

REMEDIAL ACTION COMPLETION REPORT

Hercules Road Property (Greenville Overlook) Wilmington, Delaware

Prepared For:

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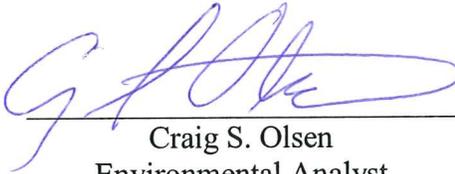


INTERNAL QUALITY CONTROL SHEET

This Remedial Action Completion Report (RACR) has been prepared by BrightFields, Inc. (BrightFields) following DNREC practices and policies under the Hazardous Substance Cleanup Act (HSCA). This report represents BrightFields' knowledge of conditions on the subject site at the time of preparation.

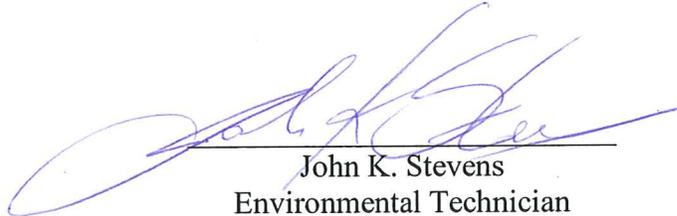
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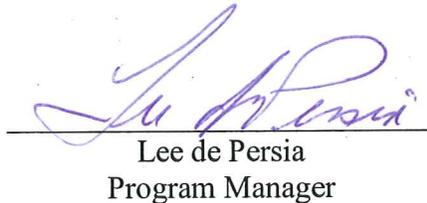
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REMEDIAL ACTION COMPLETION REPORT

HERCULES ROAD PROPERTY (GREENVILLE OVERLOOK)

WILMINGTON, DELAWARE

1.0 INTRODUCTION

BrightFields, Inc. (BrightFields) was retained by Toll Brothers, Inc. (Toll Brothers) to perform environmental oversight of remedial and intrusive construction activities for the development of the Hercules Road Property, currently known as Greenville Overlook. This Remedial Action Completion Report (RACR) summarizes and documents all remedial action activities performed on the Site.

1.1 Site Description

The Hercules Road Property (Greenville Overlook), situated on the former Hercules Golf Course, is located at 400 Hercules Road, approximately 2,000 feet west of Newport Gap Pike (State Route 41) and south of Lancaster Pike (State Route 48) in Wilmington, Delaware (Figure 1). The site is composed of two tax parcels. The northern parcel has been used as a nine-hole golf course since 1947 and covers an area of approximately 101 acres (tax parcel ID# 08-026.00-052 [Lot 5]). The southern parcel is unoccupied and wooded and is approximately 61 acres (tax parcel ID# 08-033.00-001 [Lot 10]). Hercules Road borders the property to the north, Red Clay Creek to the east, and residential properties to the south and west. The surrounding land is generally residential. The Ashland Hercules Research Center, formerly the Hercules Research Center, is located adjacent to the site, occupying approximately 45 acres.

1.2 Site History

The majority of the property was developed by the Hercules Chemical Company into a nine-hole golf course around 1947. Historical logbook records document regular application of various types of pesticides to the turf since 1947. Toll Brothers is currently in negotiations with the current owner, Chaps 901, LLC, to purchase the property for residential development. The site is to be redeveloped as 160 single family residential units with accompanying common areas.

2.0 ENVIRONMENTAL INVESTIGATION RESULTS

The following sections summarize the environmental investigations performed on the Hercules Road Property.

2.1 TriState Investigations (TriState, 2003)

In March, April, May, and July of 2003, TriState Environmental Management Services Inc. (TriState) conducted initial and follow-up soil sampling investigations across the golf course. TriState drilled approximately 79 borings throughout the property and collected 143 soil samples. Samples were collected at six-inch intervals from the ground surface to 1.5 feet below ground surface (bgs). These samples were analyzed for arsenic, lead, and organochlorine pesticides. Elevated concentrations of arsenic and other compounds were detected in soil samples taken from some of the greens and tees, and from one fairway. The sampling locations and soil sampling results from this investigation were incorporated into the Remedial Investigation/Feasibility Study (RI/FS) discussed in section 2.3.

2.2 BrightFields Green Investigation (BrightFields, 2003)

On October 17, 2003, BrightFields personnel collected a total of four soil samples from 0 to 6 inches bgs from Practice Green 3 and from Green 4. The two greens were selected because soil samples from Practice Green 3 had the highest concentrations of arsenic detected during the TriState investigation (greater than 1,000 mg/kg) and soil samples from Green 4 had moderate concentrations of arsenic (260 to 360 mg/kg) and the concentrations increased with depth. The samples were analyzed for RCRA metals and organochlorine pesticides. The samples were also subjected to the toxicity characteristic leaching procedure (TCLP) for the purpose of characterizing the soil to evaluate remedial action options. The samples were analyzed at GLA Laboratories in King of Prussia, Pennsylvania. Elevated concentrations of pesticides, arsenic, cadmium, mercury and lead were detected in the samples collected from both greens. The sampling locations and soil sampling results from this investigation were incorporated into the Remedial Investigation/Feasibility Study (RI/FS) discussed in section 2.3.

2.3 Remedial Investigation/Feasibility Study (BrightFields, 2004)

A Remedial Investigation/Feasibility Study (RI/FS) that included soil, groundwater and sediment sampling conducted by BrightFields in October 2004 and integrates previous data, reports the

presence of residual metals and pesticide concentrations in the soil at shallow depths. The following were conclusions from the RI/FS report:

Soil – Remediation Areas

- Based on the results of the TriState investigation, elevated concentrations (greater than 37 mg/kg of arsenic plus lead and pesticides) are present in site soil associated with 7 of 9 greens, 2 practice greens, 2 of 9 tees, and one fairway, to a depth of at least 2 feet bgs.
- Low to moderate arsenic exceedances (11 to 37 mg/kg) of the Delaware default background standard of 11 mg/kg are associated with 4 of 9 tees, 5 of 8 fairways, and two additional areas and appear to be present in the top 0 to 6 inches of surface soil.
- Total and TCLP results from the BrightFields Supplemental Investigation confirm that elevated levels of metals and pesticides are present in golf course greens; however they are not present at hazardous concentrations.
- Based on the results of the TriState and BrightFields investigations, arsenic had a high degree of correlation to elevated levels of pesticides associated with golf course greens and tees; therefore, by using arsenic as the indicator of contamination during remediation, pesticide contamination will be addressed.

Soil – Non Remediation Areas

- Soil samples collected from depths ranging from 0 to 12 feet bgs across the golf course property indicate that aluminum, barium, iron, manganese, and vanadium, are present in site soil above the unrestricted use URS. Arsenic was not detected above the Delaware default background standard of 11 mg/kg (DNREC 2004).
- The cumulative risk calculations indicate that exposure to the site soil should not pose an unacceptable carcinogenic risk, but may pose a non-carcinogenic risk under the unrestricted use scenario. However, the majority of the metals that contributed to the non-carcinogenic risk were detected in the background soil samples at a higher concentration than in the soil samples collected from the golf course. Given this background condition and the influence the naturally occurring substances have on the risk calculation, the non-carcinogenic risk is considered to be acceptable. Therefore, no further action is necessary for soil not associated with greens, tees, or fairways.

Sediment:

- Arsenic, barium, lead, mercury, nickel, zinc, phenanthrene, fluoranthene, benzo(a)anthracene, benzo(a)pyrene, DDT, DDE, DDD, and alpha and gamma chlordane were detected above the URS in at least one sediment samples.

Groundwater:

- Iron, manganese, and chloroform were the only compounds detected in site groundwater above the URS. Based on the fact that groundwater from the site will not be used as drinking water, the presence of contaminants in the groundwater does not pose a risk for current or anticipated site uses.

Because there is no information that indicates that pesticides were improperly applied, the Delaware Department of Natural Resources and Environmental Control, Site Investigation and Restoration Branch (DNREC-SIRB) has indicated the property is not considered a Delaware Hazardous Substance Cleanup Act (HSCA) site.

Because it is not a HSCA site, DNREC-SIRB does not hold jurisdiction over earth moving activities on the property. Toll Brothers, recognizing the importance of environmental health and safety, is voluntarily implementing HSCA policies and procedures during the redevelopment of the property as they would apply if the site was a HSCA-regulated cleanup site.

The remedial approach involves the excavation and disposal of a portion of the site soil and a soil blending remedial effort being performed on other portions of the site. Extensive testing of post remediation site conditions and the development of a record of soil conditions will document that the site conditions are suitable for future residential development.

Analytical data from the RI investigations and other borings were used to identify potential areas of concern. This information was used to plan the soil management and disposal approach for construction.

2.3 Supplemental Soil Investigation (BrightFields, 2006)

A supplemental soil investigation was conducted by BrightFields of the southern parcel and the golf course in February and March of 2008. The southern parcel is an unoccupied wooded lot and is approximately 61 acres.

Soil investigations on the wooded lot were performed to assess whether golf course operations on the adjacent lot have impacted this area where future residential lots are planned. Soil sample locations chosen for the wooded lot correspond to the location of the proposed housing unit lots on the property. Twenty-one hand auger locations, each having samples obtained at three depth intervals below ground surface (0-0.5 ft, 0.5-1 ft, and 1-1.5 ft), were advanced on the wooded lot.



Soil investigations on the golf course were performed to confirm that additional pesticide/herbicide compounds (2,4-D, Glyphosate, Oxadiazon, and Chlorpyrifos), not analyzed previously, have the same vertical distribution with arsenic as the currently known pesticides documented in BrightFields' Remedial Investigation/Feasibility Study (BrightFields, 2004). Six hand auger locations, with samples obtained at three different depth intervals below ground surface (0-0.5 ft, 0.5-1 ft, and 1-1.5 ft), were advanced on the golf course.

A composite sample was also collected from the golf course and analyzed for waste characterization parameters to determine whether a disposal facility will accept the material for off-site disposal.

The lab results for the golf course samples established that the additional pesticides/herbicide compounds analyzed (2,4-D, Glyphosate, Oxadiazon, and Chlorpyrifos) were not at levels above the URS for residential use. This confirmed that no modifications needed to be made to the conclusions or remedial action objectives of the BrightFields' Remedial Investigation/Feasibility Study, August 2004.

According to the lab analytical data, the soil compounds analyzed in the wooded lot were considered to be at safe levels for residential use by the State's URS. The soil that was tested did not appear to be impacted by the application of pesticides and herbicides on the adjacent golf course and therefore the area of concern will not need to expand.

Based on the results of the soil waste characterization analysis, the material expected to be removed off-site for remediation purposes should be classified as non-hazardous.

3.0 REMEDIAL ACTION GUIDANCE DOCUMENTS

The following section describes the guidance documents that were used during the remedial action activities that occurred on the Hercules Road Property.

3.1 Remedial Action Work Plan

In December 2007, on behalf of Toll Brothers, BrightFields prepared a revised Remedial Action Work Plan (RAWP) to outline the approach for remediation at the Site. The RAWP provides a narrative of how environmental conditions associated with the historic use of the property as a golf course will be remediated. The following actions were outlined in the RAWP:

- A construction entrance and separate truck washing area will be installed on site by the contractor as part of the required site stabilization depicted on the erosion and sediment control plan. Soil on vehicle tires will be washed off before leaving the property to prevent material from being tracked off site in accordance with the E&S Plan.
- Irrigation piping known to contain asbestos containing materials (ACM) will be removed from the subsurface by a licensed asbestos abatement contractor. BrightFields personnel licensed by the State of Delaware to perform Project Monitoring services will oversee the contractor during the removal to document compliance with applicable regulations and to monitor ambient conditions. The removed pipe will be wrapped and transported off site for proper disposal. After the pipes are removed and trenches backfilled, the disturbed soil will be stabilized in accordance with Delaware Sediment and Stormwater Regulations.
- The remediation activities will begin with the excavation of the areas which have the highest concentrations of arsenic on the site, as identified in the RAWP, and include mostly former greens and tees. Soil blending activities will occur in additional areas, mostly fairways, which are identified in the RAWP, and will be conducted simultaneously with the excavation activities. The soil remediation activities will occur on the property in four phases as outlined in the E&S plan. Following the soil remediation activities, the site work required for construction will take place.
- Environmental oversight during the remedial activities will include monitoring ambient air conditions for the presence of volatile organic compounds using a photo-ionization

detector and also monitor dust conditions using hand-held monitors at the point of remediation. In addition, fixed air monitoring devices will be set at the perimeter of the work zone and a weather station will be placed on site to record wind direction and other climatic conditions.

- Soil identified during the Remedial Investigation containing arsenic concentrations greater than 37 mg/kg will be excavated and loaded directly into trucks licensed to haul this material, and transported off site for disposal. Based on the sampling data reported in the RI/FS, the estimated depth of excavation in these areas is 1.5 feet bgs to remove soil containing an arsenic concentration above 37 mg/kg. BrightFields will perform post excavation confirmatory sampling using x-ray fluorescence spectroscopy (XRF) technology to verify that remaining soils have arsenic concentrations below 37 mg/kg. Material removed from the site for disposal will go to a licensed facility.
- Fifty-nine confirmatory soil samples will be collected from the excavated areas for laboratory analysis at TestAmerica (a HSCA certified laboratory) for RCRA metals and target pesticides and herbicides. A minimum of 5 samples will be obtained from each individual excavation area. Four samples will be removed from the sidewalls of the excavations, one each from the north, east, south, and west directions; and one sample will be obtained from the base of the excavation. Two additional sidewall samples will be collected from the excavations at Green 8 and Practice Green 3 due to their larger area.
- Soil identified during the Remedial Investigation containing arsenic concentrations between 11 mg/kg and 37 mg/kg will be mechanically blended with spading equipment resulting in lower overall concentrations of residual contaminants. Soil with arsenic concentrations above 11 mg/kg have been identified in the upper 12-inches of soil in the above locations. The blending operation is designed to mix shallow impacted soil with deeper un-impacted soil. The depth at which the equipment operates can be adjusted from 0 to 40 inches and will be adjusted as necessary throughout the operation, and multiple passes can be made to mix soil in various depth combinations. Post-blending Arsenic concentrations will be field screened by BrightFields using XRF technology.
- Eighty confirmatory soil samples will be collected from the blended areas for laboratory analysis at TestAmerica for RCRA metals and target pesticides and herbicides. The number of samples was determined using the Singer and Wickman algorithm formula and to accommodate several sample grid layouts and increase coverage in targeted areas.

- The RI/FS indicates that there are approximately 120 cubic yards of sediment materials with elevated pesticide concentrations in an existing drainage depression. Based on concentrations of contaminants identified in the RI/FS the sediment will be transported off site for disposal as non-hazardous material as defined by Resource Conservation & Recovery Act (RCRA). Disposal characterization analysis will be performed prior to disposal. Sediment removal will be performed separate from the other remedial action tasks discussed in this RAWP. The sediments will be addressed in conjunction with the proposed stream stabilization work during the final stages of the redevelopment project under the jurisdiction and permit from DNREC Sediment and Stormwater Branch.
- The remediation will be considered complete upon DNREC-SIRB's written determination that the soil conditions meet the Remedial Action Objectives stated in the Final Remedial Action Plan. Upon completion of the remediation BrightFields will prepare and submit to DNREC-SIRB a Remediation Completion Report that documents attainment of the Remedial Action Objectives. DNREC-SIRB will review the completion report as soon as the work and the report are completed and will provide documentation stating that the site is cleaned up to the technical and substantive standards of HSCA. The Remediation Completion Report will provide tabulations of off-site disposal activities with appropriate documentation, and a compilation of confirmatory sampling data from all post remedial sampling. This will be in addition to the air monitoring reports compiled daily during the remediation. BrightFields will provide the air monitoring reports to DNREC-SIRB during remediation activities and DNREC-SIRB will make the summary reports available to the public.
- Once building permits have been issued by New Castle County Land Use, building lots have been surveyed and staked, and foundation work completed, BrightFields will collect samples of the surface soil from each individual lot for laboratory analysis to document that these soils achieve the Remedial Action Objectives stated in the July 2007 Final Remedial Action Plan. The individual lot samples will be collected as a five-point composite. The five points will be distributed in the front, side and back yards of the lots with an additional location in the larger of the front or back yard. Samples will be analyzed for arsenic, cadmium, lead, mercury, chlordane, heptachlor epoxide, aldrin, and dieldrin. Additional removal and/or blending of contaminated soils will be performed as needed if analysis indicates concentrations exceeding the Remedial Action Objectives.

Upon receipt of the confirmatory sample results for individual building lots, BrightFields will issue a “statement of compliance” letter to DNREC-SIRB and a copy to New Castle County stating that the sampling and analysis for the individual lot complies with the technical and substantive requirements of HSCA and that the sample results for the lot meet the Remedial Action Objectives stated in the Final Remedial Action Plan.

3.2 Contaminated Material and Water Management Work Plan

The site-specific Contaminated Material and Water Management Work Plan for Construction Activities Associated with the Hercules Road Property (BrightFields, 2007) (CMW MWP) outlines the management approach for materials, such as soil, wood, and groundwater, that may be encountered on the site during remedial activities. The CMW MWP describes the types of environmentally impacted soil that could be encountered on the site and how those soils will be managed and, if necessary, properly disposed. This plan was followed throughout all stages of the remediation.

3.3 Health and Safety Plan

The site-specific Health and Safety Plan for Remedial Activities Associated with the Hercules Road Property (BrightFields, 2007) (HASP) describes the potential physical and chemical hazards that may be encountered during construction, and the methods to safely manage these risks and to protect construction workers and people on surrounding properties from environmental exposures. The HASP describes the proper precautionary measures for minimizing carcinogenic and non-carcinogenic risk. The HASP also outlines the requirements for air monitoring during intrusive activities and the air monitoring action levels that require the implementation of engineering controls and/or an upgrade in the level of personal protective equipment (PPE).

4.0 REMEDIAL ACTION ACTIVITIES

The following DNREC-approved Remedial Actions were performed with DNREC oversight and in accordance with the DNREC-approved site specific RAW P, CMWMWP, and HASP. A letter outlining BrightFields methods for clean-up goal attainment was also approved by DNREC (Appendix A). BrightFields performed oversight of all soil excavation and provided technical oversight during all phases of the Remedial Action activities completed to date. Remedial activities were documented by BrightFields' staff with daily field reports that were posted on DNREC's website on a daily basis. The daily field reports included a summary of site activities, hand-held dust meter data, perimeter dust meter data, and wind direction data from the on-site weather station. The daily status reports are included in Appendix B. As each individual remediation area was completed, a letter documenting attainment of cleanup goals was sent to DNREC for review (Appendix C). Each letter contained a remediation summary, a figure displaying the sample locations, XRF screening sample analysis results, and final confirmatory analysis results from the TestAmerica laboratory. Complete laboratory confirmation sample data is included in Appendix D.

4.1 Asbestos Containing Material Pipe

From April 21, 2009 until May 1, 2009, BrightFields provided an EPA certified Asbestos Abatement Building Inspector to monitor the abatement of an estimated 4,875 linear feet of underground transite irrigation asbestos cementitious pipe. No visible emissions were noted during the remediation activities. Air samples were collected daily and sent to EMSL Analytical, Inc., laboratories in Westmont New Jersey to be analyzed for fiber count using Phase-Contrast Microscopy (PCM). All asbestos containing material (ACM) was properly sealed and disposed per federal, state and local regulations. The ACM pipe was transported to the Tullytown Resource Recovery Facility Landfill in Tullytown, Pennsylvania for disposal. The Final Visual Inspection for Property Redevelopment Report with sample data is included as Appendix E. Tare sheets documenting the ACM pipe disposal at the Cherry Island Landfill are included in Appendix F.

4.2 Soil

Soil remediation began on September 14, 2009 and continued until November 6, 2009. The soil remediation areas and sample locations are identified on Figure 2. As stated in section 4.0, after each individual soil remediation area was completed, a letter documenting attainment of the

cleanup goals was sent to DNREC for review (Appendix C). Each letter contains a remediation summary, a figure displaying the sample locations, XRF screening sample analysis results, and final confirmatory analysis results from the TestAmerica laboratory. Table 1 provides a summary of each remediation area, what confirmation samples were required, when they were collected, when the data was received, and when cleanup goal attainment letters were sent to DNREC. Table 2 lists the confirmation samples collected by sample identification number and the corresponding laboratory batch number.

After the attainment of cleanup goals for each remediation area were confirmed with laboratory data, Lewis Environmental stabilized the excavated and blended areas by hydroseeding them.

4.2.1 Offsite removal

All remedial areas with arsenic concentrations in soil above 37 mg/kg, mostly tees and greens, were excavated down to 1.5 feet bgs or deeper, until screening sample results showed arsenic concentration levels were below 37 mg/kg. The excavated soil was loaded on to trucks and disposed of at either the Conestoga Landfill (Conestoga) in Morgantown, Pennsylvania, or Stags Leap Ranch Development Facility (Stags Leap) in Mullica Hill, New Jersey, depending on the contaminant concentration levels in the soil. On April 19, 2007, Lewis Environmental collected samples from the site remediation areas and had them analyzed for disposal characterization parameters at TestAmerica Laboratory in King of Prussia, Pennsylvania to be used for the Stags Leap facility. On September 1, 2009, Lewis Environmental collected additional samples from the site remediation areas and had them analyzed for disposal characterization parameters at Analytical Labs in Middletown, Pennsylvania to be used for the Conestoga Landfill. Laboratory results are included in Appendix G.1 and G.2. Based on the disposal characterization data the majority of the site soil that required off site removal was sent to the Stag's Leap facility which requires soil to have lead limits below 1,000 ppm and arsenic concentrations below 100 ppm. A total of 6,098.53 tons of soil was disposed at the Stags Leap facility. Tare sheets documenting the soil disposal at Stag's Leap are included in Appendix G.3. Soil from remedial areas A1, B5, B8, and D1 were sent to the Conestoga facility because the contaminant concentrations were above the allowed limits of Stags Leap. A total of 3,344.36 tons of soil was disposed at Conestoga Landfill. Tare sheets documenting the soil disposal at Conestoga are included in Appendix G.4.

BrightFields performed post excavation screening sampling using an XRF analyzer to verify that the remaining soil had arsenic concentrations below 37 mg/kg. Confirmatory samples were sent

to TestAmerica to be analyzed for site contaminants of concern which include arsenic, cadmium, lead, mercury, chlordane, heptachlor epoxide, aldrin, and dieldrin. Letter reports documenting the attainment of cleanup goals for each individual soil remediation area with sample results are included in Appendix C.

4.2.2 Blending

The majority of remedial areas with arsenic concentrations between 11 mg/kg and 37 mg/kg were blended using an Imants Revolution 70 Series rotary spader for the first pass (typically 30 inches in depth). In areas such as Area B6 and a portion of area B10, where the soil was too rocky for the blending equipment, the blending was conducted using an excavator bucket for the first pass. Sample areas that did not meet the cleanup goal for arsenic were re-blended either with the blender, blending down to 40 inches, or blended using an excavator bucket.

BrightFields performed post blending screening sampling using an XRF analyzer to verify that the remaining soil had arsenic concentrations below 11 mg/kg. Confirmatory samples were sent to TestAmerica to be analyzed for site contaminants of concern which include arsenic, cadmium, lead, mercury, chlordane, heptachlor epoxide, aldrin, and dieldrin. Letter reports documenting the attainment of cleanup goals for each individual soil remediation area with sample results are included in Appendix C.

4.3 Groundwater

Groundwater discharge was not required during these remedial activities; therefore wastewater treatment was not necessary.

4.3 Sediment

Four temporary sediment basins were constructed on the property to collect storm water runoff from the remediation areas. On November 5, and November 6, 2009, following the end of site remediation activities, BrightFields collected one sediment sample from each basin and one sediment sample from the base of the truck wash, below the stone and on top of the geofabric. All sediment samples were sent to TestAmerica and analyzed for the site contaminants of concern which include arsenic, cadmium, lead, mercury, chlordane, heptachlor epoxide, aldrin, and dieldrin. The laboratory confirmatory data from the sediment samples collected in the basins and the truck wash are displayed on Table 3.

4.3 Air

To prevent worker and public inhalation of possible arsenic contaminated airborne dust, a dust suppression program was implemented for all site activities that create sustained airborne dust concentration in the breathing zone that exceed the action levels outlined in the Health and Safety Plan.

A miniram hand-held dust monitor device was used by BrightFields staff to measure the levels of airborne dust particles during remedial activities. Airborne dust did not exceed the site worker action level during the remediation process. The logged handheld dust monitor results are included in the daily reports located in Appendix B.

Perimeter air monitoring devices were utilized by BrightFields to measure respirable particulate matter (PM10) along the edges of the property in areas near residences or where pedestrians could come in contact with site dust. The perimeter dust action level was set at the National Ambient Air Quality Standard (NAAQS) for PM10 in the breathing zone. Airborne dust did not exceed the perimeter dust action level during the remediation process. The logged perimeter dust monitor results are included in the daily reports located in Appendix B.

4.3 Deviations from the Remedial Action Work Plan

With approval from DNREC, changes were made to the RAWP. The changes to the RAWP are listed below:

- In some cases, BrightFields used the 95% upper confidence limit of the mean procedure as described in Section 6.2 of the DNREC Remediation Standards Guidance Document (December 1999) to demonstrate attainment of cleanup goals for excavated and blended areas where more than four sample results were available. If the 95% UCL exceeded the maximum detected value, the maximum was used. This procedure was documented in a letter to DNREC which is included as Appendix A.
- Section 3.1 of the RAWP identified specific remediation areas of the site with arsenic levels above 37 mg/kg that would be excavated down to 1.5 feet bgs and transported off site for disposal. The RAWP did not clearly identify that subsequent to the initial soil excavation and removal, any areas that still contained arsenic concentrations between 11

mg/kg and 37 mg/kg would require soil blending until arsenic concentrations were below background levels (11 mg/kg). Rather than using laboratory confirmation samples to confirm that 37 mg/kg was achieved, the XRF was used to document that excavation was performed to 37 mg/kg or less. Laboratory confirmation samples were used to document that excavation areas and blending areas achieved the cleanup goals.

