department of Health. Please let me know if you have any concerns or questions. Upon your approval we will finalize the work plan and provide hard copies to you and the NCDH.

Thank you.

Frank
<<WP020509_clos_drywell_3_wrk_pln_.pdf>>
Frank J. Williams, PG
Brown and Caldwell
234 Hudson Avenue

Albany, NY 12210
phone (518) 472-1988
fax (518) 472-1986
mailto:fwilliams@brwncald.com