- BrightFields conducted field screening with the XRF to delineate the perimeter of every remedial area. Sample points were collected along the edges of the staked out remediation areas. When arsenic readings were identified above the arsenic cleanup goal, sampling was stepped out 10 to 15 feet until a sample point resulting in arsenic concentrations below the cleanup goal was achieved. The perimeter of each remediation area would be expanded to encompass all points with arsenic concentrations above the cleanup goal.

5.0 SUMMARY

All remedial action activities were conducted in accordance with the site-specific Remedial Action Work Plan, Contaminated Material and Water Management Work Plan, and Health and Safety Plan. A dust monitoring and suppression program was implemented during remedial site activities to protect site workers and the public by preventing airborne dust in the breathing zone from exceeding action levels outlined in the Health and Safety Plan.

From April 21, 2009 until May 1, 2009, an estimated 4,875 linear feet of underground transite irrigation asbestos cementitious pipe was abated from the site and transported to the Cherry Island Landfill in Wilmington, Delaware for disposal.

Soil remediation began on September 14, 2009 and continued until November 6, 2009. Remedial activities in areas established by the RAWP for offsite disposal produced a total of 6,098.53 tons of contaminated soil that was transported to the Stags Leap Ranch Development Facility in Mullica Hill for disposal. An additional 3,344.36 tons of soil was disposed at Conestoga Landfill in Morgantown, Pennsylvania. Disposal locations were selected based on contaminant concentrations in the specific remediation areas on the site and the disposal facility criteria.

Remedial activities in areas established by the RAWP as blending locations were remediated using a rotary spader for the first pass (typically 30 inches in depth). Sample areas that did not meet the cleanup goal for arsenic were re-blended either with the blender, blending down to 40 inches, or blended using an excavator bucket.

XRF technology was used to collect screening sample analysis results during remedial activities. The attainment of cleanup goals for each remediation area was confirmed with laboratory data. Once attainment was confirmed, the excavated and blended areas were stabilized with hydroseed.

On November 5, 2009, following the end of site remediation activities, the four temporary sediment basins constructed on the property to collect storm water runoff from the remediation areas were sampled. The truck wash area was sampled on November 6, 2009. All of the samples were below the uniform risk based standards for the site contaminants of concern.

As of November 12, 2009, all remedial activities for the greens, tees, and fairways of the former golf course have been completed in accordance with the Remedial Action Work Plan.

6.0 REFERENCES

BrightFields, Inc., (BrightFields) 2007, Remedial Action Workplan, Hercules Road Property, revised December 26, 2007.

BrightFields, 2007, Final Remedial Action Plan, Hercules Road Parcel/Form er Delaware National Country Club Golf Course, July 2007

BrightFields, 2007, Environmental Specifications for Remediation Activities at the Hercules Road Property, April 2007.

BrightFields, 2007, Perimeter Air Monitoring Plan for Remediation Activities at the Hercules Road Property, April 2007.

BrightFields, 2007, Contaminated Material and Water Management Work Plan for Remedial Activities Associated with the Hercules Road Property, March 2007.

BrightFields, 2007, Health and Safety Plan for Remediation Activities at the Hercules Road Property, March 2007.

BrightFields, 2007, Summary of Test Pit Investigation at the Hercules Road Property, March 9, 2007.

BrightFields, 2004, Remedial Investigation/Feasibility Study, Hercules Road Property, October 2004.

BrightFields, 2003, Environmental Data Summary for Hercules Road Property, October 3, 2003.

Delaware Department of Natural Resources and Environmental Control (DNREC), 2009, 1996, Delaware Regulations Governing Hazardous Substance Cleanup, September 1996.

DNREC, 1996, Standard Operating Procedure For Chemical Analytical Programs Under the Hazardous Substance Cleanup Act, April 1996 revision.

DNREC, 1995, Voluntary Cleanup Program Guidance Manual, November 1995.

DNREC, 1995, Delaware Hazardous Substance Cleanup Act 7 Del. C., Chapter 91, July 1995.

DNREC, 1994, Hazardous Substance Cleanup Act Guidance Manual, October 1994.

TriState Environmental Management Services, Inc., 2003, Soil Sample Analytical Results Summary Table, July 2003.

TABLE 1
Soil Sample Analytical Results
Area B10 South
Greenville Overlook

Sample ID	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	B10-TP5-S001	B10-TP6-S001	B10-TP6-S101	B10-TP7-S001
Sampling Date	10/1/2009	10/1/2009	10/1/2009	10/1/2009	10/1/2009
Sample Depth (ft bgs)	1	1	1	1	1
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Analyte	Unrestricted Use				
XRF Analysis **	2	5	NR	3	
Arsenic					
PESTICIDES/PCBs					
Aldrin	0.040	NR	NR	NR	0.0085 U
alpha-Chlordane	2	NR	NR	NR	0.0085 U
Dieldrin	0.040	NR	NR	NR	0.0085 U
gamma-Chlordane	2	NR	NR	NR	0.0085 U
Heptachlor epoxide	0.070	NR	NR	NR	0.0085 U
No other pesticides were required to be analyzed as part of thi					
METALS					
Arsenic	11 [†]	3.5	3.3	3.4	4.0
Cadmium	4	NR	NR	NR	1.2 U
Lead	400	NR	NR	NR	8.3
Mercury	10	NR	NR	NR	0.092
No other metals were required to be analyzed as part of this ct					
WET CHEMISTRY					
Percent Moisture (%)		18.8	20.4	19.5	20.9
Percent Solids (%)		81.2	79.6	80.5	79.1

* - below ground surface
 ** - Samples were field screened with an XRF Analyzer for arsenic.
 NR: Not analyzed.
 t - Delaware background concentration (DNREC, 2007)
 J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
 U: Indicates the analyte was analyzed for but not detected.

Remedial Action Completion Report
Greenville Overlook
Wilmington, Delaware



BrightFields, Inc.

REMEDIATION AREA

C1 (Area 4)



BrightFields, Inc.
Environmental Services

29 October 2009

Stephen Johnson, P.E.
Delaware Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, DE 19720

**RE: Attainment of Cleanup Goals – Area 4, Remediation Area C1
Hercules Road Property (Greenville Overlook) (DE-1323)
BrightFields File: 1938.08.52**

Dear Mr. Johnson:

The purpose of this letter is to document attainment of cleanup goals at Area 4, Remediation Area C1 (see the attached figure). This letter documents that cleanup goals were attained at Area 4 by blending the soil.

To delineate the area to be blended, samples were collected from the planned locations of berms and swales being installed as part of the erosion and sedimentation controls. Samples collected from the planned berm areas were used to establish the north and northeast extent of the blending area and samples collected from the planned swale area were used to establish the western and southern extent of blending. Where needed, additional samples were collected along the perimeter to supplement the berm and swale samples. Samples were screened using BrightFields' Innov-x X-Ray fluorescence analyzer (XRF) to assess arsenic concentrations. A correlation study previously performed indicated that an XRF reading of 14 mg/kg corresponds to a laboratory arsenic result of 11 mg/kg (the arsenic cleanup goal). Arsenic was used as an indicator compound based on previous site data that showed that if the arsenic concentration is

below the cleanup goal, the other site contaminants will be below their respective cleanup goals as well.

Figure 1 shows the location of all samples collected. Table 1 presents the XRF screening results. At least four readings were obtained with the XRF for each soil sample and the average of the four used as the representative arsenic concentration for the sample. When determining the spacial extent of the blending area, where the initial screening samples exceeded the cleanup goal, additional samples were obtained at approximately 10 foot intervals moving away from the center of the blending area until an average XRF reading of 14 mg/kg or less was obtained. The northern limit of Area 4 is at the property boundary. Where screening results were above the cleanup goal, the soil was excavated to the depth required based on the screening data and moved onto Area 4 for blending. The excavation was then backfilled with clean soil being used for the berms.

The remediated area was delineated on all sides beyond the boundaries of the original area. Figure 1 shows the area blended. Area 4 was blended until XRF sample results were below the arsenic cleanup goal. Blending was performed to a depth of 30 inches below ground surface. The location of the confirmation samples for blended areas was determined using Visual Sample Plan software (version 4.6d) and is based on a systematic grid sampling approach to provide a 95% probability that a hot spot with a radius of approximately 40 feet will be detected if it exists. One additional confirmation sample location was added (C1-Screening16) in the northeast corner of Area 4 because of the increase in blending area in this location. Confirmation samples for screening and laboratory analysis were collected at sample locations C1-Screening1 to C1-Screening16. Table 1 presents the arsenic field screening results. Two areas were re-blended following initial screening results that indicated the arsenic cleanup goals were not achieved. The area around C1-Screening7 was re-blended on 14 October, and the area around C1-Screening16 was re-blended on 14 October and again on 20 October. Table 2 presents the laboratory analysis results for all the confirmation samples.

Four of the confirmatory sample results for arsenic exceeded the cleanup goal of 11 mg/kg (C1-Screening2, C1-Screening7, C1-Screening10 and C1-Screening13). To determine if the overall area met the arsenic cleanup goal, Pro-UCL software was used to calculate the upper 95% confidence limit of the mean (95% UCL). Using the data from the sixteen confirmation samples collected at Area 4, the 95% UCL was determined to be 10.7 mg/kg. The Pro-UCL output sheet

Mr. Stephen Johnson
Attainment of Cleanup Goals – Area 4, Remediation Area C1
Hercules Road Property (DE-1323)



is attached to this letter. Since the results are below 11 mg/kg, we consider the arsenic cleanup goal to be met for this area. All other confirmatory sample analysis results are below the cleanup goal. Therefore, remediation of Area 4 (Remediation Area C1) is considered complete.

Please do not hesitate to contact me at (302) 656-9600 should you have question, comments or require additional information.

Sincerely,

BrightFields, Inc.

A handwritten signature in cursive script, appearing to read "Lee dePersia".

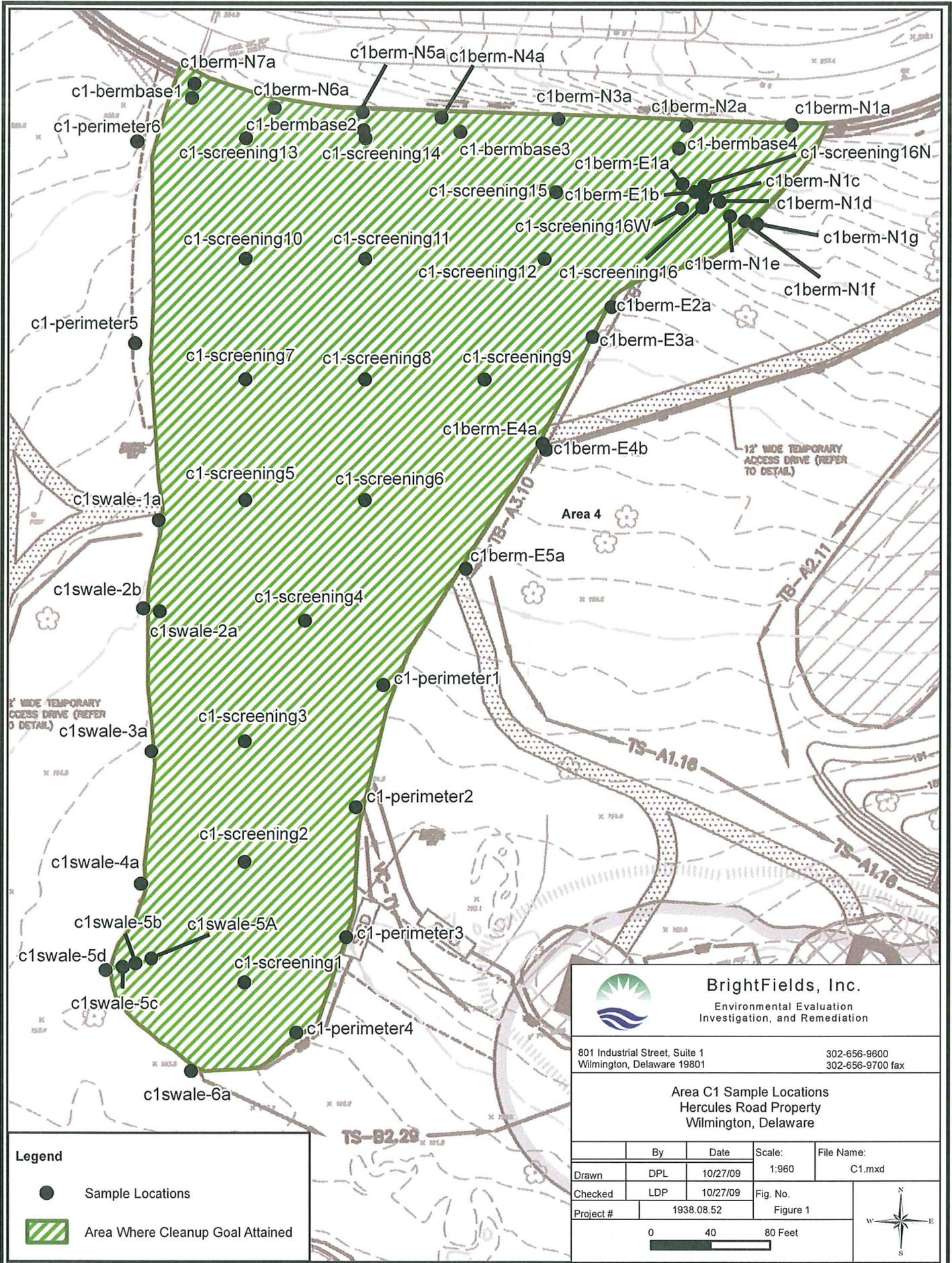
Lee dePersia, P.E.

Senior Program Manager

cc: Mr. Andrew Semon, Toll Brothers

4 Attachments

1. Figure 1 Area 4 (Area C1) Sample Locations
2. Table 1 Area 4 (Remediation Area C1) XRF Screening Results
3. Table 2 Soil Sample Analytical Results, Area 4, Remediation Area C1
4. Pro UCL Output Sheet



Legend

- Sample Locations
- ▨ Area Where Cleanup Goal Attained

BrightFields, Inc.
 Environmental Evaluation
 Investigation, and Remediation

801 Industrial Street, Suite 1
 Wilmington, Delaware 19801
 302-656-9600
 302-656-9700 fax

**Area C1 Sample Locations
 Hercules Road Property
 Wilmington, Delaware**

	By	Date	Scale:	File Name:
Drawn	DPL	10/27/09	1:960	C1.mxd
Checked	LDP	10/27/09	Fig. No.	
Project #	1938.08.52		Figure 1	
			0 40 80 Feet	



Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
7-Oct-09	Soil	14:05:50	0	4	C1 BERM BASE 1	1 ft bgs
7-Oct-09	Soil	14:06:40	6	4	C1 BERM BASE 1	1 ft bgs
7-Oct-09	Soil	14:07:25	9	4	C1 BERM BASE 1	1 ft bgs
7-Oct-09	Soil	14:08:10	5	3	C1 BERM BASE 1	1 ft bgs
			5		C1 BERM BASE 1 Average	
7-Oct-09	Soil	14:11:01	5	6	C1 BERM BASE 2	1 ft bgs
7-Oct-09	Soil	14:11:45	10	4	C1 BERM BASE 2	1 ft bgs
7-Oct-09	Soil	14:12:36	7	4	C1 BERM BASE 2	1 ft bgs
7-Oct-09	Soil	14:13:19	6	4	C1 BERM BASE 2	1 ft bgs
			7		C1 BERM BASE 2 Average	
7-Oct-09	Soil	14:14:35	9	4	C1 BERM BASE 3	1 ft bgs
7-Oct-09	Soil	14:15:19	8	4	C1 BERM BASE 3	1 ft bgs
7-Oct-09	Soil	14:16:05	5	4	C1 BERM BASE 3	1 ft bgs
7-Oct-09	Soil	14:16:48	-4	4	C1 BERM BASE 3	1 ft bgs
			5		C1 BERM BASE 3 Average	
7-Oct-09	Soil	14:18:20	28	5	C1 BERM BASE 4	1 ft bgs
7-Oct-09	Soil	14:19:04	25	6	C1 BERM BASE 4	1 ft bgs
7-Oct-09	Soil	14:19:45	21	6	C1 BERM BASE 4	1 ft bgs
7-Oct-09	Soil	14:20:26	6	6	C1 BERM BASE 4	1 ft bgs
			20		C1 BERM BASE 4 Average	
7-Oct-09	Soil	14:57:43	17	5	C1 BERM BASE 4A	1.5 ft bgs
7-Oct-09	Soil	14:59:13	9	5	C1 BERM BASE 4A	1.5 ft bgs
7-Oct-09	Soil	14:59:55	21	5	C1 BERM BASE 4A	1.5 ft bgs
7-Oct-09	Soil	15:00:36	16	5	C1 BERM BASE 4A	1.5 ft bgs
			16		C1 BERM BASE 4A Average	
7-Oct-09	Soil	15:24:54	40	8	C1 BERM BASE 4B	2 ft bgs
7-Oct-09	Soil	15:27:30	52	8	C1 BERM BASE 4B	2 ft bgs
7-Oct-09	Soil	15:28:12	25	8	C1 BERM BASE 4B	2 ft bgs
7-Oct-09	Soil	15:29:10	48	8	C1 BERM BASE 4B	2 ft bgs
7-Oct-09	Soil	15:29:52	56	8	C1 BERM BASE 4B	2 ft bgs
			44		C1 BERM BASE 4B Average	
8-Oct-09	Soil	9:37:49	11	4	C1 BERM BASE 4C	3 ft bgs
8-Oct-09	Soil	9:38:44	6	4	C1 BERM BASE 4C	3 ft bgs
8-Oct-09	Soil	9:39:48	3	4	C1 BERM BASE 4C	3 ft bgs
8-Oct-09	Soil	9:40:48	0	4	C1 BERM BASE 4C	3 ft bgs
			5		C1 BERM BASE 4C Average	
7-Oct-09	Soil	14:22:21	12	4	C1 BERM BASE 5	1 ft bgs
7-Oct-09	Soil	14:23:14	5	3	C1 BERM BASE 5	1 ft bgs
7-Oct-09	Soil	14:23:59	0	4	C1 BERM BASE 5	1 ft bgs
7-Oct-09	Soil	14:24:42	14	4	C1 BERM BASE 5	1 ft bgs
			8		C1 BERM BASE 5 Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
30-Sep-09	Soil	10:15:34	20	6	C1-BERM east 1A	0-1 ft bgs
30-Sep-09	Soil	10:16:22	20	6	C1-BERM east 1A	0-1 ft bgs
30-Sep-09	Soil	10:17:03	29	7	C1-BERM east 1A	0-1 ft bgs
30-Sep-09	Soil	10:17:47	22	7	C1-BERM east 1A	0-1 ft bgs
			23		C1-BERM east 1A Average	
30-Sep-09	Soil	10:37:51	17	6	C1-BERM east 1b	0-1 ft bgs
30-Sep-09	Soil	10:39:59	14	6	C1-BERM east 1b	0-1 ft bgs
30-Sep-09	Soil	10:40:55	23	6	C1-BERM east 1b	0-1 ft bgs
30-Sep-09	Soil	10:41:42	25	6	C1-BERM east 1b	0-1 ft bgs
			20		C1-BERM east 1b Average	
30-Sep-09	Soil	10:54:29	24	6	C1-BERM east 1c	0-1 ft bgs
30-Sep-09	Soil	10:55:47	16	6	C1-BERM east 1c	0-1 ft bgs
30-Sep-09	Soil	10:56:34	29	7	C1-BERM east 1c	0-1 ft bgs
30-Sep-09	Soil	10:57:19	17	7	C1-BERM east 1c	0-1 ft bgs
			22		C1-BERM east 1c Average	
30-Sep-09	Soil	11:07:56	23	6	C1-BERM east 1d	0-1 ft bgs
30-Sep-09	Soil	11:08:57	17	6	C1-BERM east 1d	0-1 ft bgs
30-Sep-09	Soil	11:09:48	21	7	C1-BERM east 1d	0-1 ft bgs
30-Sep-09	Soil	11:10:35	20	6	C1-BERM east 1d	0-1 ft bgs
			20		C1-BERM east 1d Average	
30-Sep-09	Soil	11:23:11	24	6	C1-BERM east 1e	0-1 ft bgs
30-Sep-09	Soil	11:24:11	30	6	C1-BERM east 1e	0-1 ft bgs
30-Sep-09	Soil	11:25:01	6	6	C1-BERM east 1e	0-1 ft bgs
30-Sep-09	Soil	11:25:51	14	5	C1-BERM east 1e	0-1 ft bgs
			19		C1-BERM east 1e Average	
30-Sep-09	Soil	11:36:08	6	5	C1-BERM east 1f	0-1 ft bgs
30-Sep-09	Soil	11:37:11	25	6	C1-BERM east 1f	0-1 ft bgs
30-Sep-09	Soil	11:38:00	18	6	C1-BERM east 1f	0-1 ft bgs
30-Sep-09	Soil	11:38:47	17	5	C1-BERM east 1f	0-1 ft bgs
			17		C1-BERM east 1f Average	
30-Sep-09	Soil	11:45:47	4	5	C1-BERM east 1g	0-1 ft bgs
30-Sep-09	Soil	11:46:39	16	5	C1-BERM east 1g	0-1 ft bgs
30-Sep-09	Soil	11:47:24	9	6	C1-BERM east 1g	0-1 ft bgs
30-Sep-09	Soil	11:48:20	12	5	C1-BERM east 1g	0-1 ft bgs
			10		C1-BERM east 1g Average	
30-Sep-09	Soil	10:12:00	10	4	C1-BERM east 2A	0-1 ft bgs
30-Sep-09	Soil	10:12:55	16	4	C1-BERM east 2A	0-1 ft bgs
30-Sep-09	Soil	10:13:44	13	4	C1-BERM east 2A	0-1 ft bgs
30-Sep-09	Soil	10:14:37	14	4	C1-BERM east 2A	0-1 ft bgs
			13		C1-BERM east 2A Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
30-Sep-09	Soil	8:52:21	9	4	C1-BERM east 3A	0-1 ft bgs
30-Sep-09	Soil	8:53:27	17	5	C1-BERM east 3A	0-1 ft bgs
30-Sep-09	Soil	8:54:09	5	5	C1-BERM east 3A	0-1 ft bgs
30-Sep-09	Soil	8:54:53	8	6	C1-BERM east 3A	0-1 ft bgs
			10		C1-BERM east 3A Average	
30-Sep-09	Soil	9:14:57	39	7	C1-BERM east 4A	0-1 ft bgs
30-Sep-09	Soil	9:15:52	18	9	C1-BERM east 4A	0-1 ft bgs
30-Sep-09	Soil	9:16:39	27	14	C1-BERM east 4A	0-1 ft bgs
30-Sep-09	Soil	9:17:25	12	8	C1-BERM east 4A	0-1 ft bgs
			24		C1-BERM east 4A Average	
30-Sep-09	Soil	9:33:12	9	5	C1-BERM east 4B	0-1 ft bgs
30-Sep-09	Soil	9:34:01	9	4	C1-BERM east 4B	0-1 ft bgs
30-Sep-09	Soil	9:34:48	6	4	C1-BERM east 4B	0-1 ft bgs
30-Sep-09	Soil	9:35:36	17	4	C1-BERM east 4B	0-1 ft bgs
			10		C1-BERM east 4B Average	
30-Sep-09	Soil	9:53:14	12	5	C1-BERM east 5A	0-1 ft bgs
30-Sep-09	Soil	9:54:44	8	5	C1-BERM east 5A	0-1 ft bgs
30-Sep-09	Soil	9:55:32	4	5	C1-BERM east 5A	0-1 ft bgs
30-Sep-09	Soil	9:56:20	11	4	C1-BERM east 5A	0-1 ft bgs
			9		C1-BERM east 5A Average	
25-Sep-09	Soil	8:51:25	20	6	C1-BERM north-1a	0-1 ft bgs
25-Sep-09	Soil	8:52:37	21	5	C1-BERM north-1a	0-1 ft bgs
25-Sep-09	Soil	8:53:18	26	6	C1-BERM north-1a	0-1 ft bgs
25-Sep-09	Soil	8:54:00	13	6	C1-BERM north-1a	0-1 ft bgs
			20		C1-BERM north-1a Average	
25-Sep-09	Soil	10:08:53	23	5	C1-BERM north-2a	0-1 ft bgs
25-Sep-09	Soil	10:09:49	9	5	C1-BERM north-2a	0-1 ft bgs
25-Sep-09	Soil	10:10:32	18	5	C1-BERM north-2a	0-1 ft bgs
25-Sep-09	Soil	10:11:17	18	5	C1-BERM north-2a	0-1 ft bgs
			17		C1-BERM north-2a Average	
25-Sep-09	Soil	9:22:40	11	5	C1-BERM north-2b	1-2 ft bgs
25-Sep-09	Soil	9:23:46	14	5	C1-BERM north-2b	1-2 ft bgs
25-Sep-09	Soil	9:24:30	3	5	C1-BERM north-2b	1-2 ft bgs
25-Sep-09	Soil	9:25:12	14	5	C1-BERM north-2b	1-2 ft bgs
			11		C1-BERM north-2b Average	
25-Sep-09	Soil	10:36:38	9	4	C1-BERM north-3a	0-1 ft bgs
25-Sep-09	Soil	10:37:27	11	4	C1-BERM north-3a	0-1 ft bgs
25-Sep-09	Soil	10:38:09	7	4	C1-BERM north-3a	0-1 ft bgs
25-Sep-09	Soil	10:38:50	12	4	C1-BERM north-3a	0-1 ft bgs
			10		C1-BERM north-3a Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
25-Sep-09	Soil	11:10:56	10	4	C1-BERM north-3b	1-2 ft bgs
25-Sep-09	Soil	11:11:42	11	4	C1-BERM north-3b	1-2 ft bgs
25-Sep-09	Soil	11:12:25	15	4	C1-BERM north-3b	1-2 ft bgs
25-Sep-09	Soil	11:13:08	13	5	C1-BERM north-3b	1-2 ft bgs
			12		C1-BERM north-3b Average	
25-Sep-09	Soil	11:48:40	17	5	C1-BERM north-4a	0-1 ft bgs
25-Sep-09	Soil	11:50:02	9	5	C1-BERM north-4a	0-1 ft bgs
25-Sep-09	Soil	11:50:50	15	5	C1-BERM north-4a	0-1 ft bgs
25-Sep-09	Soil	11:51:31	12	5	C1-BERM north-4a	0-1 ft bgs
			13		C1-BERM north-4a Average	
25-Sep-09	Soil	12:10:51	18	16	C1-BERM north-5a	0-1 ft bgs
25-Sep-09	Soil	12:11:40	-2	7	C1-BERM north-5a	
25-Sep-09	Soil	12:12:27	8	5	C1-BERM north-5a	0-1 ft bgs
25-Sep-09	Soil	12:13:12	5	4	C1-BERM north-5a	0-1 ft bgs
25-Sep-09	Soil	12:13:55	7	5	C1-BERM north-5a	0-1 ft bgs
			7		C1-BERM north-5a Average	
25-Sep-09	Soil	12:36:04	-3	6	C1-BERM north-6a	
25-Sep-09	Soil	12:36:49	16	5	C1-BERM north-6a	0-1 ft bgs
25-Sep-09	Soil	12:37:32	11	4	C1-BERM north-6a	0-1 ft bgs
25-Sep-09	Soil	12:38:15	5	4	C1-BERM north-6a	0-1 ft bgs
25-Sep-09	Soil	12:39:01	6	4	C1-BERM north-6a	0-1 ft bgs
			7		C1-BERM north-6a Average	
25-Sep-09	Soil	12:55:25	15	5	C1-BERM north-7a	0-1 ft bgs
25-Sep-09	Soil	13:01:56	10	5	C1-BERM north-7a	0-1 ft bgs
25-Sep-09	Soil	13:02:40	16	5	C1-BERM north-7a	0-1 ft bgs
25-Sep-09	Soil	13:03:22	22	5	C1-BERM north-7a	0-1 ft bgs
			16		C1-BERM north-7a Average	
8-Oct-09	Soil	7:57:10	12	4	C1-PERIMETER1	0-1 ft bgs
8-Oct-09	Soil	7:59:37	12	4	C1-PERIMETER1	0-1 ft bgs
8-Oct-09	Soil	8:00:20	3	4	C1-PERIMETER1	0-1 ft bgs
8-Oct-09	Soil	8:01:05	6	4	C1-PERIMETER1	0-1 ft bgs
			8		C1-PERIMETER1 Average	
8-Oct-09	Soil	8:01:57	8	4	C1-PERIMETER2	0-1 ft bgs
8-Oct-09	Soil	8:02:39	11	4	C1-PERIMETER2	0-1 ft bgs
8-Oct-09	Soil	8:03:24	11	4	C1-PERIMETER2	0-1 ft bgs
8-Oct-09	Soil	8:04:09	9	4	C1-PERIMETER2	0-1 ft bgs
			10		C1-PERIMETER2 Average	
8-Oct-09	Soil	8:14:44	10	4	C1-PERIMETER3	0-1 ft bgs
8-Oct-09	Soil	8:16:07	15	4	C1-PERIMETER3	0-1 ft bgs
8-Oct-09	Soil	8:16:50	9	4	C1-PERIMETER3	0-1 ft bgs
8-Oct-09	Soil	8:17:38	14	4	C1-PERIMETER3	0-1 ft bgs
			12		C1-PERIMETER3 Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
8-Oct-09	Soil	8:19:37	3	4	C1-PERIMETER4	0-1 ft bgs
8-Oct-09	Soil	8:21:23	6	4	C1-PERIMETER4	0-1 ft bgs
8-Oct-09	Soil	8:24:25	9	4	C1-PERIMETER4	0-1 ft bgs
8-Oct-09	Soil	8:25:25	6	4	C1-PERIMETER4	0-1 ft bgs
			6		C1-PERIMETER4 Average	
8-Oct-09	Soil	8:53:22	1	4	C1-PERIMETER5	0-1 ft bgs
8-Oct-09	Soil	8:54:33	8	4	C1-PERIMETER5	0-1 ft bgs
8-Oct-09	Soil	8:55:15	14	4	C1-PERIMETER5	0-1 ft bgs
8-Oct-09	Soil	8:56:01	6	4	C1-PERIMETER5	0-1 ft bgs
			7		C1-PERIMETER5 Average	
8-Oct-09	Soil	8:57:06	13	4	C1-PERIMETER6	0-1 ft bgs
8-Oct-09	Soil	8:58:04	14	4	C1-PERIMETER6	0-1 ft bgs
8-Oct-09	Soil	8:59:00	12	4	C1-PERIMETER6	0-1 ft bgs
8-Oct-09	Soil	8:59:43	6	4	C1-PERIMETER6	0-1 ft bgs
			11		C1-PERIMETER6 Average	
19-Sep-09	Soil	11:13:20	11	5	c1swale-1a	0-1 ft bgs
19-Sep-09	Soil	11:14:20	12	4	c1swale-1a	0-1 ft bgs
19-Sep-09	Soil	11:15:07	10	5	c1swale-1a	0-1 ft bgs
19-Sep-09	Soil	11:15:58	15	4	c1swale-1a	0-1 ft bgs
			12		c1swale-1a Average	
19-Sep-09	Soil	11:17:40	16	4	c1swale-2a	0-1 ft bgs
19-Sep-09	Soil	11:18:32	16	4	c1swale-2a	0-1 ft bgs
19-Sep-09	Soil	11:19:23	22	5	c1swale-2a	0-1 ft bgs
19-Sep-09	Soil	11:20:14	16	4	c1swale-2a	0-1 ft bgs
			18		c1swale-2a Average	
19-Sep-09	Soil	11:43:38	13	4	c1swale-2b	0-1 ft bgs
19-Sep-09	Soil	11:44:31	14	4	c1swale-2b	0-1 ft bgs
19-Sep-09	Soil	11:45:24	10	4	c1swale-2b	0-1 ft bgs
19-Sep-09	Soil	11:46:17	12	4	c1swale-2b	0-1 ft bgs
			12		c1swale-2b Average	
19-Sep-09	Soil	11:23:03	8	4	c1swale-3a	0-1 ft bgs
19-Sep-09	Soil	11:23:58	13	4	c1swale-3a	0-1 ft bgs
19-Sep-09	Soil	11:24:52	13	4	c1swale-3a	0-1 ft bgs
19-Sep-09	Soil	11:25:43	11	4	c1swale-3a	0-1 ft bgs
			11		c1swale-3a Average	
19-Sep-09	Soil	11:28:56	4	5	c1swale-4a	0-1 ft bgs
19-Sep-09	Soil	11:29:48	7	4	c1swale-4a	0-1 ft bgs
19-Sep-09	Soil	11:30:40	10	4	c1swale-4a	0-1 ft bgs
19-Sep-09	Soil	11:31:34	8	4	c1swale-4a	0-1 ft bgs
			7		c1swale-4a Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
19-Sep-09	Soil	11:32:50	20	4	c1swale-5a	0-1 ft bgs
19-Sep-09	Soil	11:33:45	14	5	c1swale-5a	0-1 ft bgs
19-Sep-09	Soil	11:34:48	18	4	c1swale-5a	0-1 ft bgs
19-Sep-09	Soil	11:35:40	8	4	c1swale-5a	0-1 ft bgs
			15		c1swale-5a Average	
19-Sep-09	Soil	11:49:08	16	5	c1swale-5b	0-1 ft bgs
19-Sep-09	Soil	11:50:00	7	5	c1swale-5b	0-1 ft bgs
19-Sep-09	Soil	11:50:53	20	5	c1swale-5b	0-1 ft bgs
19-Sep-09	Soil	11:51:43	24	5	c1swale-5b	0-1 ft bgs
			17		c1swale-5b Average	
19-Sep-09	Soil	12:03:27	6	9	c1swale-5c	0-1 ft bgs
19-Sep-09	Soil	12:04:20	8	8	c1swale-5c	0-1 ft bgs
19-Sep-09	Soil	12:05:10	49	10	c1swale-5c	0-1 ft bgs
19-Sep-09	Soil	12:06:21	29	10	c1swale-5c	0-1 ft bgs
			23		c1swale-5c Average	
19-Sep-09	Soil	13:18:13	17	5	c1swale-5cc	0-1 ft bgs
19-Sep-09	Soil	13:20:06	19	5	c1swale-5cc	0-1 ft bgs
19-Sep-09	Soil	13:21:11	11	5	c1swale-5cc	0-1 ft bgs
19-Sep-09	Soil	13:22:15	13	5	c1swale-5cc	0-1 ft bgs
			15		c1swale-5cc Average	
19-Sep-09	Soil	13:44:58	18	4	c1swale-5d	0-1 ft bgs
19-Sep-09	Soil	13:45:54	10	4	c1swale-5d	0-1 ft bgs
19-Sep-09	Soil	13:46:52	13	4	c1swale-5d	0-1 ft bgs
19-Sep-09	Soil	13:47:46	10	4	c1swale-5d	0-1 ft bgs
			13		c1swale-5d Average	
19-Sep-09	Soil	11:37:05	2	4	c1swale-6a	0-1 ft bgs
19-Sep-09	Soil	11:38:01	9	4	c1swale-6a	0-1 ft bgs
19-Sep-09	Soil	11:38:59	12	4	c1swale-6a	0-1 ft bgs
19-Sep-09	Soil	11:39:58	12	4	c1swale-6a	0-1 ft bgs
			9		c1swale-6a Average	
10-Oct-09	Soil		9		C1-Screening1	0-1 ft bgs
10-Oct-09	Soil		9		C1-Screening1	0-1 ft bgs
10-Oct-09	Soil		7		C1-Screening1	0-1 ft bgs
10-Oct-09	Soil		16		C1-Screening1	0-1 ft bgs
			10		C1-Screening1 Average	
10-Oct-09	Soil		10		C1-Screening2	0-1 ft bgs
10-Oct-09	Soil		8		C1-Screening2	0-1 ft bgs
10-Oct-09	Soil		6		C1-Screening2	0-1 ft bgs
10-Oct-09	Soil		12		C1-Screening2	0-1 ft bgs
			9		C1-Screening2 Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
10-Oct-09	Soil		6		C1-Screening3	0-1 ft bgs
10-Oct-09	Soil		4		C1-Screening3	0-1 ft bgs
10-Oct-09	Soil		3		C1-Screening3	0-1 ft bgs
10-Oct-09	Soil		15		C1-Screening3	0-1 ft bgs
			7		C1-Screening3 Average	
12-Oct-09	Soil	13:44:20	5	4	C1-SCREENING4	0-1 ft bgs
12-Oct-09	Soil	13:45:27	10	4	C1-SCREENING4	0-1 ft bgs
12-Oct-09	Soil	13:46:12	11	4	C1-SCREENING4	0-1 ft bgs
12-Oct-09	Soil	13:47:13	7	4	C1-SCREENING4	0-1 ft bgs
			8		C1-SCREENING4 Average	
12-Oct-09	Soil	13:52:17	12	4	C1-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	13:54:02	20	4	C1-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	13:54:49	16	4	C1-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	13:55:41	10	4	C1-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	13:57:33	1	4	C1-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	13:58:17	8	4	C1-SCREENING5	0-1 ft bgs
			11		C1-SCREENING5 Average	
12-Oct-09	Soil	14:01:13	8	4	C1-SCREENING6	0-1 ft bgs
12-Oct-09	Soil	14:02:35	7	4	C1-SCREENING6	0-1 ft bgs
12-Oct-09	Soil	14:03:21	8	4	C1-SCREENING6	0-1 ft bgs
12-Oct-09	Soil	14:04:07	14	4	C1-SCREENING6	0-1 ft bgs
			9		C1-SCREENING6 Average	
12-Oct-09	Soil	14:06:09	16	4	C1-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	14:06:56	17	4	C1-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	14:07:43	12	4	C1-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	14:08:28	15	4	C1-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	14:09:49	15	4	C1-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	14:10:33	16	4	C1-SCREENING7	0-1 ft bgs
			15		C1-SCREENING7 Average	
14-Oct-09	Soil	14:10:25	9	4	C1-SCREENING7	0-1 ft bgs
14-Oct-09	Soil	14:11:27	14	4	C1-SCREENING7	0-1 ft bgs
14-Oct-09	Soil	14:12:13	7	4	C1-SCREENING7	0-1 ft bgs
14-Oct-09	Soil	14:13:10	10	4	C1-SCREENING7	0-1 ft bgs
			10		C1-SCREENING7 Average	
12-Oct-09	Soil	14:12:14	4	4	C1-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	14:13:16	7	4	C1-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	14:14:03	14	4	C1-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	14:14:47	14	4	C1-SCREENING8	0-1 ft bgs
			10		C1-SCREENING8 Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
12-Oct-09	Soil	14:15:54	9	4	C1-SCREENING9	0-1 ft bgs
12-Oct-09	Soil	14:17:25	6	4	C1-SCREENING9	0-1 ft bgs
12-Oct-09	Soil	14:18:12	3	4	C1-SCREENING9	0-1 ft bgs
12-Oct-09	Soil	14:19:00	12	4	C1-SCREENING9	0-1 ft bgs
			8		C1-SCREENING9 Average	
12-Oct-09	Soil	14:20:18	12	4	C1-SCREENING10	0-1 ft bgs
12-Oct-09	Soil	14:21:06	10	4	C1-SCREENING10	0-1 ft bgs
12-Oct-09	Soil	14:21:53	9	5	C1-SCREENING10	0-1 ft bgs
12-Oct-09	Soil	14:22:36	18	4	C1-SCREENING10	0-1 ft bgs
			12		C1-SCREENING10 Average	
12-Oct-09	Soil	14:25:07	11	4	C1-SCREENING11	0-1 ft bgs
12-Oct-09	Soil	14:25:55	10	4	C1-SCREENING11	0-1 ft bgs
12-Oct-09	Soil	14:26:38	6	4	C1-SCREENING11	0-1 ft bgs
12-Oct-09	Soil	14:27:34	14	4	C1-SCREENING11	0-1 ft bgs
			10		C1-SCREENING11 Average	
12-Oct-09	Soil	14:29:20	2	4	C1-SCREENING12	0-1 ft bgs
12-Oct-09	Soil	14:30:26	6	4	C1-SCREENING12	0-1 ft bgs
12-Oct-09	Soil	14:31:11	8	4	C1-SCREENING12	0-1 ft bgs
12-Oct-09	Soil	14:31:59	5	4	C1-SCREENING12	0-1 ft bgs
			5		C1-SCREENING12 Average	
12-Oct-09	Soil	14:35:59	16	4	C1-SCREENING13	0-1 ft bgs
12-Oct-09	Soil	14:36:49	17	4	C1-SCREENING13	0-1 ft bgs
12-Oct-09	Soil	14:37:37	12	4	C1-SCREENING13	0-1 ft bgs
12-Oct-09	Soil	14:38:27	14	4	C1-SCREENING13	0-1 ft bgs
12-Oct-09	Soil	14:39:11	4	4	C1-SCREENING13	0-1 ft bgs
12-Oct-09	Soil	14:41:30	10	4	C1-SCREENING13	0-1 ft bgs
			12		C1-SCREENING13 Average	
12-Oct-09	Soil	14:43:11	3	4	C1-SCREENING14	0-1 ft bgs
12-Oct-09	Soil	14:44:25	-1	4	C1-SCREENING14	0-1 ft bgs
12-Oct-09	Soil	14:45:07	8	4	C1-SCREENING14	0-1 ft bgs
12-Oct-09	Soil	14:46:40	12	4	C1-SCREENING14	0-1 ft bgs
			6		C1-SCREENING14 Average	
12-Oct-09	Soil	14:48:43	13	4	C1-SCREENING15	0-1 ft bgs
12-Oct-09	Soil	14:49:52	9	4	C1-SCREENING15	0-1 ft bgs
12-Oct-09	Soil	14:50:39	10	4	C1-SCREENING15	0-1 ft bgs
12-Oct-09	Soil	14:51:26	9	4	C1-SCREENING15	0-1 ft bgs
			10		C1-SCREENING15 Average	
12-Oct-09	Soil	14:59:28	18	5	C1-SCREENING16	0-1 ft bgs
12-Oct-09	Soil	15:00:26	16	5	C1-SCREENING16	0-1 ft bgs
12-Oct-09	Soil	15:01:39	22	5	C1-SCREENING16	0-1 ft bgs
12-Oct-09	Soil	15:02:33	25	5	C1-SCREENING16	0-1 ft bgs
			20		C1-SCREENING16 Average	

Table 1. Area 4 (Remediation Area C1) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
14-Oct-09	Soil	14:14:41	21	5	C1-SCREENING16	0-1 ft bgs
14-Oct-09	Soil	14:15:26	21	5	C1-SCREENING16	0-1 ft bgs
14-Oct-09	Soil	14:16:10	24	5	C1-SCREENING16	0-1 ft bgs
14-Oct-09	Soil	14:16:52	20	5	C1-SCREENING16	0-1 ft bgs
			22		C1-SCREENING16 Average	
20-Oct-09	Soil	14:35:19	18	6	C1-SCREENING16-NORTH1	0-1ft bgs
20-Oct-09	Soil	14:36:00	20	6	C1-SCREENING16-NORTH1	0-1ft bgs
20-Oct-09	Soil	14:36:58	15	6	C1-SCREENING16-NORTH1	0-1ft bgs
20-Oct-09	Soil	14:37:43	29	6	C1-SCREENING16-NORTH1	0-1ft bgs
			21		C1-SCREENING16-NORTH1 Average	
20-Oct-09	Soil	14:38:59	18	4	C1-SCREENING16-WEST1	0-1ft bgs
20-Oct-09	Soil	14:39:44	9	4	C1-SCREENING16-WEST1	0-1ft bgs
20-Oct-09	Soil	14:40:31	6	4	C1-SCREENING16-WEST1	0-1ft bgs
20-Oct-09	Soil	14:42:00	19	4	C1-SCREENING16-WEST1	0-1ft bgs
			13		C1-SCREENING16-WEST1 Average	
20-Oct-09	Soil	12:29:07	9	4	C1-SCREENING16-S003	0-1ft bgs
20-Oct-09	Soil	12:30:00	5	4	C1-SCREENING16-S003	0-1ft bgs
20-Oct-09	Soil	12:30:50	1	4	C1-SCREENING16-S003	0-1ft bgs
20-Oct-09	Soil	12:31:36	5	4	C1-SCREENING16-S003	0-1ft bgs
			5		C1-SCREENING16-S003 Average	

*XRF concentration used is an average of the 4 or more individual readings.

TABLE 2
Soil Sample Analytical Results
Area 4, Remediation Area C1
Greenville Overlook

Sample ID	Sampling Date	Sample Depth (ft bgs)	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)		C1-Screening1-S001	C1-Screening2-S001	C1-Screening3-S001	C1-SCREENING 4-S001	
			Unrestricted Use	0.0-1.0 mg/Kg	0.0-1.0 mg/Kg	0.0-1.0 mg/Kg	10/10/2009	10/10/2009	10/12/2009
PESTICIDES/PCBs									
Aldrin		0.040		0.0082	U	0.0082	U	0.0084	U
alpha-Chlordane		2		0.0094	p	0.0049	J p	0.0027	J p
Dieldrin		0.040		0.0019	J p	0.0082	U	0.0084	U
gamma-Chlordane		2		0.008	J	0.0032	J	0.0084	U
Heptachlor epoxide		0.070		0.0082	U	0.0082	U	0.0084	U
No other pesticides were required to be analyzed as part of this confirmatory sampling event.									
METALS									
Arsenic		11 ^t		8.0		11.5		10.6	
Cadmium		4		1.2	U	0.23	J	1.2	U
Lead		400		19.2		24.4		22.0	
Mercury		10		0.16		0.22		0.17	
No other metals were required to be analyzed as part of this confirmatory sampling event.									
WET CHEMISTRY									
Percent Moisture (%)				18.5		18.8		20.6	
Percent Solids (%)				81.5		81.2		79.4	
								9.4	
								90.6	

* - below ground surface
t - Delaware background concentration (DNREC, 2007)
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U: Indicates the analyte was analyzed for but not detected.
Shaded - Concentration was detected above unrestricted criteria.

TABLE 2
Soil Sample Analytical Results
Area 4, Remediation Area C1
Greenville Overlook

Sample ID	Sampling Date	Sample Depth (ft bgs)	Units	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	C1-SCREENING 5-S001		C1-SCREENING 6-S001		C1-Screening 7-(Reblend)-S001		C1-SCREENING 8-S001	
					10/12/2009	0.0-1.0 mg/Kg	10/12/2009	0.0-1.0 mg/Kg	10/14/2009	0.0-1.0 mg/Kg	10/12/2009	0.0-1.0 mg/Kg
Analyte	Unrestricted Use											
PESTICIDES/PCBs												
Aldrin				0.040	0.0083 U	0.0082 U		0.0083 U	0.019 p ¹		0.0083 U	0.0083 U
alpha-Chlordane			2	0.040	0.031 p	0.011 p		0.0031 J	0.0031 J		0.0047 J p	0.020 p
Dieldrin			2	0.070	0.0038 J	0.0083 J		0.013 J	0.011 J		0.011 J	0.011 J
gamma-Chlordane					0.0037 J	0.0026 J			0.003 J p		0.0039 J	0.0039 J
Heptachlor epoxide												
No other pesticides were required to be analyzed as part of this α												
METALS												
Arsenic			11 [†]		10.1	9.9		15.1	0.26 J		10.0	10.0
Cadmium			4		1.2 U	1.2 U		57.8			0.24 J	0.24 J
Lead			400		24.6	19.0		0.15			27.8	27.8
Mercury			10		0.31	0.13					0.47	0.47
No other metals were required to be analyzed as part of this α												
WET CHEMISTRY												
Percent Moisture (%)					19.5	18.3		19.3			19.6	19.6
Percent Solids (%)					80.5	81.7		80.7			80.4	80.4

* - below ground surface
t - Delaware background concentration (DNREC, 2007)
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p - The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U - Indicates the analyte was analyzed for but not detected.
Shaded - Concentration was detected above unrestricted criteria.

TABLE 2
Soil Sample Analytical Results
Area 4, Remediation Area C1
Greenville Overlook

Sample ID	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/Kg)	C1-SCREENING 9-S001		C1-SCREENING 10-S001		C1-SCREENING 11-S001		C1-SCREENING 12-S001	
		10/12/2009	0.0-1.0 mg/Kg	10/12/2009	0.0-1.0 mg/Kg	10/12/2009	0.0-1.0 mg/Kg	10/12/2009	0.0-1.0 mg/Kg
Sampling Date	Area (mg/Kg)								
Sample Depth (ft bgs)	Unrestricted Use								
Units									
Analyte									
PESTICIDES/PCBs									
Aldrin	0.040	0.0071	U	0.0083	U	0.0082	U	0.0082	U
alpha-Chlordane	2	0.0028	J p	0.0027	J p	0.0018	J p	0.0082	U
Dieldrin	0.040	0.0018	J p	0.0083	U	0.0082	U	0.0082	U
gamma-Chlordane	2	0.0071	U	0.0026	J	0.0082	U	0.0082	U
Heptachlor epoxide	0.070	0.0021	J	0.0083	U	0.0082	U	0.0082	U
No other pesticides were required to be analyzed as part of thi									
METALS									
Arsenic	11'	7.7		12.3		9.3		7.2	
Cadmium	4	1.1	U	1.2	U	1.2	U	1.2	U
Lead	400	19.1		30.0		22.0		21.6	
Mercury	10	0.19		0.28		0.32		0.098	
No other metals were required to be analyzed as part of this cr									
WET CHEMISTRY									
Percent Moisture (%)		5.3		19.8		18.4		18.3	
Percent Solids (%)		94.7		80.2		81.6		81.7	

* - below ground surface
t - Delaware background concentration (DNREC, 2007)
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U: Indicates the analyte was analyzed for but not detected.
Shaded - Concentration was detected above unrestricted criteria.

TABLE 2
Soil Sample Analytical Results
Area 4, Remediation Area C1
Greenville Overlook

Sample ID	Sampling Date	Sample Depth (ft bgs)	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	C1-SCREENING 13-S001		C1-SCREENING 14-S001		C1-SCREENING-15-S001		C1-SCREENING-16-S003	
				10/12/2009	0.0-1.0 mg/Kg	10/12/2009	0.0-1.0 mg/Kg	10/12/2009	0.0-1.0 mg/Kg	10/20/2009	0.0-1.0 mg/Kg
Units			mg/Kg								
Analyte			Unrestricted Use								
PESTICIDES/PCBs											
Aldrin			0.040	0.0086	U	0.0081	U	0.0079	U	0.0083	U
alpha-Chlordane		2	0.040	0.0055	J p	0.0058	J p	0.0046	J p	0.0034	J
Dieldrin		2	0.040	0.0086	U	0.0081	U	0.002	J	0.0045	J
gamma-Chlordane		2	0.040	0.0021	J p	0.003	J p	0.0079	U	0.0018	J p
Heptachlor epoxide		0.070	0.040	0.0086	U	0.0081	U	0.0079	U	0.0083	U
No other pesticides were required to be analyzed as part of this											
METALS											
Arsenic		11 ^t		12.0		7.8		7.1		7.5	
Cadmium		4		6.1	U	1.1	U	1.2	U	1.2	U
Lead		400		41.7		20.6		26.2		19.6	
Mercury		10		0.39		0.19		0.15		0.11	
No other metals were required to be analyzed as part of this c											
WET CHEMISTRY											
Percent Moisture (%)			22.3	17.1	15.6	19.7					
Percent Solids (%)			77.7	82.9	84.4	80.3					

* - below ground surface
t - Delaware background concentration (DNREC, 2007)
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U: Indicates the analyte was analyzed for but not detected.
Shaded - Concentration was detected above unrestricted criteria.

General UCL Statistics for Full Data Sets

User Selected Options	
From File	C:\C-1 data.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

C-1

General Statistics

Number of Valid Observations	16	Number of Distinct Observations	16
------------------------------	----	---------------------------------	----

Raw Statistics

Minimum	7.1
Maximum	15.1
Mean	9.738
Median	9.8
SD	2.222
Coefficient of Variation	0.228
Skewness	0.847

Log-transformed Statistics

Minimum of Log Data	1.96
Maximum of Log Data	2.715
Mean of log Data	2.253
SD of log Data	0.22

Relevant UCL Statistics

Normal Distribution Test

Shapiro Wilk Test Statistic	0.921
Shapiro Wilk Critical Value	0.887

Data appear Normal at 5% Significance Level

Lognormal Distribution Test

Shapiro Wilk Test Statistic	0.944
Shapiro Wilk Critical Value	0.887

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL	10.71
95% UCLs (Adjusted for Skewness)	
95% Adjusted-CLT UCL	10.78
95% Modified-t UCL	10.73

Assuming Lognormal Distribution

95% H-UCL	10.8
95% Chebyshev (MVUE) UCL	12.08
97.5% Chebyshev (MVUE) UCL	13.09
99% Chebyshev (MVUE) UCL	15.08

Gamma Distribution Test

k star (bias corrected)	17.76
Theta Star	0.548
nu star	568.3

Approximate Chi Square Value (.05)	514
Adjusted Level of Significance	0.0335
Adjusted Chi Square Value	508.1

Anderson-Darling Test Statistic	0.379
Anderson-Darling 5% Critical Value	0.736
Kolmogorov-Smirnov Test Statistic	0.168
Kolmogorov-Smirnov 5% Critical Value	0.215

Data appear Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL	10.77
95% Adjusted Gamma UCL	10.89

Data Distribution

Data appear Normal at 5% Significance Level

Nonparametric Statistics

95% CLT UCL	10.65
95% Jackknife UCL	10.71
95% Standard Bootstrap UCL	10.6
95% Bootstrap-t UCL	10.95
95% Hall's Bootstrap UCL	10.91
95% Percentile Bootstrap UCL	10.61
95% BCA Bootstrap UCL	10.71
95% Chebyshev(Mean, Sd) UCL	12.16
97.5% Chebyshev(Mean, Sd) UCL	13.21
99% Chebyshev(Mean, Sd) UCL	15.26

Potential UCL to Use

Use 95% Student's-t UCL 10.71

Remedial Action Completion Report
Greenville Overlook
Wilmington, Delaware



BrightFields, Inc.

REMEDIATION AREA

D1 (Tee Hole 3) and D2 (Green 2)



BrightFields, Inc.
Environmental Services

20 October 2009

Stephen Johnson, P.E.
Delaware Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, DE 19720

**RE: Attainment of Cleanup Goals – Tee Hole 3, Remediation Area D1 and Green 2,
Remediation Area D2
Hercules Road Property (Greenville Overlook) (DE-1323)
BrightFields File: 1938.08.52**

Dear Mr. Johnson:

The purpose of this letter is to document attainment of cleanup goals at Tee Hole 3, Remediation Area D1 and Green 2, Remediation Area D2 (see the attached figure). This letter documents that cleanup goals were attained at Tee Hole 3 by blending and at Green 2 by excavating.

To delineate the area for blending in Area D1 and for excavation in Area D2 screening soil samples were collected at each compass direction and screened using BrightFields' Innov-x XRF for arsenic concentration. In addition, samples D1-TP1 through D1-TP4 were collected from Area D1 to confirm that blending was required. A correlation study previously performed indicated that an XRF reading of 14 mg/kg corresponds to a laboratory arsenic result of 11 mg/kg (the arsenic cleanup goal). Arsenic was used as an indicator compound based on previous site data that showed if the arsenic concentration is below the cleanup goal, the other site contaminants will be below their respective cleanup goals as well. Figure 1 shows the location of all samples collected. Table 1 presents the XRF screening results. At least four readings were obtained with the XRF for each soil sample and the average of the four used as the representative arsenic concentration for the sample. Where the initial screening samples exceeded the cleanup goal, additional samples were obtained at approximately 10 foot intervals moving away from the center of the excavation area until an average XRF reading of 14 mg/kg or less was obtained.

Area D1. Figure 1 shows the area blended at Tee Hole 3 (area D1). The soil from the Tee Hole 3 (Area D1) was blended until XRF sample results for this area were below the arsenic cleanup goal (sample location D1-Screening1). Blending was performed to a depth of 30 inches below ground surface. The location of the confirmation samples for blended areas is determined using Visual Sample Plan software (version 4.6d) and is based on a systematic grid sampling approach

Mr. Stephen Johnson
Attainment of Cleanup Goals –Tee Hole 3 (Area D1) and
Green 2 (Area D2)
Hercules Road Property (DE-1323)



to provide a 95% probability that a hot spot will be detected if it exists. Table 2 presents the laboratory analysis results for the confirmation samples.

Area D2. The soil from Green 2 (Area D2) was excavated to a total depth of 18 inches below ground surface and taken to the Stags Leap Facility in New Jersey for proper disposal. Once the XRF data indicated that the arsenic cleanup goal was attained, confirmation samples were collected for laboratory analysis of the full cleanup goal parameters. Table 2 presents the laboratory analysis results for the confirmation samples. In addition to the samples collected to confirm the spacial extent of the excavation area, three samples were collected to confirm the depth of the excavation in Area D2 was adequate to achieve cleanup goals. Samples D2-Base-1, D2-Base-2, and D2-Base-3 were collected from the base of the excavation, approximately 18 inches below the original ground surface.

As shown in Table 2, all final confirmatory sample analysis results for Areas D1 and D2 are below the cleanup goals; therefore, remediation of Tee Hole 3 (Area D1) and Green 2 (Area D2) is considered complete.

Please do not hesitate to contact me at (302) 656-9600 should you have question, comments or require additional information.

Sincerely,

BrightFields, Inc.

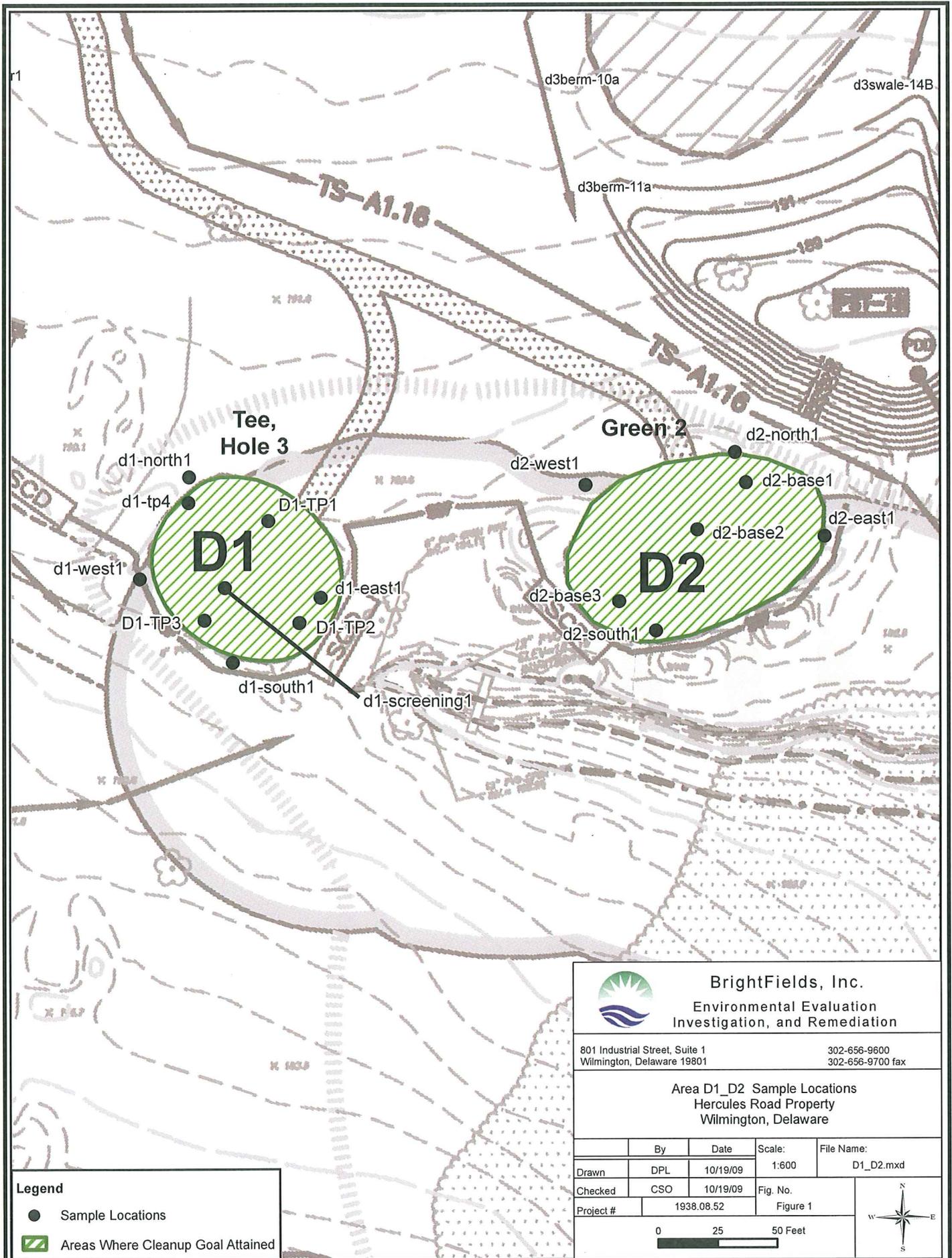
A handwritten signature in cursive script that reads "Lee dePersia".

Lee dePersia, P.E.
Senior Program Manager

cc: Mr. Andrew Semon, Toll Brothers

3 Attachments

1. Figure 1 Tee Hole 3 (Area D1) and Green 2 (Area D2) Sample Locations
2. Table 1 Tee Hole 3 (Area D1) and Green 2 (Area D2) XRF Screening Results
3. Table 2 Soil Sample Analytical Results, Tee Hole 3 (Area D1) and Green 2 (Area D2)



Legend

- Sample Locations
- ▨ Areas Where Cleanup Goal Attained



BrightFields, Inc.
Environmental Evaluation
Investigation, and Remediation

801 Industrial Street, Suite 1
Wilmington, Delaware 19801

302-656-9600
302-656-9700 fax

Area D1_D2 Sample Locations
Hercules Road Property
Wilmington, Delaware

	By	Date	Scale:
Drawn	DPL	10/19/09	1:600
Checked	CSO	10/19/09	Fig. No.
Project #	1938.08.52		Figure 1

0 25 50 Feet



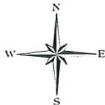


Table 1. Tee Hole 3 (Remediation Area D1) and Green 2 (Remediation Area D2) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
7-Oct-09	Soil	13:04:24	12	4	D1-EAST1	0-1 ft bgs
7-Oct-09	Soil	13:05:22	7	4	D1-EAST1	0-1 ft bgs
7-Oct-09	Soil	13:06:04	7	4	D1-EAST1	0-1 ft bgs
7-Oct-09	Soil	13:06:58	6	4	D1-EAST1	0-1 ft bgs
			8		D1-EAST1 Average	
7-Oct-09	Soil	12:57:54	19	5	D1-NORTH1	0-1 ft bgs
7-Oct-09	Soil	13:00:39	12	5	D1-NORTH1	0-1 ft bgs
7-Oct-09	Soil	13:02:20	12	4	D1-NORTH1	0-1 ft bgs
7-Oct-09	Soil	13:03:07	11	4	D1-NORTH1	0-1 ft bgs
			13.5		D1-NORTH1 Average	
9-Oct-09	Soil	13:07:44	4	4	D1-SCREENING1	0-1 ft bgs
9-Oct-09	Soil	13:08:37	16	4	D1-SCREENING1	0-1 ft bgs
9-Oct-09	Soil	13:09:24	20	4	D1-SCREENING1	0-1 ft bgs
9-Oct-09	Soil	13:10:14	7	4	D1-SCREENING1	0-1 ft bgs
			11.75		D1-SCREENING1 Average	
7-Oct-09	Soil	13:09:25	11	4	D1-SOUTH1	0-1 ft bgs
7-Oct-09	Soil	13:10:12	7	4	D1-SOUTH1	0-1 ft bgs
7-Oct-09	Soil	13:10:57	8	4	D1-SOUTH1	0-1 ft bgs
7-Oct-09	Soil	13:11:42	8	4	D1-SOUTH1	0-1 ft bgs
			8.5		D1-SOUTH1 Average	
2-Oct-09	Soil		19	5	D1-TP1	0-1 ft bgs
2-Oct-09	Soil		13	4	D1-TP1	0-1 ft bgs
2-Oct-09	Soil		16	5	D1-TP1	0-1 ft bgs
2-Oct-09	Soil		18	5	D1-TP1	0-1 ft bgs
			16.5		D1-TP1 Average	
2-Oct-09	Soil	8:44:56	13	5	D1-TP2	0-1 ft bgs
2-Oct-09	Soil	8:46:49	10	4	D1-TP2	0-1 ft bgs
2-Oct-09	Soil	8:47:32	12	4	D1-TP2	0-1 ft bgs
2-Oct-09	Soil	8:48:17	24	5	D1-TP2	0-1 ft bgs
			14.75		D1-TP2 Average	
2-Oct-09	Soil		17	5	D1-TP3	0-1 ft bgs
2-Oct-09	Soil		15	4	D1-TP3	0-1 ft bgs
2-Oct-09	Soil		22	5	D1-TP3	0-1 ft bgs
2-Oct-09	Soil		21	4	D1-TP3	0-1 ft bgs
			18.75		D1-TP3 Average	
2-Oct-09	Soil	8:54:36	7	5	D1-TP-4	0-1 ft bgs
2-Oct-09	Soil	8:55:40	15	5	D1-TP-4	0-1 ft bgs
2-Oct-09	Soil	8:56:35	13	5	D1-TP-4	0-1 ft bgs
2-Oct-09	Soil	8:57:21	15	5	D1-TP-4	0-1 ft bgs
			12.5		D1-TP-4 Average	
7-Oct-09	Soil	13:15:07	21	5	D1-WEST1	0-1 ft bgs
7-Oct-09	Soil	13:15:57	10	5	D1-WEST1	0-1 ft bgs
7-Oct-09	Soil	13:17:07	18	5	D1-WEST1	0-1 ft bgs
7-Oct-09	Soil	13:17:52	10	5	D1-WEST1	0-1 ft bgs
			14.75		D1-WEST1 Average	

Table 1. Tee Hole 3 (Remediation Area D1) and Green 2 (Remediation Area D2) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
5-Oct-09	Soil	14:44:51	10	3	D2 BASE 2	1.5 ft bgs
5-Oct-09	Soil	14:46:46	9	4	D2 BASE 2	1.5 ft bgs
5-Oct-09	Soil	14:47:34	9	4	D2 BASE 2	1.5 ft bgs
5-Oct-09	Soil	14:48:19	7	4	D2 BASE 2	1.5 ft bgs
			8.75		D2 BASE 2 Average	
5-Oct-09	Soil	16:01:23	19	4	D2 BASE 3	1.5 ft bgs
5-Oct-09	Soil	16:02:09	8	4	D2 BASE 3	1.5 ft bgs
5-Oct-09	Soil	16:03:03	7	4	D2 BASE 3	1.5 ft bgs
5-Oct-09	Soil	16:03:45	5	4	D2 BASE 3	1.5 ft bgs
			9.75		D2 BASE 3 Average	
5-Oct-09	Soil	12:27:01	8	3	D2-BASE1	1.5 ft bgs
5-Oct-09	Soil	12:28:07	3	3	D2-BASE1	1.5 ft bgs
5-Oct-09	Soil	12:29:14	7	3	D2-BASE1	1.5 ft bgs
5-Oct-09	Soil	12:30:20	1	3	D2-BASE1	1.5 ft bgs
			4.75		D2-BASE1 Average	
2-Oct-09	Soil	15:44:30	13	4	D2-EAST1	0-1 ft bgs
2-Oct-09	Soil	15:45:22	11	4	D2-EAST1	0-1 ft bgs
2-Oct-09	Soil	15:47:28	5	4	D2-EAST1	0-1 ft bgs
2-Oct-09	Soil	15:48:14	13	4	D2-EAST1	0-1 ft bgs
			10.5		D2-EAST1 Average	
2-Oct-09	Soil	15:39:17	9	4	D2-NORTH1	0-1 ft bgs
2-Oct-09	Soil	15:40:06	10	4	D2-NORTH1	0-1 ft bgs
2-Oct-09	Soil	15:40:50	11	4	D2-NORTH1	0-1 ft bgs
2-Oct-09	Soil	15:41:51	5	4	D2-NORTH1	0-1 ft bgs
			8.75		D2-NORTH1 Average	
2-Oct-09	Soil	15:34:59	4	3	D2-SOUTH1	0-1 ft bgs
2-Oct-09	Soil	15:36:02	6	3	D2-SOUTH1	0-1 ft bgs
2-Oct-09	Soil	15:36:50	3	3	D2-SOUTH1	0-1 ft bgs
2-Oct-09	Soil	15:37:46	2	3	D2-SOUTH1	0-1 ft bgs
			3.75		D2-SOUTH1 Average	
2-Oct-09	Soil	15:31:01	9	4	D2-WEST1	0-1 ft bgs
2-Oct-09	Soil	15:31:53	8	5	D2-WEST1	0-1 ft bgs
2-Oct-09	Soil	15:32:40	14	4	D2-WEST1	0-1 ft bgs
2-Oct-09	Soil	15:33:23	7	4	D2-WEST1	0-1 ft bgs
			9.5		D2-WEST1 Average	

TABLE 2
Soil Sample Analytical Results
Green 2, Remediation Area D2 and Tee Hole 3, Remediation Area D1
Greenville Overlook

Sample ID	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	D2-North 1-S001		D2-North 1-S101		D2-South 1-S001		D2-East 1-S001	
		10/2/2009	0.0-1.0 mg/Kg	10/2/2009	0.0-1.0 mg/Kg (Duplicate)	10/2/2009	0.0-1.0 mg/Kg	10/2/2009	0.0-1.0 mg/Kg
Sampling Date	Unrestricted Use								
Sample Depth (ft bgs)									
Units									
Analyte									
PESTICIDES/PCBs									
Aldrin	0.040	0.0083	U	0.0083	U	0.0081	U	0.0083	U
alpha-Chlordane	2	0.0081	J p	0.0048	J p	0.0081	U	0.014	p
Dieldrin	0.040	0.0083	U	0.0083	U	0.0081	U	0.0018	J p
gamma-Chlordane	2	0.0054	J	0.0038	J	0.0081	U	0.0084	J
Heptachlor epoxide	0.070	0.0083	U	0.0083	U	0.0081	U	0.0022	J
No other pesticides were required to be analyzed as part of this confirmatory sampling event									
METALS									
Arsenic	11 ^t	7.4		7.7		2.2		9.9	
Cadmium	4	1.2	U	1.2	U	1.2	U	1.2	U
Lead	400	21.1		20.7		10.2		29.8	
Mercury	10	0.53		0.47		0.090		3.2	
No other metals were required to be analyzed as part of this confirmatory sampling event									
WET CHEMISTRY									
Percent Moisture (%)		19.7		19.1		17.8		20.0	
Percent Solids (%)		80.3		80.9		82.2		80.0	

* - below ground surface

NR: Not analyzed.

t - Delaware background concentration (DNREC, 2007)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

U: Indicates the analyte was analyzed for but not detected.

TABLE 2
Soil Sample Analytical Results
Green 2, Remediation Area D2 and Tee Hole 3, Remediation Area D1
Greenville Overlook

Sample ID	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	D2-West 1-S001 10/2/2009 0.0-1.0 mg/Kg	D2 BASE 2-S001 10/5/2009 1.5 mg/Kg	D1-Screening1-S001 10/9/2009 0.0-1.0 mg/Kg
Sampling Date	Unrestricted Use			
Sample Depth (ft bgs)				
Units				
Analyte				
PESTICIDES/PCBs				
Aldrin	0.040	0.0083 U	0.0082 U	0.0083 U
alpha-Chlordane	2	0.092 p	0.0089 p	0.0048 J p
Dieldrin	0.040	0.0083 U	0.0082 U	0.0083 U
gamma-Chlordane	2	0.056	0.012	0.0035 J
Heptachlor epoxide	0.070	0.022	0.0082 U	0.0083 U
No other pesticides were required to be analyzed as part of this				
METALS				
Arsenic	11 ^t	7.8	4.9	8.5
Cadmium	4	1.2 U	1.2 U	0.23 J
Lead	400	21.2	11.9	20.9
Mercury	10	0.98	0.064	0.35
No other metals were required to be analyzed as part of this co				
WET CHEMISTRY				
Percent Moisture (%)		19.2	18.4	20.0
Percent Solids (%)		80.8	81.6	80.0

* - below ground surface

NR: Not analyzed.

t - Delaware background concentration (DNREC, 2007)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

U: Indicates the analyte was analyzed for but not detected.

Remedial Action Completion Report
Greenville Overlook
Wilmington, Delaware



BrightFields, Inc.

REMEDIATION AREA

D3 (Fairway 3)



BrightFields, Inc.
Environmental Services

23 October 2009

Stephen Johnson, P.E.
Delaware Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, DE 19720

**RE: Attainment of Cleanup Goals – Fairway 3, Remediation Area D3
Hercules Road Property (Greenville Overlook) (DE-1323)
BrightFields File: 1938.08.52**

Dear Mr. Johnson:

The purpose of this letter is to document attainment of cleanup goals at Fairway 3, Remediation Area D3 (see the attached figure). This letter documents that cleanup goals were attained at Fairway 3 by blending the soil.

To delineate the area to be blended, samples were collected from the planned locations of berms and swales being installed as part of the erosion and sedimentation controls. Samples collected from the planned berm were used to establish the western extent of the blending area and samples collected from the planned swale were used to establish the eastern extent of blending. Samples were screened using BrightFields' Innov-x X-Ray fluorescence analyzer (XRF) to assess arsenic concentrations. A correlation study previously performed indicated that an XRF reading of 14 mg/kg corresponds to a laboratory arsenic result of 11 mg/kg (the arsenic cleanup goal). Arsenic was used as an indicator compound based on previous site data that showed that if the arsenic concentration is below the cleanup goal, the other site contaminants will be below their respective cleanup goals as well. Figure 1 shows the location of all samples collected. Table 1 presents the XRF screening results. At least four readings were obtained with the XRF for each soil sample and the average of the four used as the representative arsenic concentration for the sample. When determining the spacial extent of the blending area, where the initial screening samples exceeded the cleanup goal, additional samples were obtained at approximately 10 foot intervals moving away from the center of the blending area until an average XRF reading of 14 mg/kg or less was obtained.

The remediated area was delineated on all sides beyond the boundaries of the original area. Figure 1 shows the area blended at Fairway 3 (Area D3). An active buried sewer line is located

on the northern portion of Fairway 3 which could not be disturbed. Screening samples (samples D3-SL1 through D3-SL11) were collected along the sewer line to determine the depth of arsenic contamination. The soil within 10 feet of either side of the sewer line was excavated and moved onto Fairway 3 for blending. Soil adjacent to the sewer line was removed and sampled from progressively deeper intervals until the arsenic cleanup goal was achieved.

Fairway 3 (Area D3) was blended until XRF sample results were below the arsenic cleanup goal. Blending was performed to a depth of 30 inches below ground surface. The location of the confirmation samples for blended areas was determined using Visual Sample Plan software (version 4.6d) and is based on a systematic grid sampling approach to provide a 95% probability that a hot spot with a radius of approximately 40 feet will be detected if it exists. Confirmation samples for screening and laboratory analysis were collected at sample locations D3-Screening1 to D3-Screening8. Table 1 presents the arsenic screening results and Table 2 presents the laboratory analysis results for the confirmation samples.

All final confirmatory sample analysis results are below the cleanup goals; therefore, remediation of Fairway 3 (Area D3) is considered complete.

Please do not hesitate to contact me at (302) 656-9600 should you have question, comments or require additional information.

Sincerely,

BrightFields, Inc.

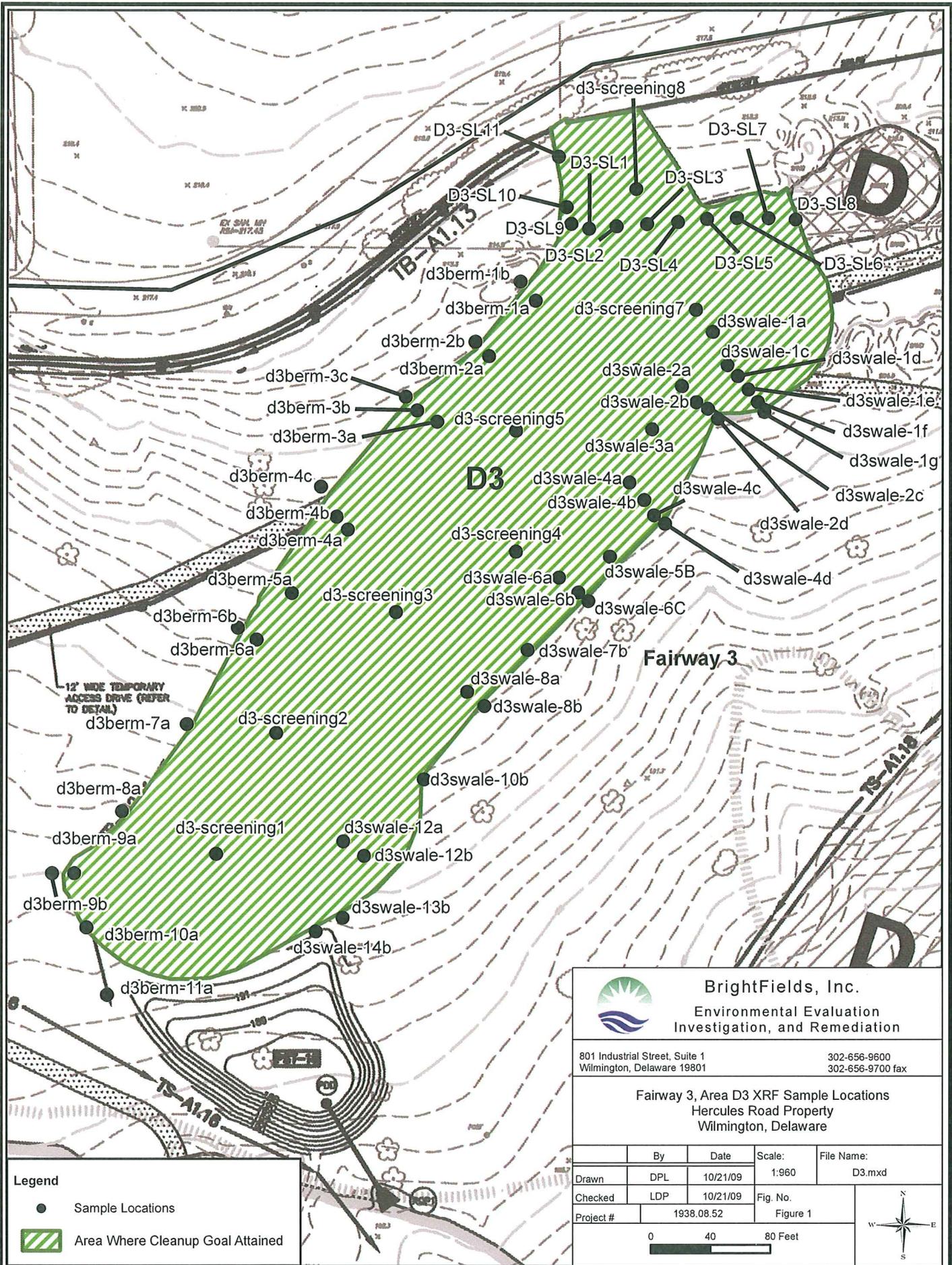


Lee dePersia, P.E.
Senior Program Manager

cc: Mr. Andrew Semon, Toll Brothers

3 Attachments

1. Figure 1 Fairway 3 (Area D3) Sample Locations
2. Table 1 Fairway 3 (Remediation Area D3) XRF Screening Results
3. Table 2 Soil Sample Analytical Results, Fairway 3, Remediation Area D3



Legend

- Sample Locations
- ▨ Area Where Cleanup Goal Attained



BrightFields, Inc.
Environmental Evaluation
Investigation, and Remediation

801 Industrial Street, Suite 1
Wilmington, Delaware 19801

302-656-9600
302-656-9700 fax

Fairway 3, Area D3 XRF Sample Locations
Hercules Road Property
Wilmington, Delaware

	By	Date	Scale:
Drawn	DPL	10/21/09	1:960
Checked	LDP	10/21/09	Fig. No.
Project #	1938.08.52		Figure 1

0 40 80 Feet



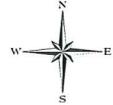


Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
19-Sep-09	Soil	8:20:00	14	5	d3berm-1a	0-1 ft bgs
19-Sep-09	Soil	8:21:00	12	5	d3berm-1a	0-1 ft bgs
19-Sep-09	Soil	8:22:00	17	5	d3berm-1a	0-1 ft bgs
19-Sep-09	Soil	8:23:00	17	5	d3berm-1a	0-1 ft bgs
			15		d3berm-1a Average	
19-Sep-09	Soil	9:25:34	6	4	d3berm-1b	0-1 ft bgs
19-Sep-09	Soil	9:26:25	12	4	d3berm-1b	0-1 ft bgs
19-Sep-09	Soil	9:27:16	14	4	d3berm-1b	0-1 ft bgs
19-Sep-09	Soil	9:28:08	9	4	d3berm-1b	0-1 ft bgs
			10		d3berm-1b Average	
19-Sep-09	Soil	8:25:06	22	6	d3berm-2a	0-1 ft bgs
19-Sep-09	Soil	8:26:03	29	6	d3berm-2a	0-1 ft bgs
19-Sep-09	Soil	8:26:53	36	6	d3berm-2a	0-1 ft bgs
19-Sep-09	Soil	8:28:02	28	6	d3berm-2a	0-1 ft bgs
			29		d3berm-2a Average	
19-Sep-09	Soil	9:29:15	5	4	d3berm-2b	0-1 ft bgs
19-Sep-09	Soil	9:30:08	11	4	d3berm-2b	0-1 ft bgs
19-Sep-09	Soil	9:30:55	17	5	d3berm-2b	0-1 ft bgs
19-Sep-09	Soil	9:33:13	16	5	d3berm-2b	0-1 ft bgs
			12		d3berm-2b Average	
19-Sep-09	Soil	8:29:56	9	5	d3berm-3a	0-1 ft bgs
19-Sep-09	Soil	8:30:51	19	5	d3berm-3a	0-1 ft bgs
19-Sep-09	Soil	8:31:43	17	5	d3berm-3a	0-1 ft bgs
19-Sep-09	Soil	8:32:31	15	5	d3berm-3a	0-1 ft bgs
			15		d3berm-3a Average	
19-Sep-09	Soil	9:32:17	11	5	d3berm-3b	0-1 ft bgs
19-Sep-09	Soil	9:34:13	19	5	d3berm-3b	0-1 ft bgs
19-Sep-09	Soil	9:35:10	21	5	d3berm-3b	0-1 ft bgs
19-Sep-09	Soil	9:36:03	18	5	d3berm-3b	0-1 ft bgs
			17		d3berm-3b Average	
19-Sep-09	Soil	10:22:57	9	5	d3berm-3c	0-1 ft bgs
19-Sep-09	Soil	10:23:49	16	5	d3berm-3c	0-1 ft bgs
19-Sep-09	Soil	10:24:41	13	4	d3berm-3c	0-1 ft bgs
19-Sep-09	Soil	10:25:38	15	5	d3berm-3c	0-1 ft bgs
			13		d3berm-3c Average	
19-Sep-09	Soil	8:34:32	18	5	d3berm-4a	0-1 ft bgs
19-Sep-09	Soil	8:35:28	19	5	d3berm-4a	0-1 ft bgs
19-Sep-09	Soil	8:36:20	25	5	d3berm-4a	0-1 ft bgs
19-Sep-09	Soil	8:37:14	23	6	d3berm-4a	0-1 ft bgs
			21		d3berm-4a Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
19-Sep-09	Soil	9:37:21	23	5	d3berm-4b	0-1 ft bgs
19-Sep-09	Soil	9:38:11	25	5	d3berm-4b	0-1 ft bgs
19-Sep-09	Soil	9:39:03	23	5	d3berm-4b	0-1 ft bgs
19-Sep-09	Soil	9:40:02	16	5	d3berm-4b	0-1 ft bgs
			22		d3berm-4b Average	
19-Sep-09	Soil	10:18:31	14	4	d3berm-4c	0-1 ft bgs
19-Sep-09	Soil	10:19:34	4	4	d3berm-4c	0-1 ft bgs
19-Sep-09	Soil	10:20:24	11	4	d3berm-4c	0-1 ft bgs
19-Sep-09	Soil	10:21:15	16	4	d3berm-4c	0-1 ft bgs
			11		d3berm-4c Average	
19-Sep-09	Soil	8:39:20	10	5	d3berm-5a	0-1 ft bgs
19-Sep-09	Soil	8:40:15	8	5	d3berm-5a	0-1 ft bgs
19-Sep-09	Soil	8:41:01	14	4	d3berm-5a	0-1 ft bgs
19-Sep-09	Soil	8:41:54	11	4	d3berm-5a	0-1 ft bgs
			11		d3berm-5a Average	
19-Sep-09	Soil	8:43:59	57	8	d3berm-6a	0-1 ft bgs
19-Sep-09	Soil	8:44:52	40	7	d3berm-6a	0-1 ft bgs
19-Sep-09	Soil	8:45:57	38	8	d3berm-6a	0-1 ft bgs
19-Sep-09	Soil	8:46:47	47	7	d3berm-6a	0-1 ft bgs
			46		d3berm-6a Average	
19-Sep-09	Soil	9:41:10	3	4	d3berm-6b	0-1 ft bgs
19-Sep-09	Soil	9:42:06	8	4	d3berm-6b	0-1 ft bgs
19-Sep-09	Soil	9:42:55	11	4	d3berm-6b	0-1 ft bgs
19-Sep-09	Soil	9:43:49	6	4	d3berm-6b	0-1 ft bgs
			7		d3berm-6b Average	
19-Sep-09	Soil	8:49:04	12	4	d3berm-7a	0-1 ft bgs
19-Sep-09	Soil	8:49:59	12	4	d3berm-7a	0-1 ft bgs
19-Sep-09	Soil	8:50:57	10	4	d3berm-7a	0-1 ft bgs
19-Sep-09	Soil	8:51:45	11	4	d3berm-7a	0-1 ft bgs
			11		d3berm-7a Average	
19-Sep-09	Soil	8:54:48	14	4	d3berm-8a	0-1 ft bgs
19-Sep-09	Soil	8:55:47	15	4	d3berm-8a	0-1 ft bgs
19-Sep-09	Soil	8:56:42	16	4	d3berm-8a	0-1 ft bgs
19-Sep-09	Soil	8:57:37	9	4	d3berm-8a	0-1 ft bgs
			14		d3berm-8a Average	
19-Sep-09	Soil	9:00:41	9	4	d3berm-9a	0-1 ft bgs
19-Sep-09	Soil	9:01:41	17	4	d3berm-9a	0-1 ft bgs
19-Sep-09	Soil	9:02:38	19	4	d3berm-9a	0-1 ft bgs
19-Sep-09	Soil	9:03:32	14	4	d3berm-9a	0-1 ft bgs
			15		d3berm-9a Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
19-Sep-09	Soil	9:45:09	15	4	d3berm-9b	0-1 ft bgs
19-Sep-09	Soil	9:46:05	7	4	d3berm-9b	0-1 ft bgs
19-Sep-09	Soil	9:46:59	6	4	d3berm-9b	0-1 ft bgs
19-Sep-09	Soil	9:47:51	8	4	d3berm-9b	0-1 ft bgs
			9		d3berm-9b Average	
19-Sep-09	Soil	9:07:02	2	5	d3berm-10a	0-1 ft bgs
19-Sep-09	Soil	9:07:57	7	5	d3berm-10a	0-1 ft bgs
19-Sep-09	Soil	9:08:51	16	4	d3berm-10a	0-1 ft bgs
19-Sep-09	Soil	9:09:43	11	4	d3berm-10a	0-1 ft bgs
			9		d3berm-10a Average	
19-Sep-09	Soil	9:11:52	8	5	d3berm-11a	0-1 ft bgs
19-Sep-09	Soil	9:12:42	11	4	d3berm-11a	0-1 ft bgs
19-Sep-09	Soil	9:13:39	12	4	d3berm-11a	0-1 ft bgs
19-Sep-09	Soil	9:14:37	7	4	d3berm-11a	0-1 ft bgs
			10		d3berm-11a Average	
18-Sep-09	Soil	8:17:42	19	5	D3-SWALE-1a	0-1 ft bgs
18-Sep-09	Soil	8:18:44	24	5	D3-SWALE-1a	0-1 ft bgs
18-Sep-09	Soil	8:20:11	12	5	D3-SWALE-1a	0-1 ft bgs
18-Sep-09	Soil	8:21:01	23	5	D3-SWALE-1a	0-1 ft bgs
			20		D3-SWALE-1a Average	
18-Sep-09	Soil	14:21:57	26	5	D3-SWALE-1c	0-1 ft bgs
18-Sep-09	Soil	14:22:50	25	6	D3-SWALE-1c	0-1 ft bgs
18-Sep-09	Soil	14:23:33	27	6	D3-SWALE-1c	0-1 ft bgs
18-Sep-09	Soil	14:24:44	17	5	D3-SWALE-1c	0-1 ft bgs
			24		D3-SWALE-1c Average	
18-Sep-09	Soil	15:28:59	20	5	D3-SWALE-1d	0-1 ft bgs
18-Sep-09	Soil	15:29:40	28	5	D3-SWALE-1d	0-1 ft bgs
18-Sep-09	Soil	15:30:22	28	5	D3-SWALE-1d	0-1 ft bgs
18-Sep-09	Soil	15:31:15	20	5	D3-SWALE-1d	0-1 ft bgs
			24		D3-SWALE-1d Average	
18-Sep-09	Soil	15:37:57	18	5	D3-SWALE-1e	0-1 ft bgs
18-Sep-09	Soil	15:38:53	26	6	D3-SWALE-1e	0-1 ft bgs
18-Sep-09	Soil	15:39:37	29	5	D3-SWALE-1e	0-1 ft bgs
18-Sep-09	Soil	15:40:25	24	6	D3-SWALE-1e	0-1 ft bgs
			24		D3-SWALE-1e Average	
19-Sep-09	Soil	14:46:43	28	6	d3swale1f 0-6	0.0-0.5 ft bgs
19-Sep-09	Soil	14:47:35	34	6	d3swale1f 0-6	0.0-0.5 ft bgs
19-Sep-09	Soil	14:48:22	29	6	d3swale1f 0-6	0.0-0.5 ft bgs
19-Sep-09	Soil	14:49:17	35	6	d3swale1f 0-6	0.0-0.5 ft bgs
			32		d3swale1f 0-6 Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
19-Sep-09	Soil	14:50:41	16	5	d3swale 1f 6-12	0.5-1.0 ft bgs
19-Sep-09	Soil	14:51:28	11	5	d3swale 1f 6-12	0.5-1.0 ft bgs
19-Sep-09	Soil	14:52:18	30	5	d3swale 1f 6-12	0.5-1.0 ft bgs
19-Sep-09	Soil	14:53:04	18	5	d3swale 1f 6-12	0.5-1.0 ft bgs
			19		d3swale 1f 6-12 Average	
18-Sep-09	Soil	15:46:39	22	6	D3-SWALE-1f	0-1 ft bgs
18-Sep-09	Soil	15:47:30	17	5	D3-SWALE-1f	0-1 ft bgs
18-Sep-09	Soil	15:48:11	32	6	D3-SWALE-1f	0-1 ft bgs
18-Sep-09	Soil	15:48:55	24	5	D3-SWALE-1f	0-1 ft bgs
			24		D3-SWALE-1f Average	
18-Sep-09	Soil	16:04:10	10	5	D3-SWALE-1g	0-1 ft bgs
18-Sep-09	Soil	16:05:59	12	4	D3-SWALE-1g	0-1 ft bgs
18-Sep-09	Soil	16:06:53	22	5	D3-SWALE-1g	0-1 ft bgs
18-Sep-09	Soil	16:07:35	4	5	D3-SWALE-1g	0-1 ft bgs
			12		D3-SWALE-1g Average	
18-Sep-09	Soil	8:29:33	21	5	D3-SWALE-2a	0-1 ft bgs
18-Sep-09	Soil	8:30:32	15	5	D3-SWALE-2a	0-1 ft bgs
18-Sep-09	Soil	8:31:23	29	6	D3-SWALE-2a	0-1 ft bgs
18-Sep-09	Soil	8:32:36	28	6	D3-SWALE-2a	0-1 ft bgs
			23		D3-SWALE-2a Average	
18-Sep-09	Soil	9:44:42	23	5	D3-SWALE-2b	0-1 ft bgs
18-Sep-09	Soil	9:45:36	19	5	D3-SWALE-2b	0-1 ft bgs
18-Sep-09	Soil	9:46:42	20	5	D3-SWALE-2b	0-1 ft bgs
18-Sep-09	Soil	9:47:33	27	6	D3-SWALE-2b	0-1 ft bgs
			22		D3-SWALE-2b Average	
19-Sep-09	Soil	14:42:41	13	6	d3swale2c 0-6	0.0-0.5 ft bgs
19-Sep-09	Soil	14:43:37	17	5	d3swale2c 0-6	0.0-0.5 ft bgs
19-Sep-09	Soil	14:44:24	26	5	d3swale2c 0-6	0.0-0.5 ft bgs
19-Sep-09	Soil	14:45:26	20	5	d3swale2c 0-6	0.0-0.5 ft bgs
			19		d3swale2c 0-6 Average	
19-Sep-09	Soil	14:38:43	19	5	d3swale2c 6-12	0.5-1.0 ft bgs
19-Sep-09	Soil	14:39:41	21	5	d3swale2c 6-12	0.5-1.0 ft bgs
19-Sep-09	Soil	14:40:30	24	5	d3swale2c 6-12	0.5-1.0 ft bgs
19-Sep-09	Soil	14:41:27	28	5	d3swale2c 6-12	0.5-1.0 ft bgs
			23		d3swale2c 6-12 Average	
18-Sep-09	Soil	10:11:49	26	6	D3-SWALE-2c	0-1 ft bgs
18-Sep-09	Soil	10:12:48	16	5	D3-SWALE-2c	0-1 ft bgs
18-Sep-09	Soil	10:13:43	24	5	D3-SWALE-2c	0-1 ft bgs
18-Sep-09	Soil	10:14:37	16	5	D3-SWALE-2c	0-1 ft bgs
			21		D3-SWALE-2c Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
18-Sep-09	Soil	15:14:55	12	4	D3-SWALE-2d	0-1 ft bgs
18-Sep-09	Soil	15:16:49	13	5	D3-SWALE-2d	0-1 ft bgs
18-Sep-09	Soil	15:17:32	14	5	D3-SWALE-2d	0-1 ft bgs
18-Sep-09	Soil	15:18:26	11	4	D3-SWALE-2d	0-1 ft bgs
			12		D3-SWALE-2d Average	
18-Sep-09	Soil	8:40:40	16	5	D3-SWALE-3a	0-1 ft bgs
18-Sep-09	Soil	8:41:30	24	6	D3-SWALE-3a	0-1 ft bgs
18-Sep-09	Soil	8:42:16	26	5	D3-SWALE-3a	0-1 ft bgs
18-Sep-09	Soil	8:43:05	14	5	D3-SWALE-3a	0-1 ft bgs
			20		D3-SWALE-3a Average	
18-Sep-09	Soil	9:01:03	21	5	D3-SWALE-4a	0-1 ft bgs
18-Sep-09	Soil	9:02:04	28	5	D3-SWALE-4a	0-1 ft bgs
18-Sep-09	Soil	9:03:25	22	5	D3-SWALE-4a	0-1 ft bgs
18-Sep-09	Soil	9:04:25	18	5	D3-SWALE-4a	0-1 ft bgs
			22		D3-SWALE-4a Average	
18-Sep-09	Soil	9:29:45	14	5	D3-SWALE-4b	0-1 ft bgs
18-Sep-09	Soil	9:30:37	25	5	D3-SWALE-4b	0-1 ft bgs
18-Sep-09	Soil	9:31:42	12	5	D3-SWALE-4b	0-1 ft bgs
18-Sep-09	Soil	9:32:38	9	5	D3-SWALE-4b	0-1 ft bgs
18-Sep-09	Soil	9:36:09	12	5	D3-SWALE-4b	0-1 ft bgs
18-Sep-09	Soil	9:37:08	18	5	D3-SWALE-4b	0-1 ft bgs
			15		D3-SWALE-4b Average	
18-Sep-09	Soil	10:06:59	21	5	D3-SWALE-4c	0-1 ft bgs
18-Sep-09	Soil	10:08:17	15	5	D3-SWALE-4c	0-1 ft bgs
18-Sep-09	Soil	10:09:06	22	5	D3-SWALE-4c	0-1 ft bgs
18-Sep-09	Soil	10:09:56	22	5	D3-SWALE-4c	0-1 ft bgs
18-Sep-09	Soil	10:10:42	14	5	D3-SWALE-4c	0-1 ft bgs
			19		D3-SWALE-4c Average	
18-Sep-09	Soil	15:03:49	11	4	D3-SWALE-4d	0-1 ft bgs
18-Sep-09	Soil	15:04:32	13	4	D3-SWALE-4d	0-1 ft bgs
18-Sep-09	Soil	15:05:14	10	5	D3-SWALE-4d	0-1 ft bgs
18-Sep-09	Soil	15:06:04	6	4	D3-SWALE-4d	0-1 ft bgs
			10		D3-SWALE-4d Average	
18-Sep-09	Soil	12:12:37	24	5	D3-SWALE-5b	0-1 ft bgs
18-Sep-09	Soil	12:13:50	33	6	D3-SWALE-5b	0-1 ft bgs
18-Sep-09	Soil	12:14:36	13	5	D3-SWALE-5b	0-1 ft bgs
18-Sep-09	Soil	12:15:22	19	5	D3-SWALE-5b	0-1 ft bgs
			22		D3-SWALE-5b Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
18-Sep-09	Soil	9:12:46	27	5	D3-SWALE-6a	0-1 ft bgs
18-Sep-09	Soil	9:13:36	23	5	D3-SWALE-6a	0-1 ft bgs
18-Sep-09	Soil	9:14:34	21	5	D3-SWALE-6a	0-1 ft bgs
18-Sep-09	Soil	9:15:39	17	5	D3-SWALE-6a	0-1 ft bgs
			22		D3-SWALE-6a Average	
18-Sep-09	Soil	12:16:22	14	5	D3-SWALE-6b	0-1 ft bgs
18-Sep-09	Soil	12:17:05	25	5	D3-SWALE-6b	0-1 ft bgs
18-Sep-09	Soil	12:17:55	15	5	D3-SWALE-6b	0-1 ft bgs
18-Sep-09	Soil	12:18:47	22	5	D3-SWALE-6b	0-1 ft bgs
			19		D3-SWALE-6b Average	
18-Sep-09	Soil	14:59:38	7	4	D3-SWALE-6c	0-1 ft bgs
18-Sep-09	Soil	15:00:57	14	5	D3-SWALE-6c	0-1 ft bgs
18-Sep-09	Soil	15:01:54	6	5	D3-SWALE-6c	0-1 ft bgs
18-Sep-09	Soil	15:02:46	12	5	D3-SWALE-6c	0-1 ft bgs
			10		D3-SWALE-6c Average	
18-Sep-09	Soil	10:27:51	11	5	D3-SWALE-7b	0-1 ft bgs
18-Sep-09	Soil	10:28:52	8	5	D3-SWALE-7b	0-1 ft bgs
18-Sep-09	Soil	10:29:50	18	4	D3-SWALE-7b	0-1 ft bgs
18-Sep-09	Soil	10:30:40	20	5	D3-SWALE-7b	0-1 ft bgs
			14		D3-SWALE-7b Average	
18-Sep-09	Soil	11:19:16	18	4	D3-SWALE-8a	0-1 ft bgs
18-Sep-09	Soil	11:20:05	11	5	D3-SWALE-8a	0-1 ft bgs
18-Sep-09	Soil	11:20:47	14	5	D3-SWALE-8a	0-1 ft bgs
18-Sep-09	Soil	11:21:31	16	5	D3-SWALE-8a	0-1 ft bgs
			15		D3-SWALE-8a Average	
18-Sep-09	Soil	10:53:33	13	5	D3-SWALE-8b	0-1 ft bgs
18-Sep-09	Soil	10:54:23	14	5	D3-SWALE-8b	0-1 ft bgs
18-Sep-09	Soil	10:55:12	12	4	D3-SWALE-8b	0-1 ft bgs
18-Sep-09	Soil	10:56:01	7	5	D3-SWALE-8b	0-1 ft bgs
			12		D3-SWALE-8b Average	
18-Sep-09	Soil	10:31:34	7	5	D3-SWALE-10b	0-1 ft bgs
18-Sep-09	Soil	10:32:26	7	5	D3-SWALE-10b	0-1 ft bgs
18-Sep-09	Soil	10:33:08	12	5	D3-SWALE-10b	0-1 ft bgs
18-Sep-09	Soil	10:33:51	15	5	D3-SWALE-10b	0-1 ft bgs
			10		D3-SWALE-10b Average	
18-Sep-09	Soil	11:14:21	20	4	D3-SWALE-12a	0-1 ft bgs
18-Sep-09	Soil	11:15:40	5	4	D3-SWALE-12a	0-1 ft bgs
18-Sep-09	Soil	11:16:37	16	4	D3-SWALE-12a	0-1 ft bgs
18-Sep-09	Soil	11:17:36	6	4	D3-SWALE-12a	0-1 ft bgs
			12		D3-SWALE-12a Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
18-Sep-09	Soil	10:57:00	18	4	D3-SWALE-12b	0-1 ft bgs
18-Sep-09	Soil	10:57:45	14	4	D3-SWALE-12b	0-1 ft bgs
18-Sep-09	Soil	10:58:27	8	4	D3-SWALE-12b	0-1 ft bgs
18-Sep-09	Soil	10:59:12	8	4	D3-SWALE-12b	0-1 ft bgs
			12		D3-SWALE-12b Average	
18-Sep-09	Soil	11:49:08	11	5	D3-SWALE-13b	0-1 ft bgs
18-Sep-09	Soil	11:52:06	12	5	D3-SWALE-13b	0-1 ft bgs
18-Sep-09	Soil	11:53:09	16	5	D3-SWALE-13b	0-1 ft bgs
18-Sep-09	Soil	11:54:03	18	5	D3-SWALE-13b	0-1 ft bgs
			14		D3-SWALE-13b Average	
18-Sep-09	Soil	11:55:43	15	5	D3-SWALE-14b	0-1 ft bgs
18-Sep-09	Soil	11:56:24	7	5	D3-SWALE-14b	0-1 ft bgs
18-Sep-09	Soil	11:57:11	12	4	D3-SWALE-14b	0-1 ft bgs
18-Sep-09	Soil	11:57:53	6	4	D3-SWALE-14b	0-1 ft bgs
			10		D3-SWALE-14b Average	
16-Sep-09	Soil	8:24:22	11	5	D3-SL1	0-1 ft bgs
16-Sep-09	Soil	8:25:26	14	5	D3-SL1	0-1 ft bgs
16-Sep-09	Soil	8:26:27	10	4	D3-SL1	0-1 ft bgs
16-Sep-09	Soil	8:27:22	11	4	D3-SL1	0-1 ft bgs
			12		D3-SL1 Average	
18-Sep-09	Soil	13:11:10	12	5	D3-SL1A	18" bgs
18-Sep-09	Soil	13:14:46	1	4	D3-SL1A	18" bgs
18-Sep-09	Soil	13:15:33	7	4	D3-SL1A	18" bgs
18-Sep-09	Soil	13:16:17	11	4	D3-SL1A	18" bgs
			8		D3-SL1A Average	
16-Sep-09	Soil	8:44:41	18	5	D3-SL2	0-1 ft bgs
16-Sep-09	Soil	8:46:14	21	5	D3-SL2	0-1 ft bgs
16-Sep-09	Soil	8:47:12	19	5	D3-SL2	0-1 ft bgs
16-Sep-09	Soil	8:48:01	15	5	D3-SL2	0-1 ft bgs
			18		D3-SL2 Average	
18-Sep-09	Soil	12:54:54	6	4	D3-SL2A	18" bgs
18-Sep-09	Soil	12:55:47	11	5	D3-SL2A	18" bgs
18-Sep-09	Soil	13:02:06	4	4	D3-SL2A	18" bgs
18-Sep-09	Soil	13:02:51	11	4	D3-SL2A	18" bgs
			8		D3-SL2A Average	
16-Sep-09	Soil	8:59:35	7	4	D3-SL3	0-1 ft bgs
16-Sep-09	Soil	9:00:33	12	4	D3-SL3	0-1 ft bgs
16-Sep-09	Soil	9:01:25	8	4	D3-SL3	0-1 ft bgs
16-Sep-09	Soil	9:02:14	18	5	D3-SL3	0-1 ft bgs
			11		D3-SL3 Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
18-Sep-09	Soil	10:17:35	20	4	D3-SL3A	18" bgs
18-Sep-09	Soil	10:18:31	8	5	D3-SL3A	18" bgs
18-Sep-09	Soil	10:19:16	14	4	D3-SL3A	18" bgs
18-Sep-09	Soil	10:20:10	19	5	D3-SL3A	18" bgs
			15		D3-SL3A Average	
18-Sep-09	Soil	10:34:44	1	5	D3-SL3A1	24" bgs
18-Sep-09	Soil	10:35:36	17	4	D3-SL3A1	24" bgs
18-Sep-09	Soil	10:36:31	16	5	D3-SL3A1	24" bgs
18-Sep-09	Soil	10:37:21	11	5	D3-SL3A1	24" bgs
			11		D3-SL3A1 Average	
16-Sep-09	Soil	9:09:25	20	4	D3-SL4	0-1 ft bgs
16-Sep-09	Soil	9:10:10	24	5	D3-SL4	0-1 ft bgs
16-Sep-09	Soil	9:11:08	14	5	D3-SL4	0-1 ft bgs
16-Sep-09	Soil	9:12:14	12	5	D3-SL4	0-1 ft bgs
			18		D3-SL4 Average	
18-Sep-09	Soil	10:01:58	9	4	D3-SL4A	18" bgs
18-Sep-09	Soil	10:02:47	8	4	D3-SL4A	18" bgs
18-Sep-09	Soil	10:03:31	16	4	D3-SL4A	18" bgs
18-Sep-09	Soil	10:04:13	9	4	D3-SL4A	18" bgs
			11		D3-SL4A Average	
16-Sep-09	Soil	9:28:15	4	5	D3-SL5	0-1 ft bgs
16-Sep-09	Soil	9:29:08	13	5	D3-SL5	0-1 ft bgs
16-Sep-09	Soil	9:29:56	14	4	D3-SL5	0-1 ft bgs
16-Sep-09	Soil	9:31:14	16	5	D3-SL5	0-1 ft bgs
			12		D3-SL5 Average	
18-Sep-09	Soil	9:41:10	12	4	D3-SL5A	18" bgs
18-Sep-09	Soil	9:42:02	12	4	D3-SL5A	18" bgs
18-Sep-09	Soil	9:42:50	10	4	D3-SL5A	18" bgs
18-Sep-09	Soil	9:43:35	17	4	D3-SL5A	18" bgs
			13		D3-SL5A Average	
16-Sep-09	Soil	9:38:47	15	4	D3-SL6	0-1 ft bgs
16-Sep-09	Soil	9:39:35	15	5	D3-SL6	0-1 ft bgs
16-Sep-09	Soil	9:40:33	15	5	D3-SL6	0-1 ft bgs
16-Sep-09	Soil	9:41:23	12	5	D3-SL6	0-1 ft bgs
			14		D3-SL6 Average	
18-Sep-09	Soil	9:16:47	8	5	D3-SL6A	18" bgs
18-Sep-09	Soil	9:17:35	13	5	D3-SL6A	18" bgs
18-Sep-09	Soil	9:18:28	18	4	D3-SL6A	18" bgs
18-Sep-09	Soil	9:19:15	14	4	D3-SL6A	18" bgs
			13		D3-SL6A Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
16-Sep-09	Soil		15		D3-SL7	0-1 ft bgs
16-Sep-09	Soil		14		D3-SL7	0-1 ft bgs
16-Sep-09	Soil		14		D3-SL7	0-1 ft bgs
16-Sep-09	Soil		12		D3-SL7	0-1 ft bgs
			14		D3-SL7 Average	
18-Sep-09	Soil	8:48:10	20	5	D3-SL7A	18" bgs
18-Sep-09	Soil	8:48:55	15	5	D3-SL7A	18" bgs
18-Sep-09	Soil	8:49:43	8	4	D3-SL7A	18" bgs
18-Sep-09	Soil	8:50:28	11	4	D3-SL7A	18" bgs
			14		D3-SL7A Average	
18-Sep-09	Soil	8:57:14	20	5	D3-SL7A1	24" bgs
18-Sep-09	Soil	8:58:00	9	5	D3-SL7A1	24" bgs
18-Sep-09	Soil	8:58:44	2	4	D3-SL7A1	24" bgs
18-Sep-09	Soil	8:59:33	11	5	D3-SL7A1	24" bgs
			11		D3-SL7A1 Average	
18-Sep-09	Soil	7:31:17	33	11	D3-SL8A	18" bgs
18-Sep-09	Soil	7:32:15	10	5	D3-SL8A	18" bgs
18-Sep-09	Soil	7:33:01	11	4	D3-SL8A	18" bgs
18-Sep-09	Soil	7:33:46	13	4	D3-SL8A	18" bgs
			17		D3-SL8A Average	
18-Sep-09	Soil	7:45:02	15	4	D3-SL8A1	22" bgs
18-Sep-09	Soil	7:45:47	14	4	D3-SL8A1	22" bgs
18-Sep-09	Soil	7:46:35	20	5	D3-SL8A1	22" bgs
18-Sep-09	Soil	7:47:22	12	5	D3-SL8A1	22" bgs
			15		D3-SL8A1 Average	
18-Sep-09	Soil	8:22:07	17	5	D3-SL8A2	29" bgs
18-Sep-09	Soil	8:23:03	11	4	D3-SL8A2	29" bgs
18-Sep-09	Soil	8:23:50	16	5	D3-SL8A2	29" bgs
18-Sep-09	Soil	8:24:33	10	5	D3-SL8A2	29" bgs
			14		D3-SL8A2 Average	
18-Sep-09	Soil	13:43:21	5	4	D3-SL9	18" bgs
18-Sep-09	Soil	13:44:14	15	4	D3-SL9	18" bgs
18-Sep-09	Soil	13:47:00	28	10	D3-SL9	18" bgs
18-Sep-09	Soil	13:47:54	24	10	D3-SL9	18" bgs
			18		D3-SL9 Average	
24-Sep-09	Soil	13:17:27	18	5	D3-SL10	0-1 ft bgs
24-Sep-09	Soil	13:19:03	14	4	D3-SL10	0-1 ft bgs
24-Sep-09	Soil	13:19:45	8	4	D3-SL10	0-1 ft bgs
24-Sep-09	Soil	13:20:32	37	10	D3-SL10	0-1 ft bgs
24-Sep-09	Soil	13:21:18	3	7	D3-SL10	0-1 ft bgs
			16		D3-SL10 Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
24-Sep-09	Soil	15:13:17	12	4	D3-SL11	0-1 ft bgs
24-Sep-09	Soil	15:14:02	12	4	D3-SL11	0-1 ft bgs
24-Sep-09	Soil	15:14:45	12	4	D3-SL11	0-1 ft bgs
24-Sep-09	Soil	15:15:30	15	4	D3-SL11	0-1 ft bgs
			13		D3-SL11 Average	
9-Oct-09	Soil	11:48:46	16	4	D3-SCREENING1	0-1 ft bgs
9-Oct-09	Soil	12:03:10	0	4	D3-SCREENING1	0-1 ft bgs
9-Oct-09	Soil	12:04:00	6	4	D3-SCREENING1	0-1 ft bgs
9-Oct-09	Soil	12:04:48	3	4	D3-SCREENING1	0-1 ft bgs
			6		D3-SCREENING1 Average	
9-Oct-09	Soil	11:24:30	10	4	D3-SCREENING2	0-1 ft bgs
9-Oct-09	Soil	11:25:20	14	4	D3-SCREENING2	0-1 ft bgs
9-Oct-09	Soil	11:26:03	12	4	D3-SCREENING2	0-1 ft bgs
9-Oct-09	Soil	11:26:45	3	4	D3-SCREENING2	0-1 ft bgs
			10		D3-SCREENING2 Average	
9-Oct-09	Soil	11:36:28	10	4	D3-SCREENING3	0-1 ft bgs
9-Oct-09	Soil	11:37:13	7	4	D3-SCREENING3	0-1 ft bgs
9-Oct-09	Soil	11:37:58	9	4	D3-SCREENING3	0-1 ft bgs
9-Oct-09	Soil	11:38:56	13	4	D3-SCREENING3	0-1 ft bgs
			10		D3-SCREENING3 Average	
8-Oct-09	Soil	12:27:47	12	4	D3-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	12:31:04	12	4	D3-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	12:32:23	12	4	D3-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	12:34:52	5	4	D3-SCREENING4	0-1 ft bgs
			10		D3-SCREENING4 Average	
9-Oct-09	Soil	11:31:05	14	4	D3-SCREENING5	0-1 ft bgs
9-Oct-09	Soil	11:32:06	10	5	D3-SCREENING5	0-1 ft bgs
9-Oct-09	Soil	11:32:52	17	4	D3-SCREENING5	0-1 ft bgs
9-Oct-09	Soil	11:33:37	9	4	D3-SCREENING5	0-1 ft bgs
			13		D3-SCREENING5 Average	
9-Oct-09	Soil	11:41:22	12	4	D3-SCREENING6	0-1 ft bgs
9-Oct-09	Soil	11:42:14	8	4	D3-SCREENING6	0-1 ft bgs
9-Oct-09	Soil	11:43:00	10	4	D3-SCREENING6	0-1 ft bgs
9-Oct-09	Soil	11:43:48	15	4	D3-SCREENING6	0-1 ft bgs
			11		D3-SCREENING6 Average	
8-Oct-09	Soil	12:36:11	11	4	D3-SCREENING7	0-1 ft bgs
8-Oct-09	Soil	12:36:55	12	4	D3-SCREENING7	0-1 ft bgs
8-Oct-09	Soil	12:37:46	10	4	D3-SCREENING7	0-1 ft bgs
8-Oct-09	Soil	12:38:32	21	4	D3-SCREENING7	0-1 ft bgs
			14		D3-SCREENING7 Average	

Table 1. Fairway 3 (Remediation Area D3) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
12-Oct-09	Soil	12:09:43	10	4	D3-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	12:10:44	6	3	D3-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	12:11:29	8	4	D3-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	12:12:17	7	4	D3-SCREENING8	0-1 ft bgs
			8		D3-SCREENING8 Average	

*XRF concentration used is an average of the 4 or more individual readings.

TABLE 2
Soil Sample Analytical Results
Fairway 3, Remediation Area D3
Greenville Overlook

Sample ID	Sampling Date	Sample Depth (ft. bgs)	Units	Analyte	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	D3-Screening 1-S001			D3-Screening 2-S001			D3-Screening 3-S001		
						10/9/2009	0.0-1.0	mg/Kg	10/9/2009	0.0-1.0	mg/Kg	10/9/2009	0.0-1.0	mg/Kg
PESTICIDES/PCBs														
					Unrestricted Use									
					0.040	0.0082	U	0.0082	U	0.0082	U	0.0083	U	0.0083
					2	0.010	P	0.020	P	0.013	P	0.0096	P	0.0096
					0.040	0.0082	U	0.0082	U	0.0083	U	0.0083	U	0.0083
					2	0.006	J	0.0096	J	0.0062	J	0.0055	J	0.0055
					0.070	0.0026	J	0.0034	J	0.0023	J	0.0083	J	0.0083
No other pesticides were required to be analyzed as part of this confirmatory sampling event.														
METALS														
					11 [†]	7.0		9.3		9.5		10.6		10.6
					4	1.2	U	1.2	U	1.2	U	1.2	U	1.2
					400	15.9		20.0		22.7		20.9		20.9
					10	0.088		0.14		0.17		0.13		0.13
No other metals were required to be analyzed as part of this confirmatory sampling event.														
WET CHEMISTRY														
						18.7		17.9		19.1		18.8		18.8
						81.3		82.1		80.9		81.2		81.2

* - below ground surface

NR: Not analyzed.

† - Delaware background concentration (DNREC, 2007)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

P: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

U: Indicates the analyte was analyzed for but not detected.

TABLE 2
Soil Sample Analytical Results
Fairway 3, Remediation Area D3
Greenville Overlook

Sample ID	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	D3-SCREENING 4- S001				D3-SCREENING 5-S001				D3-SCREENING 6-S001				D3-SCREENING 7- S001				D3- Screening 8 - S001			
		10/8/2009				10/9/2009				10/9/2009				10/8/2009				10/12/2009			
Sampling Date	Area (mg/kg)	0.0-1.0				0.0-1.0				0.0-1.0				0.0-1.0				0.0-1.0			
Sample Depth (ft bgs)	Units	mg/Kg				mg/Kg				mg/Kg				mg/Kg				mg/Kg			
Analyte	Unrestricted Use																				
PESTICIDES/PCBs																					
Aldrin	0.040	0.0083	U	0.0075	U	0.0082	U	0.0085	U	0.0085	U	0.0084	U	0.0084	U	0.0084	U	0.0084	U		
alpha-Chlordane	2	0.0083	U	0.023	P	0.021	P	0.0085	U	0.0085	U	0.0084	U	0.0084	U	0.0084	U	0.0084	U		
Dieldrin	0.040	0.0083	U	0.0075	U	0.0082	U	0.0085	U	0.0085	U	0.0084	U	0.0084	U	0.0084	U	0.0084	U		
gamma-Chlordane	2	0.0083	U	0.011		0.011		0.0085	U	0.0085	U	0.0084	U	0.0084	U	0.0084	U	0.0084	U		
Heptachlor epoxide	0.070	0.0083	U	0.0042	J	0.0034	J	0.0085	U	0.0085	U	0.0084	U	0.0084	U	0.0084	U	0.0084	U		
No other pesticides were required to be analyzed as part of t																					
METALS																					
Arsenic	11 ^t	9.8		9.0		8.6		10		10		6.2		6.2		6.2		6.2			
Cadmium	4	1.2	U	1.1	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U		
Lead	400	23.4		20.0		19.2		17.3		17.3		19.8		19.8		19.8		19.8			
Mercury	10	0.15		0.16		0.19		0.32		0.32		0.062		0.062		0.062		0.062			
No other metals were required to be analyzed as part of this c																					
WET CHEMISTRY																					
Percent Moisture (%)		19.1		11.1		18.3		21.0		21.0		20.5		20.5		20.5		20.5			
Percent Solids (%)		80.9		88.9		81.7		79.0		79.0		79.5		79.5		79.5		79.5			

* - below ground surface

NR: Not analyzed.

t - Delaware background concentration (DNREC, 2007)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

P: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

U: Indicates the analyte was analyzed for but not detected.

Remedial Action Completion Report
Greenville Overlook
Wilmington, Delaware



BrightFields, Inc.

REMEDIATION AREA

D4 (Green 3)



BrightFields, Inc.
Environmental Services

29 October 2009

Stephen Johnson, P.E.
Delaware Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, DE 19720

**RE: Attainment of Cleanup Goals – Green 3, Remediation Area D4
Hercules Road Property (Greenville Overlook) (DE-1323)
BrightFields File: 1938.08.52**

Dear Mr. Johnson:

The purpose of this letter is to document attainment of cleanup goals at Green 3, Remediation Area D4 (see the attached figure). This letter documents that cleanup goals were attained at Green 3 following excavation and blending.

To delineate the area for excavation, screening soil samples were collected and screened using BrightFields' Innov-x X-Ray fluorescence analyzer (XRF) to assess arsenic concentrations. A correlation study previously performed indicated that an XRF reading of 14 mg/kg corresponds to a laboratory arsenic result of 11 mg/kg (the arsenic cleanup goal). Arsenic was used as an indicator compound based on previous site data that showed that if the arsenic concentration is below the cleanup goal, the other site contaminants will be below their respective cleanup goals as well.

Figure 1 shows the location of all samples collected. Table 1 presents the XRF screening results. At least four readings were obtained with the XRF for each soil sample and the average of the four used as the representative arsenic concentration for the sample. To delineate the area for excavation, screening soil samples were collected at each compass direction. Where the initial

screening sample results exceeded the cleanup goal, additional samples were obtained at approximately 10 foot intervals moving away from the center of the excavation area until an average XRF reading of 14 mg/kg or less was obtained.

Based on the screening sample results, the excavation of Green 3 (Area D4) was extended ten feet out along the east edge, out to sample location D4-East2. Once the lateral limits of the excavation were determined using field screening, samples were collected from each compass direction for laboratory confirmation. Table 2 presents the results of the laboratory analysis for the confirmation samples.

The soil from the Green 3 (Area D4) excavation was taken to the Conestoga Facility in Pennsylvania for proper disposal. On 10 October Green 3 was initially excavated to a depth of one foot below the original ground surface (BGS). Samples were collected and screened from the base of the one-foot deep excavation (D4-Base 1 through D4-Base4). Results indicated that the soil in the vicinity of D4-Base1, on the eastern portion of the area, needed to be excavated deeper. On 12 October, based on XRF screening sample results, the soil between sample point D4-Base4 and D4-East1 was excavated to 2 feet BGS. In addition, because the laboratory confirmation sample from D4-West1 exceeded 11 mg/kg arsenic, the western portion of Area D4, between sample point D4-West1 and D4-Base4, was blended to 30 inches BGS. Once the excavation and blending was considered to be complete based on field screening samples (locations D4-Base2, D4-Base5, D4-Base6 and D4-Base7 for excavation areas; locations D4-Screening1 and D4-Screening2 for blended areas) one base confirmatory sample (D4-Base5-S002 and a field duplicate) from the excavated portion, and one screening sample (D4-Screening1-S001) from the blended portion, were sent for laboratory analysis of the full cleanup goal parameters. Table 2 presents the results of the laboratory analysis for the confirmation sample.

One of the confirmatory sample results for arsenic exceeded the cleanup goal of 11 mg/kg (D4-Screening-S001 with 16.2 mg/kg arsenic). Based on this result, the previously blended area was reblended deeper with an excavator. Following the reblending, sample D4-Screening1-S003 and D4-West1-S002 were obtained for screening and confirmatory analysis (see Tables 1 and 2).

As shown on Table 2, all final confirmatory analysis results are below the cleanup goals; therefore, remediation of Green 3 (Area D4) is considered complete.

Mr. Stephen Johnson
Attainment of Cleanup Goals – Green 3, Area D4
Hercules Road Property (DE-1323)



Please do not hesitate to contact me at (302) 656-9600 should you have question, comments or require additional information.

Sincerely,

BrightFields, Inc.

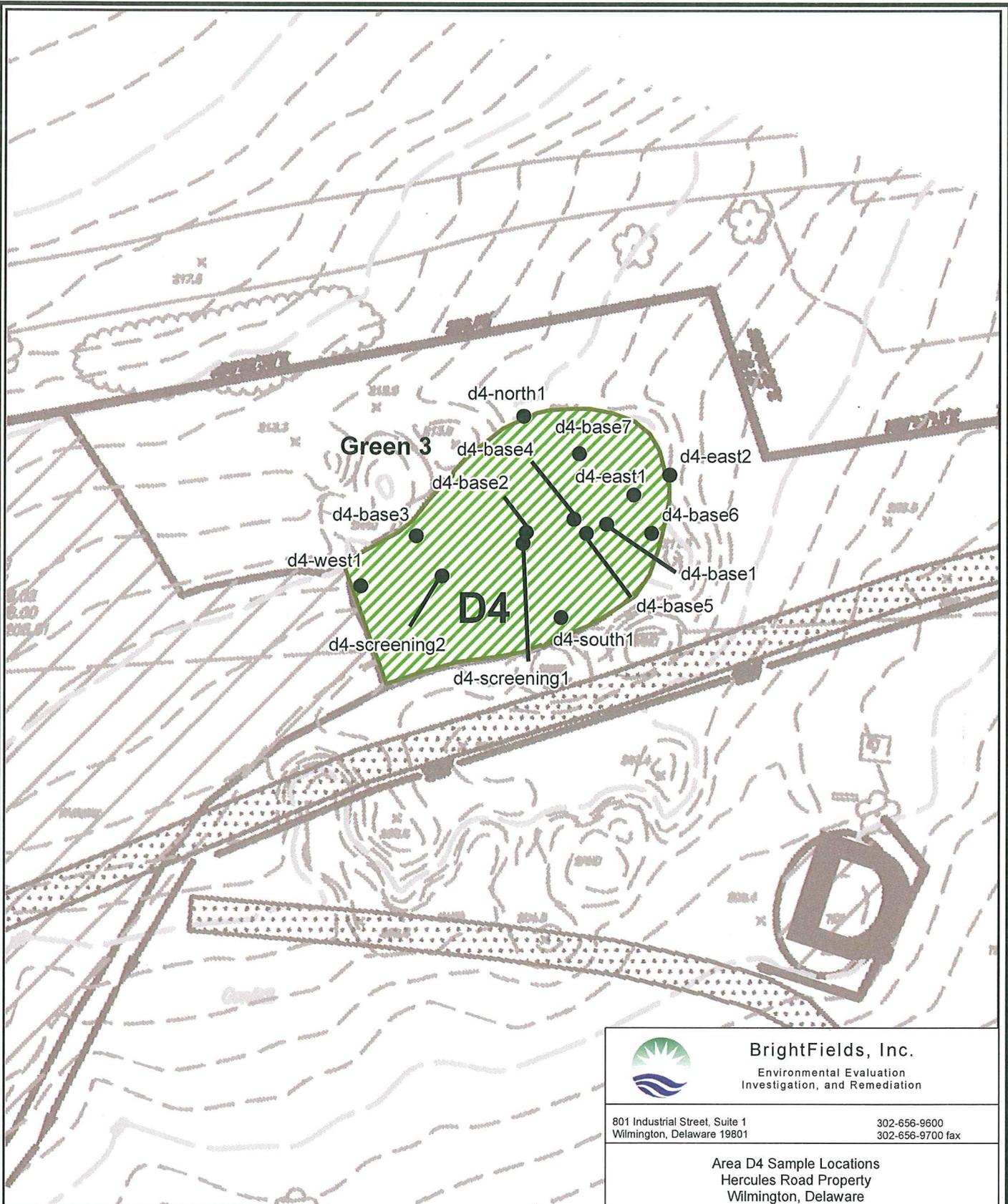
A handwritten signature in cursive script, appearing to read "Lee dePersia".

Lee dePersia, P.E.
Senior Program Manager

cc: Mr. Andrew Semon, Toll Brothers

3 Attachments

1. Figure 1 Green 3 (Remediation Area D4) Sample Locations
2. Table 1 Green 3 (Remediation Area D4) XRF Screening Results
3. Table 2 Soil Sample Analytical Results, Green 3, Remediation Area D4



Legend

- Sample Locations
- ▨ Area Where Cleanup Goal Attained



BrightFields, Inc.
Environmental Evaluation
Investigation, and Remediation

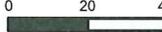
801 Industrial Street, Suite 1
Wilmington, Delaware 19801

302-656-9600
302-656-9700 fax

Area D4 Sample Locations
Hercules Road Property
Wilmington, Delaware

	By	Date	Scale:	File Name:
Drawn	DPL	10/27/09	1:540	D4.mxd
Checked	LDP	10/27/09	Fig. No.	
Project #	1938.08.52		Figure 1	

0 20 40 Feet



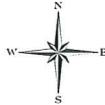


Table 1. Green 3 (Remediation Area D4) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
3-Oct-09	Soil	9:51:22	62	6	D4-EAST1	0-1 ft bgs
3-Oct-09	Soil	9:53:42	63	6	D4-EAST1	0-1 ft bgs
3-Oct-09	Soil	9:55:08	76	7	D4-EAST1	0-1 ft bgs
3-Oct-09	Soil	9:56:30	63	6	D4-EAST1	0-1 ft bgs
			66		D4-EAST1 Average	
3-Oct-09	Soil	10:50:03	9	4	D4-EAST2	0-1 ft bgs
3-Oct-09	Soil	10:51:21	5	4	D4-EAST2	0-1 ft bgs
3-Oct-09	Soil	10:52:25	18	4	D4-EAST2	0-1 ft bgs
3-Oct-09	Soil	10:53:25	14	4	D4-EAST2	0-1 ft bgs
			12		D4-EAST2 Average	
3-Oct-09	Soil	10:24:53	8	3	D4-NORTH1	0-1 ft bgs
3-Oct-09	Soil	10:25:54	9	3	D4-NORTH1	0-1 ft bgs
3-Oct-09	Soil	10:26:55	8	3	D4-NORTH1	0-1 ft bgs
3-Oct-09	Soil	10:28:06	6	3	D4-NORTH1	0-1 ft bgs
			8		D4-NORTH1 Average	
3-Oct-09	Soil	10:19:17	15	3	D4-SOUTH1	0-1 ft bgs
3-Oct-09	Soil	10:20:45	12	3	D4-SOUTH1	0-1 ft bgs
3-Oct-09	Soil	10:21:46	6	3	D4-SOUTH1	0-1 ft bgs
3-Oct-09	Soil	10:22:49	8	3	D4-SOUTH1	0-1 ft bgs
			10		D4-SOUTH1 Average	
3-Oct-09	Soil	10:05:18	15	3	D4-WEST1	0-1 ft bgs
3-Oct-09	Soil	10:06:38	18	4	D4-WEST1	0-1 ft bgs
3-Oct-09	Soil	10:10:25	15	4	D4-WEST1	0-1 ft bgs
3-Oct-09	Soil	10:12:16	12	4	D4-WEST1	0-1 ft bgs
			15		D4-WEST1 Average	
10-Oct-09	Soil		155		D4-Base1	1 ft bgs
10-Oct-09	Soil		157		D4-Base1	1 ft bgs
10-Oct-09	Soil		211		D4-Base1	1 ft bgs
10-Oct-09	Soil		129		D4-Base1	1 ft bgs
			163		D4-Base1 Average	
10-Oct-09	Soil		11		D4-Base2	1 ft bgs
10-Oct-09	Soil		6		D4-Base2	1 ft bgs
10-Oct-09	Soil		6		D4-Base2	1 ft bgs
10-Oct-09	Soil		7		D4-Base2	1 ft bgs
			8		D4-Base2 Average	
10-Oct-09	Soil		21		D4-Base3	1 ft bgs
10-Oct-09	Soil		11		D4-Base3	1 ft bgs
10-Oct-09	Soil		10		D4-Base3	1 ft bgs
10-Oct-09	Soil		8		D4-Base3	1 ft bgs
			13		D4-Base3 Average	
10-Oct-09	Soil		11		D4-Base4	1 ft bgs

Table 1. Green 3 (Remediation Area D4) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
10-Oct-09	Soil		9		D4-Base4	1 ft bgs
10-Oct-09	Soil		13		D4-Base4	1 ft bgs
10-Oct-09	Soil		17		D4-Base4	1 ft bgs
			13		D4-Base4 Average	
12-Oct-09	Soil	8:01:24	36	4	D4-BASE2 18	1.5 ft bgs
12-Oct-09	Soil	8:04:47	40	5	D4-BASE2 18	1.5 ft bgs
12-Oct-09	Soil	8:05:46	11	4	D4-BASE2 18	1.5 ft bgs
12-Oct-09	Soil	8:06:39	27	5	D4-BASE2 18	1.5 ft bgs
			29		D4-BASE2 18 Average	
12-Oct-09	Soil	7:57:26	2	4	D4-BASE5	2.0 ft bgs
12-Oct-09	Soil	7:58:07	0	3	D4-BASE5	2.0 ft bgs
12-Oct-09	Soil	7:58:47	5	4	D4-BASE5	2.0 ft bgs
12-Oct-09	Soil	7:59:30	8	4	D4-BASE5	2.0 ft bgs
			4		D4-BASE5 Average	
12-Oct-09	Soil	8:13:59	-3	4	D4-BASE6	1.5 ft bgs
12-Oct-09	Soil	8:15:04	3	4	D4-BASE6	1.5 ft bgs
12-Oct-09	Soil	8:15:51	8	4	D4-BASE6	1.5 ft bgs
12-Oct-09	Soil	8:16:36	1	4	D4-BASE6	1.5 ft bgs
			2		D4-BASE6 Average	
12-Oct-09	Soil	8:17:42	83	6	D4-BASE7 18	1.5 ft bgs
12-Oct-09	Soil	8:18:41	69	6	D4-BASE7 18	1.5 ft bgs
12-Oct-09	Soil	8:23:00	57	5	D4-BASE7 18	1.5 ft bgs
12-Oct-09	Soil	8:24:17	58	6	D4-BASE7 18	1.5 ft bgs
			67		D4-BASE7 18 Average	
12-Oct-09	Soil	9:51:55	6	3	D4-base7 24	2.0 ft bgs
12-Oct-09	Soil	9:52:36	4	4	D4-base7 24	2.0 ft bgs
12-Oct-09	Soil	9:53:18	7	4	D4-base7 24	2.0 ft bgs
12-Oct-09	Soil	9:54:02	6	4	D4-base7 24	2.0 ft bgs
			6		D4-base7 24 Average	
12-Oct-09	Soil	11:37:03	17	4	D4-SCREENING1	0-1 ft bgs
12-Oct-09	Soil	11:38:04	8	4	D4-SCREENING1	0-1 ft bgs
12-Oct-09	Soil	11:38:47	14	4	D4-SCREENING1	0-1 ft bgs
12-Oct-09	Soil	11:39:34	19	4	D4-SCREENING1	0-1 ft bgs
			15		D4-SCREENING1 Average	

Table 1. Green 3 (Remediation Area D4) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
12-Oct-09	Soil	15:37:28	16	4	D4-SCREENING1-S002	0-1 ft bgs
12-Oct-09	Soil	15:38:08	14	4	D4-SCREENING1-S002	0-1 ft bgs
12-Oct-09	Soil	15:39:49	17	4	D4-SCREENING1-S002	0-1 ft bgs
12-Oct-09	Soil	15:40:47	13	4	D4-SCREENING1-S002	0-1 ft bgs
12-Oct-09	Soil	15:41:37	8	4	D4-SCREENING1-S002	0-1 ft bgs
			14		D4-SCREENING1-S002 Average	
12-Oct-09	Soil	11:58:40	17	5	D4-SCREENING2	0-1 ft bgs
12-Oct-09	Soil	11:59:36	39	5	D4-SCREENING2	0-1 ft bgs
12-Oct-09	Soil	12:00:27	29	5	D4-SCREENING2	0-1 ft bgs
12-Oct-09	Soil	12:04:36	28	5	D4-SCREENING2	0-1 ft bgs
			28		D4-SCREENING2 Average	
12-Oct-09	Soil	15:42:56	13	4	D4-SCREENING2-S002	0-1 ft bgs
12-Oct-09	Soil	15:43:47	13	4	D4-SCREENING2-S002	0-1 ft bgs
12-Oct-09	Soil	15:44:35	7	4	D4-SCREENING2-S002	0-1 ft bgs
12-Oct-09	Soil	15:45:22	12	4	D4-SCREENING2-S002	0-1 ft bgs
			11		D4-SCREENING2-S002 Average	
20-Oct-09	Soil	12:21:45	15	5	D4-WEST1-S002	0-1 ft bgs
20-Oct-09	Soil	12:22:27	6	4	D4-WEST1-S002	0-1 ft bgs
20-Oct-09	Soil	12:23:11	2	4	D4-WEST1-S002	0-1 ft bgs
20-Oct-09	Soil	12:23:55	11	4	D4-WEST1-S002	0-1 ft bgs
			9		D4-WEST1-S002 Average	
20-Oct-09	Soil	12:16:50	16	4	D4-SCREENING1-S003	0-1 ft bgs
20-Oct-09	Soil	12:17:36	14	5	D4-SCREENING1-S003	0-1 ft bgs
20-Oct-09	Soil	12:18:17	10	4	D4-SCREENING1-S003	0-1 ft bgs
20-Oct-09	Soil	12:19:03	5	4	D4-SCREENING1-S003	0-1 ft bgs
			11		D4-SCREENING1-S003 Average	

*XRF concentration used is an average of the 4 or more individual readings.

TABLE 2
Soil Sample Analytical Results
Green 3, Remediation Area D4
Greenville Overlook

Sample ID	Sampling Date	Sample Depth (ft bgs)	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)		D4-East 2-S001 10/3/2009 0.0-1.0 mg/Kg	D4-North 1-S001 10/3/2009 0.0-1.0 mg/Kg	D4-South 1-S001 10/3/2009 0.0-1.0 mg/Kg	D4-West 1-S001 10/3/2009 0.0-1.0 mg/Kg	D4-West1-S002 10/20/2009 0.0-1.0 mg/Kg	
			Unrestricted Use							
PESTICIDES/PCBs										
Aldrin			0.040	U	0.0087	U	0.0076	U	0.0084	U
alpha-Chlordane			2	p	0.011	p	0.022	p	0.065	p
Dieldrin			0.040	J p	0.0044	J p	0.0076	U	0.0058	J p
gamma-Chlordane			2		0.018		0.019		0.042	
Heptachlor epoxide			0.070	J	0.0035	J	0.0081		0.014	J
No other pesticides were required to be analyzed as part of this confirmatory sampling event.										
METALS										
Arsenic			11 ^t		9.9		7.7		15.0	
Cadmium			4	U	1.3	U	1.1	U	1.2	U
Lead			400		35.8		13.1		33.1	
Mercury			10		0.98		0.76		0.55	
No other metals were required to be analyzed as part of this confirmatory sampling event.										
WET CHEMISTRY										
Percent Moisture (%)					23.5		12.1		20.2	
Percent Solids (%)					76.5		87.9		79.8	

* - below ground surface
t - Delaware background concentration (DNREC, 2007)
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U: Indicates the analyte was analyzed for but not detected.
Shaded - Concentrations were detected above the unrestricted use criteria.

TABLE 2
Soil Sample Analytical Results
Green 3, Remediation Area D4
Greenville Overlook

Sample ID	Sampling Date	Sample Depth (ft bgs)	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)		D4- Base 5 - S002 10/12/2009 2.0 mg/Kg	D4- Base 5 - S102 10/12/2009 2.0 mg/Kg (Field Duplicate)	D4-Screening 1-S001 10/12/2009 0.0-1.0 mg/Kg	D4-Screening1-S003 10/20/2009 0.0-1.0 mg/Kg
			Unrestricted Use					
PESTICIDES/PCBS								
Aldrin			0.040		0.0083 U	0.0083 U	0.0086 U	0.0089 U
alpha-Chlordane			2		0.0083 U	0.0083 U	0.033 P	0.007 J
Dieldrin			0.040		0.0083 U	0.0083 U	0.0086 U	0.0089 U
gamma-Chlordane			2		0.0083 U	0.0083 U	0.025	0.0036 J p
Heptachlor epoxide			0.070		0.0083 U	0.0083 U	0.011	0.0089 U
No other pesticides were required to be analyzed as part of this c								
METALS								
Arsenic			11 ¹		6.4	6.4	16.2	8.3
Cadmium			4		3.0 U	1.2 U	1.3 U	1.3 U
Lead			400		11.6	11.8	16.3	18.2
Mercury			10		0.040 U	0.040 U	0.18	0.081
No other metals were required to be analyzed as part of this c								
WET CHEMISTRY								
Percent Moisture (%)					19.4	19.3	21.8	24.5
Percent Solids (%)					80.6	80.7	78.2	75.5

* - below ground surface
t - Delaware background concentration (DNREC, 2007)
J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
U: Indicates the analyte was analyzed for but not detected.
Shaded - Concentrations were detected above the unrestricted use criteria.

Remedial Action Completion Report
Greenville Overlook
Wilmington, Delaware



BrightFields, Inc.

REMEDIATION AREA

D5 (Men's Tee Hole 4) and D6 (Women's Tee Hole 4)



BrightFields, Inc.
Environmental Services

23 October 2009

Stephen Johnson, P.E.
Delaware Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, DE 19720

**RE: Attainment of Cleanup Goals -- Men's Tee Hole 4, Remediation Area D5 and
Women's Tee Hole 4, Remediation Area D6
Hercules Road Property (Greenville Overlook) (DE-1323)
BrightFields File: 1938.08.52**

Dear Mr. Johnson:

The purpose of this letter is to document attainment of cleanup goals at Men's Tee Hole 4, Remediation Area D5 and Women's Tee Hole 4, Remediation Area D6 by blending the areas in in each location (see attached figure).

Screening samples were collected from D5 and D6 to delineate the area for blending. Samples were screened using BrightFields' Innov-x X-Ray fluorescence analyzer (XRF) to assess arsenic concentrations. A correlation study previously performed indicated that an XRF reading of 14 mg/kg corresponds to a laboratory arsenic result of 11 mg/kg (the arsenic cleanup goal). Arsenic was used as an indicator compound based on previous site data that showed that if the arsenic concentration is below the cleanup goal, the other site contaminants will be below their respective cleanup goals as well. Figure 1 shows the location of all samples collected. Table 1 presents the XRF screening results. At least four readings were obtained with the XRF for each soil sample and the average of the four used as the representative arsenic concentration for the sample.

Men's Tee Hole 4. On 2 Oct 2009, samples D5-TP1 and D5-TP2 were collected and screened to confirm that blending was required. Since blending was confirmed to be required, samples were collected and screened from the perimeter of the proposed blending area to delineate the lateral extent of blending (sample locations D5-North1, D5-South 1, D5-South2, etc). Where the initial

Mr. Stephen Johnson
Attainment of Cleanup Goals –Men’s Tee Hole 4 (Area D5) and
Women’s Tee Hole 4 (Area D6)
Hercules Road Property (DE-1323)



sample was also sent for laboratory analysis. Table 2 presents the laboratory analysis results for the confirmation sample.

As shown in Table 2, all final confirmatory sample analysis results for Areas D5 and D6 are below the cleanup goals; therefore, remediation of Men’s Tee Hole 4 (Area D5) and Women’s Tee Hole 4 (Area D6) is considered complete.

Please do not hesitate to contact me at (302) 656-9600 should you have question, comments or require additional information.

Sincerely,

BrightFields, Inc.

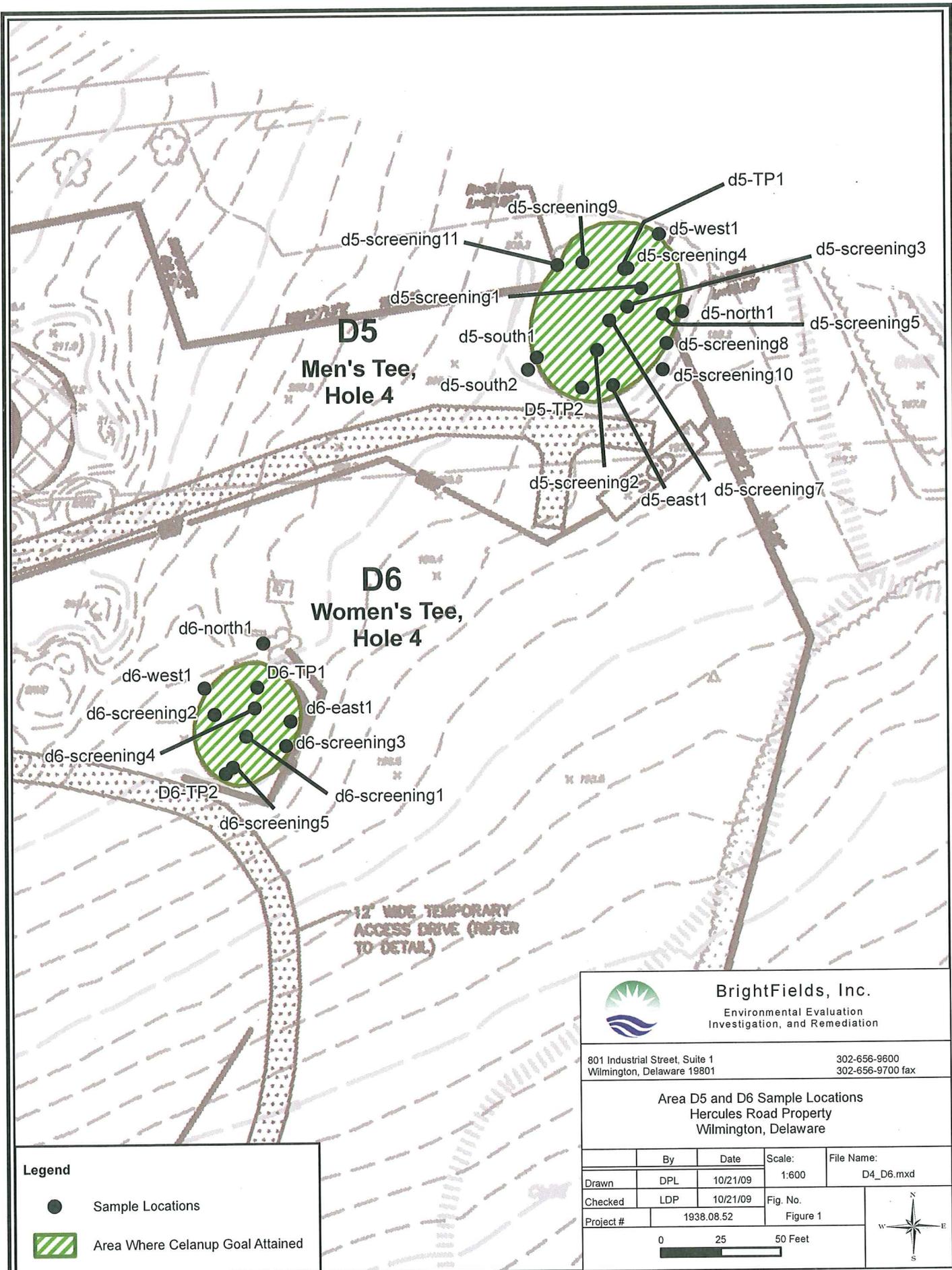
A handwritten signature in cursive script, appearing to read "Lee dePersia".

Lee dePersia, P.E.
Senior Program Manager

cc: Mr. Andrew Semon, Toll Brothers

3 Attachments

1. Figure 1 Men’s Tee Hole 4 (Area D5) and Women’s Tee Hole 4 (Area D6) Sample Locations
2. Table 1 Men’s Tee Hole 4 (Area D5) and Women’s Tee Hole 4 (Area D6) XRF Screening Results
3. Table 2 Soil Sample Analytical Results, Men’s Tee Hole 4 (Area D5) and Women’s Tee Hole 4 (Area D6)



BrightFields, Inc.
 Environmental Evaluation
 Investigation, and Remediation

801 Industrial Street, Suite 1
 Wilmington, Delaware 19801
 302-656-9600
 302-656-9700 fax

Area D5 and D6 Sample Locations
 Hercules Road Property
 Wilmington, Delaware

	By	Date	Scale:	File Name:
Drawn	DPL	10/21/09	1:600	D4_D6.mxd
Checked	LDP	10/21/09	Fig. No.	
Project #	1938.08.52		Figure 1	
			0 25 50 Feet	

Legend

- Sample Locations
- Area Where Cleanup Goal Attained

Table 1. Men's Tee Hole 4 (Remediation Area D5) and Women's Tee Hole 4 (Remediation Area D6) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
2-Oct-09	Soil	10:06:58	33	6	D5-TP1	0-1 ft bgs
2-Oct-09	Soil	10:09:18	21	5	D5-TP1	0-1 ft bgs
2-Oct-09	Soil	10:10:04	34	6	D5-TP1	0-1 ft bgs
2-Oct-09	Soil	10:10:48	27	5	D5-TP1	0-1 ft bgs
			29		D5-TP1 Average	
2-Oct-09	Soil	10:12:18	15	5	D5-TP2	0-1 ft bgs
2-Oct-09	Soil	10:13:02	9	5	D5-TP2	0-1 ft bgs
2-Oct-09	Soil	10:13:47	15	4	D5-TP2	0-1 ft bgs
2-Oct-09	Soil	10:14:30	7	5	D5-TP2	0-1 ft bgs
			12		D5-TP2 Average	
7-Oct-09	Soil	9:21:40	4	4	D5-EAST1	0-1 ft bgs
7-Oct-09	Soil	9:22:41	1	5	D5-EAST1	0-1 ft bgs
7-Oct-09	Soil	9:23:33	8	4	D5-EAST1	0-1 ft bgs
7-Oct-09	Soil	9:24:23	11	5	D5-EAST1	0-1 ft bgs
			6		D5-EAST1 Average	
7-Oct-09	Soil	9:10:57	7	5	D5-NORTH1	0-1 ft bgs
7-Oct-09	Soil	9:12:12	3	4	D5-NORTH1	0-1 ft bgs
7-Oct-09	Soil	9:13:03	5	4	D5-NORTH1	0-1 ft bgs
7-Oct-09	Soil	9:13:51	8	4	D5-NORTH1	0-1 ft bgs
			6		D5-NORTH1 Average	
7-Oct-09	Soil	9:16:51	16	4	D5-SOUTH1	0-1 ft bgs
7-Oct-09	Soil	9:18:00	17	5	D5-SOUTH1	0-1 ft bgs
7-Oct-09	Soil	9:18:49	22	6	D5-SOUTH1	0-1 ft bgs
7-Oct-09	Soil	9:19:38	10	7	D5-SOUTH1	0-1 ft bgs
			16		D5-SOUTH1 Average	
7-Oct-09	Soil	9:41:10	2	4	D5-SOUTH2	0-1 ft bgs
7-Oct-09	Soil	9:42:04	2	4	D5-SOUTH2	0-1 ft bgs
7-Oct-09	Soil	9:43:00	6	6	D5-SOUTH2	0-1 ft bgs
7-Oct-09	Soil	9:43:39	8	4	D5-SOUTH2	0-1 ft bgs
			5		D5-SOUTH2 Average	
7-Oct-09	Soil	8:58:47	51	7	D5-WEST1	0-1 ft bgs
7-Oct-09	Soil	8:59:55	41	8	D5-WEST1	0-1 ft bgs
7-Oct-09	Soil	9:00:45	62	8	D5-WEST1	0-1 ft bgs
7-Oct-09	Soil	9:01:36	61	8	D5-WEST1	0-1 ft bgs
7-Oct-09	Soil	9:51:23	58	7	D5-WEST1	0-1 ft bgs
7-Oct-09	Soil	9:52:25	60	8	D5-WEST1	0-1 ft bgs
7-Oct-09	Soil	9:53:12	50	7	D5-WEST1	0-1 ft bgs
7-Oct-09	Soil	9:53:55	51	7	D5-WEST1	0-1 ft bgs
			54		D5-WEST1 Average	
12-Oct-09	Soil	8:59:34	30	5	D5-SCREENING1	0-1 ft bgs
12-Oct-09	Soil	9:01:04	13	5	D5-SCREENING1	0-1 ft bgs
12-Oct-09	Soil	9:01:55	27	6	D5-SCREENING1	0-1 ft bgs
12-Oct-09	Soil	9:02:37	19	5	D5-SCREENING1	0-1 ft bgs
			22		D5-SCREENING1 Average	
12-Oct-09	Soil	9:12:00	1	4	D5-SCREENING2	0-1 ft bgs
12-Oct-09	Soil	9:12:39	14	4	D5-SCREENING2	0-1 ft bgs
12-Oct-09	Soil	9:13:20	13	4	D5-SCREENING2	0-1 ft bgs
12-Oct-09	Soil	9:14:01	12	4	D5-SCREENING2	0-1 ft bgs
			10		D5-SCREENING2 Average	

Table 1. Men's Tee Hole 4 (Remediation Area D5) and Women's Tee Hole 4 (Remediation Area D6) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
12-Oct-09	Soil	9:44:22	22	5	D5-SCREENING3	0-1 ft bgs
12-Oct-09	Soil	9:45:10	30	6	D5-SCREENING3	0-1 ft bgs
12-Oct-09	Soil	9:45:52	23	5	D5-SCREENING3	0-1 ft bgs
12-Oct-09	Soil	9:46:34	25	5	D5-SCREENING3	0-1 ft bgs
			25		D5-SCREENING3 Average	
12-Oct-09	Soil	9:47:40	15	5	D5-SCREENING4	0-1 ft bgs
12-Oct-09	Soil	9:48:28	18	5	D5-SCREENING4	0-1 ft bgs
12-Oct-09	Soil	9:49:13	31	5	D5-SCREENING4	0-1 ft bgs
12-Oct-09	Soil	9:49:56	20	4	D5-SCREENING4	0-1 ft bgs
			21		D5-SCREENING4 Average	
12-Oct-09	Soil	9:40:33	12	5	D5-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	9:41:39	13	5	D5-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	9:42:26	26	5	D5-SCREENING5	0-1 ft bgs
12-Oct-09	Soil	9:43:13	23	5	D5-SCREENING5	0-1 ft bgs
			19		D5-SCREENING5 Average	
12-Oct-09	Soil	10:12:53	42	6	D5-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	10:14:23	27	5	D5-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	10:15:05	31	6	D5-SCREENING7	0-1 ft bgs
12-Oct-09	Soil	10:15:58	29	5	D5-SCREENING7	0-1 ft bgs
			32		D5-SCREENING7 Average	
12-Oct-09	Soil	10:08:50	21	5	D5-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	10:09:55	13	5	D5-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	10:10:39	24	5	D5-SCREENING8	0-1 ft bgs
12-Oct-09	Soil	10:11:24	11	5	D5-SCREENING8	0-1 ft bgs
			17		D5-SCREENING8 Average	
12-Oct-09	Soil	10:42:30	30	6	D5-SCREENING9	0-1 ft bgs
12-Oct-09	Soil	10:43:14	42	6	D5-SCREENING9	0-1 ft bgs
12-Oct-09	Soil	10:44:02	33	6	D5-SCREENING9	0-1 ft bgs
12-Oct-09	Soil	10:44:51	18	6	D5-SCREENING9	0-1 ft bgs
			31		D5-SCREENING9 Average	
12-Oct-09	Soil	10:32:45	8	4	D5-SCREENING10	0-1 ft bgs
12-Oct-09	Soil	10:38:42	4	4	D5-SCREENING10	0-1 ft bgs
12-Oct-09	Soil	10:39:35	15	4	D5-SCREENING10	0-1 ft bgs
12-Oct-09	Soil	10:40:16	17	4	D5-SCREENING10	0-1 ft bgs
			11		D5-SCREENING10 Average	
12-Oct-09	Soil	11:00:08	15	4	D5-SCREENING11	0-1 ft bgs
12-Oct-09	Soil	11:00:55	10	4	D5-SCREENING11	0-1 ft bgs
12-Oct-09	Soil	11:01:41	9	4	D5-SCREENING11	0-1 ft bgs
12-Oct-09	Soil	11:02:22	12	4	D5-SCREENING11	0-1 ft bgs
			12		D5-SCREENING11 Average	
14-Oct-09	Soil	15:45:12	8	4	D5-SCREENING1-S002	0-1 ft bgs
14-Oct-09	Soil	15:46:01	3	4	D5-SCREENING1-S002	0-1 ft bgs
14-Oct-09	Soil	15:46:43	14	4	D5-SCREENING1-S002	0-1 ft bgs
14-Oct-09	Soil	15:47:38	8	4	D5-SCREENING1-S002	0-1 ft bgs
			8		D5-SCREENING1-S002 Average	

Table 1. Men's Tee Hole 4 (Remediation Area D5) and Women's Tee Hole 4 (Remediation Area D6) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
2-Oct-09	Soil	9:34:15	30	5	D6-TP1	0-1 ft bgs
2-Oct-09	Soil	9:35:18	25	5	D6-TP1	0-1 ft bgs
2-Oct-09	Soil	9:35:58	34	5	D6-TP1	0-1 ft bgs
2-Oct-09	Soil	9:36:51	20	5	D6-TP1	0-1 ft bgs
			27		D6-TP1 Average	
2-Oct-09	Soil	9:38:13	14	4	D6-TP2	0-1 ft bgs
2-Oct-09	Soil	9:38:51	6	4	D6-TP2	0-1 ft bgs
2-Oct-09	Soil	9:39:34	9	4	D6-TP2	0-1 ft bgs
2-Oct-09	Soil	9:40:15	9	5	D6-TP2	0-1 ft bgs
			10		D6-TP2 Average	
7-Oct-09	Soil	10:34:18	8	4	D6-WEST1	0-1 ft bgs
7-Oct-09	Soil	10:35:04	16	4	D6-WEST1	0-1 ft bgs
7-Oct-09	Soil	10:36:09	8	4	D6-WEST1	0-1 ft bgs
7-Oct-09	Soil	10:37:13	10	4	D6-WEST1	0-1 ft bgs
7-Oct-09	Soil	10:38:27	10	5	D6-WEST1	0-1 ft bgs
			10		D6-WEST1 Average	
7-Oct-09	Soil	10:59:24	17	5	D6-EAST1	0-1 ft bgs
7-Oct-09	Soil	11:00:23	4	4	D6-EAST1	0-1 ft bgs
7-Oct-09	Soil	11:01:14	17	5	D6-EAST1	0-1 ft bgs
7-Oct-09	Soil	11:02:03	10	4	D6-EAST1	0-1 ft bgs
			12		D6-EAST1 Average	
7-Oct-09	Soil	10:46:40	12	5	D6-NORTH1	0-1 ft bgs
7-Oct-09	Soil	10:47:38	9	5	D6-NORTH1	0-1 ft bgs
7-Oct-09	Soil	10:50:30	14	4	D6-NORTH1	0-1 ft bgs
7-Oct-09	Soil	10:51:25	13	5	D6-NORTH1	0-1 ft bgs
			12		D6-NORTH1 Average	
8-Oct-09	Soil	10:46:22	22	4	D6-SCREENING1	0-1 ft bgs
8-Oct-09	Soil	10:47:09	19	5	D6-SCREENING1	0-1 ft bgs
8-Oct-09	Soil	10:48:01	21	4	D6-SCREENING1	0-1 ft bgs
8-Oct-09	Soil	10:48:46	13	5	D6-SCREENING1	0-1 ft bgs
			19		D6-SCREENING1 Average	
8-Oct-09	Soil	14:58:47	24	4	D6-SCREENING1-S002	0-1 ft bgs
8-Oct-09	Soil	14:59:32	14	5	D6-SCREENING1-S002	0-1 ft bgs
8-Oct-09	Soil	15:00:16	15	4	D6-SCREENING1-S002	0-1 ft bgs
8-Oct-09	Soil	15:01:04	13	4	D6-SCREENING1-S002	0-1 ft bgs
			17		D6-SCREENING1-S002 Average	
8-Oct-09	Soil	11:00:21	1	4	D6-SCREENING2	0-1 ft bgs
8-Oct-09	Soil	11:01:25	1	4	D6-SCREENING2	0-1 ft bgs
8-Oct-09	Soil	11:02:12	14	4	D6-SCREENING2	0-1 ft bgs
8-Oct-09	Soil	11:02:58	14	4	D6-SCREENING2	0-1 ft bgs
			8		D6-SCREENING2 Average	
8-Oct-09	Soil	11:13:23	21	5	D6-SCREENING3	0-1 ft bgs
8-Oct-09	Soil	11:14:17	3	4	D6-SCREENING3	0-1 ft bgs
8-Oct-09	Soil	11:15:11	14	4	D6-SCREENING3	0-1 ft bgs
8-Oct-09	Soil	11:15:56	10	5	D6-SCREENING3	0-1 ft bgs
			12		D6-SCREENING3 Average	

Table 1. Men's Tee Hole 4 (Remediation Area D5) and Women's Tee Hole 4 (Remediation Area D6) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
8-Oct-09	Soil	11:34:30	26	5	D6-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	11:35:49	10	5	D6-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	11:36:34	22	5	D6-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	11:37:18	16	5	D6-SCREENING4	0-1 ft bgs
			19		D6-SCREENING4 Average	
8-Oct-09	Soil	11:30:05	12	4	D6-SCREENING5	0-1 ft bgs
8-Oct-09	Soil	11:30:54	16	5	D6-SCREENING5	0-1 ft bgs
8-Oct-09	Soil	11:31:41	20	5	D6-SCREENING5	0-1 ft bgs
8-Oct-09	Soil	11:32:30	12	5	D6-SCREENING5	0-1 ft bgs
			15		D6-SCREENING5 Average	
14-Oct-09	Soil	15:48:54	-1	4	D6-SCREENING1-S003	0-1 ft bgs
14-Oct-09	Soil	15:49:57	10	4	D6-SCREENING1-S003	0-1 ft bgs
14-Oct-09	Soil	15:50:44	3	4	D6-SCREENING1-S003	0-1 ft bgs
14-Oct-09	Soil	15:52:26	8	4	D6-SCREENING1-S003	0-1 ft bgs
			5		D6-SCREENING1-S003 Average	

* XRF concentration used is an average of 4 or more individual readings.

TABLE 2
Soil Sample Analytical Results
Men's Tee Hole 4, Remediation Area D5 and Women's Tee Hole 4, Remediation Area D6
Greenville Overlook

Sample ID	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)		D5-Screening-1-(Reblend)-S001 10/14/2009 0.0-1.0 mg/Kg	D6-Screening-1-(Reblend)-S001 10/14/2009 0.0-1.0 mg/Kg
	Sampling Date	Sample Depth (ft bgs)		
Units	Unrestricted Use			
Analyte	Unrestricted Use			
PESTICIDES/PCBs				
Aldrin	0.040		0.0083 U	0.0081 U
alpha-Chlordane	2		0.0083 U	0.0036 J p ¹
Dieldrin	0.040		0.0083 U	0.0081 U
gamma-Chlordane	2		0.0083 U	0.0081 U
Heptachlor epoxide	0.070		0.0083 U	0.0081 U
No other pesticides were required to be analyzed as part of this confirmatory sampling event.				
METALS				
Arsenic	11 ^t		5.5	6.7
Cadmium	4		1.2 U	1.2 U
Lead	400		18.1	19.7
Mercury	10		0.070	0.18
No other metals were required to be analyzed as part of this confirmatory sampling event.				
WET CHEMISTRY				
Percent Moisture (%)			19.4	17.1
Percent Solids (%)			80.6	82.9

* - below ground surface

NR: Not analyzed.

t - Delaware background concentration (DNREC, 2007)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

U: Indicates the analyte was analyzed for but not detected.

1: Recovery or RPD exceeds control limits

Remedial Action Completion Report
Greenville Overlook
Wilmington, Delaware



BrightFields, Inc.

REMEDIATION AREA

D7 (Fairway 4)



BrightFields, Inc.
Environmental Services

16 October 2009

Mr. Stephen Johnson, P.E.
Delaware Department of Natural Resources and Environmental Control
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, DE 19720

**RE: Attainment of Cleanup Goals – Fairway 4, Remediation Area D7
Hercules Road Property (Greenville Overlook) (DE-1323)
BrightFields File: 1938.08.52**

Dear Mr. Johnson:

The purpose of this letter is to document attainment of cleanup goals at Fairway 4, Remediation Area D7 (see Figure 1 attached). Fairway 4 was blended and this letter documents that cleanup goals were attained.

To delineate the area for blending, screening soil samples were collected around the perimeter of the planned blending area (d7-perimeter and d7-swale samples shown on Figure 1). These samples were screened using an Innov-x XRF for arsenic concentration. A correlation study previously performed indicated that an XRF reading of 14 mg/kg corresponds to a laboratory arsenic result of 11 mg/kg (the arsenic cleanup goal). Arsenic was used as an indicator compound based on previous site data that showed if the arsenic concentration is below the cleanup goal, the other site contaminants will be below their respective cleanup goals as well.

Table 1 presents the XRF screening results. At least four readings were obtained with the XRF for each soil sample and the average of the four used as the representative arsenic concentration for the sample. Where the initial screening samples exceeded the cleanup goal, additional samples were obtained at approximately 10 foot intervals moving away from the center of the blending area until an average XRF reading of 14 mg/kg or less was obtained. Examples of where the blending area was enlarged is at d7-swale-7a, b and c; and at d7-swale-3a, b and c. Blending was performed within the green hatched area on Figure 1 and was performed to a total depth of 30 inches below the ground surface.

Mr. Stephen Johnson
Attainment of Cleanup Goals – Fairway 4, Area D7
Hercules Road Property (DE-1323)



Once blending was complete, screening samples of the blended soil were collected at sample locations d7-Screening2 through 7 (there was no sample 7d-Screening1) (see Figure 1). If screening results indicated the arsenic concentration was below 14 mg/kg with the XRF, samples were collected for laboratory confirmation. Table 2 presents the laboratory analysis data for the confirmation samples. The location of the confirmation samples was determined using Visual Sample Plan software (version 4.6d) and is based on a systematic grid sampling approach to provide a 95% probability that a hot spot will be detected if it exists. This sampling plan was detailed in Appendix A to the Final Remedial Action Plan.

All final confirmatory sample analysis results are below the cleanup goals; therefore, remediation of Fairway 4 (Area D7) is considered complete.

Please do not hesitate to contact me at (302) 656-9600 should you have question, comments or require additional information.

Sincerely,

BrightFields, Inc.

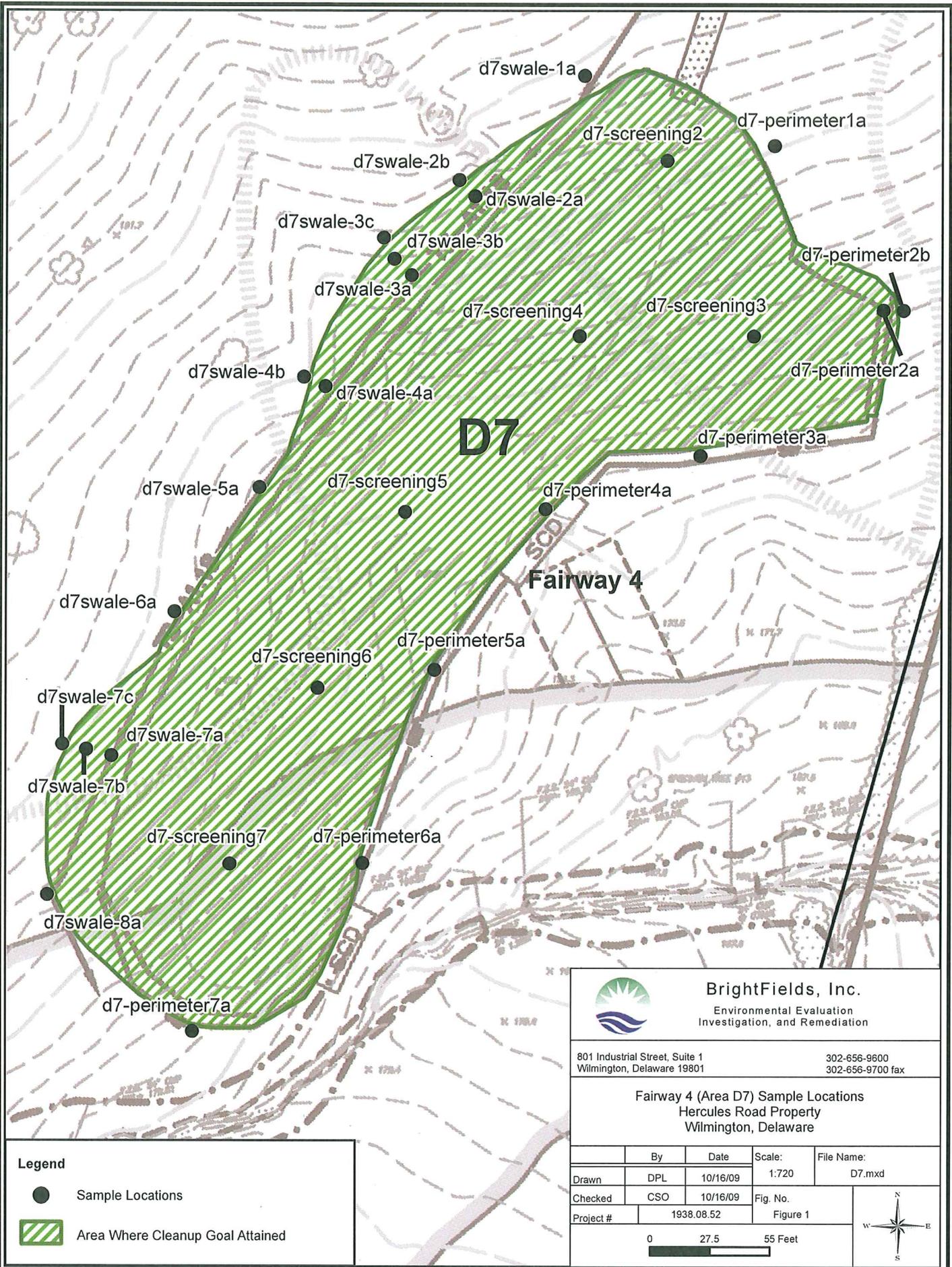
A handwritten signature in cursive script that reads "Lee dePersia".

Lee dePersia, P.E.
Senior Program Manager

cc: Mr. Andrew Semon, Toll Brothers

3 Attachments

1. Figure 1 Fairway 4 (Area D7) Sample Locations
2. Table 1 Fairway 4 (Remediation Area D7) XRF Screening Results
3. Table 2 Soil Sample Analytical Results, Fairway 4, Remediation Area D7



Legend

- Sample Locations
- ▨ Area Where Cleanup Goal Attained



BrightFields, Inc.
 Environmental Evaluation
 Investigation, and Remediation

801 Industrial Street, Suite 1
 Wilmington, Delaware 19801

302-656-9600
 302-656-9700 fax

Fairway 4 (Area D7) Sample Locations
 Hercules Road Property
 Wilmington, Delaware

	By	Date	Scale:	File Name:
Drawn	DPL	10/16/09	1:720	D7.mxd
Checked	CSO	10/16/09	Fig. No.	
Project #	1938.08.52		Figure 1	
			0 27.5 55 Feet	

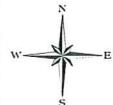


Table 1. Fairway 4 (Remediation Area D7) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
6-Oct-09	Soil	13:53:32	11	4	D7-PERIMETER1A	0-1 ft bgs
6-Oct-09	Soil	13:55:28	9	4	D7-PERIMETER1A	0-1 ft bgs
6-Oct-09	Soil	13:56:12	7	4	D7-PERIMETER1A	0-1 ft bgs
6-Oct-09	Soil	13:56:55	7	4	D7-PERIMETER1A	0-1 ft bgs
			8.5		D7-PERIMETER1A Average	0-1 ft bgs
6-Oct-09	Soil	13:58:11	12	4	D7-PERIMETER2A	0-1 ft bgs
6-Oct-09	Soil	13:58:56	21	4	D7-PERIMETER2A	0-1 ft bgs
6-Oct-09	Soil	13:59:41	22	4	D7-PERIMETER2A	0-1 ft bgs
6-Oct-09	Soil	14:00:27	19	5	D7-PERIMETER2A	0-1 ft bgs
			18.5		D7-PERIMETER2A Average	0-1 ft bgs
6-Oct-09	Soil	14:33:52	7	4	D7-PERIMETER2B	0-1 ft bgs
6-Oct-09	Soil	14:34:54	-2	4	D7-PERIMETER2B	0-1 ft bgs
6-Oct-09	Soil	14:35:37	0	4	D7-PERIMETER2B	0-1 ft bgs
6-Oct-09	Soil	14:36:22	7	4	D7-PERIMETER2B	0-1 ft bgs
			3		D7-PERIMETER2B Average	0-1 ft bgs
6-Oct-09	Soil	14:01:32	12	4	D7-PERIMETER3A	0-1 ft bgs
6-Oct-09	Soil	14:02:39	22	5	D7-PERIMETER3A	0-1 ft bgs
6-Oct-09	Soil	14:03:23	10	4	D7-PERIMETER3A	0-1 ft bgs
6-Oct-09	Soil	14:04:09	15	5	D7-PERIMETER3A	0-1 ft bgs
6-Oct-09	Soil	14:05:45	9	4	D7-PERIMETER3A	0-1 ft bgs
			13.6		D7-PERIMETER3A Average	0-1 ft bgs
6-Oct-09	Soil	14:07:22	8	4	D7-PERIMETER4A	0-1 ft bgs
6-Oct-09	Soil	14:08:22	12	4	D7-PERIMETER4A	0-1 ft bgs
6-Oct-09	Soil	14:09:08	4	4	D7-PERIMETER4A	0-1 ft bgs
6-Oct-09	Soil	14:09:55	6	4	D7-PERIMETER4A	0-1 ft bgs
			7.5		D7-PERIMETER4A Average	0-1 ft bgs
6-Oct-09	Soil	14:11:15	19	4	D7-PERIMETER5A	0-1 ft bgs
6-Oct-09	Soil	14:12:03	7	4	D7-PERIMETER5A	0-1 ft bgs
6-Oct-09	Soil	14:12:48	12	4	D7-PERIMETER5A	0-1 ft bgs
6-Oct-09	Soil	14:13:37	11	4	D7-PERIMETER5A	0-1 ft bgs
			12.25		D7-PERIMETER5A Average	0-1 ft bgs
6-Oct-09	Soil	14:17:34	15	4	D7-PERIMETER6A	0-1 ft bgs
6-Oct-09	Soil	14:18:20	11	4	D7-PERIMETER6A	0-1 ft bgs
6-Oct-09	Soil	14:19:06	12	5	D7-PERIMETER6A	0-1 ft bgs
6-Oct-09	Soil	14:19:52	9	4	D7-PERIMETER6A	0-1 ft bgs
			11.75		D7-PERIMETER6A Average	0-1 ft bgs
6-Oct-09	Soil	14:29:30	11	4	D7-PERIMETER7A	0-1 ft bgs
6-Oct-09	Soil	14:30:33	12	4	D7-PERIMETER7A	0-1 ft bgs
6-Oct-09	Soil	14:31:16	7	4	D7-PERIMETER7A	0-1 ft bgs
6-Oct-09	Soil	14:32:13	11	4	D7-PERIMETER7A	0-1 ft bgs

Table 1. Fairway 4 (Remediation Area D7) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
			10.25		D7-PERIMETER7A Average	0-1 ft bgs
8-Oct-09	Soil	9:50:27	14	4	D7-SCREENING2	0-1 ft bgs
8-Oct-09	Soil	9:51:32	9	4	D7-SCREENING2	0-1 ft bgs
8-Oct-09	Soil	9:52:16	6	4	D7-SCREENING2	0-1 ft bgs
8-Oct-09	Soil	9:53:01	4	4	D7-SCREENING2	0-1 ft bgs
			8.25		D7-SCREENING2 Average	0-1 ft bgs
8-Oct-09	Soil	9:54:35	5	4	D7-SCREENING3	0-1 ft bgs
8-Oct-09	Soil	9:55:36	8	4	D7-SCREENING3	0-1 ft bgs
8-Oct-09	Soil	9:56:21	13	4	D7-SCREENING3	0-1 ft bgs
8-Oct-09	Soil	9:57:08	16	4	D7-SCREENING3	0-1 ft bgs
			10.5		D7-SCREENING3 Average	0-1 ft bgs
8-Oct-09	Soil	9:59:42	5	4	D7-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	10:00:27	9	4	D7-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	10:01:21	12	4	D7-SCREENING4	0-1 ft bgs
8-Oct-09	Soil	10:02:09	16	5	D7-SCREENING4	0-1 ft bgs
			10.5		D7-SCREENING4 Average	0-1 ft bgs
8-Oct-09	Soil	10:03:38	11	4	D7-SCREENING5	0-1 ft bgs
8-Oct-09	Soil	10:04:36	5	4	D7-SCREENING5	0-1 ft bgs
8-Oct-09	Soil	10:05:50	13	4	D7-SCREENING5	0-1 ft bgs
8-Oct-09	Soil	10:06:34	12	4	D7-SCREENING5	0-1 ft bgs
			10.25		D7-SCREENING5 Average	0-1 ft bgs
8-Oct-09	Soil	10:08:17	12	4	D7-SCREENING6	0-1 ft bgs
8-Oct-09	Soil	10:09:31	13	4	D7-SCREENING6	0-1 ft bgs
8-Oct-09	Soil	10:10:30	15	4	D7-SCREENING6	0-1 ft bgs
8-Oct-09	Soil	10:11:18	7	4	D7-SCREENING6	0-1 ft bgs
			11.75		D7-SCREENING6 Average	0-1 ft bgs
8-Oct-09	Soil	10:14:41	14	4	D7-SCREENING7	0-1 ft bgs
8-Oct-09	Soil	10:15:29	8	4	D7-SCREENING7	0-1 ft bgs
8-Oct-09	Soil	10:16:16	11	4	D7-SCREENING7	0-1 ft bgs
8-Oct-09	Soil	10:17:01	9	4	D7-SCREENING7	0-1 ft bgs
			10.5		D7-SCREENING7 Average	0-1 ft bgs
30-Sep-09	Soil	12:29:47	13	9	D7-SWALE-1a	0-1 ft bgs
30-Sep-09	Soil	12:30:44	15	7	D7-SWALE-1a	0-1 ft bgs
30-Sep-09	Soil	12:32:02	32	16	D7-SWALE-1a	0-1 ft bgs
			20		D7-SWALE-1a Average	0-1 ft bgs
30-Sep-09	Soil	12:44:00	18	6	D7-SWALE-2a	0-1 ft bgs
30-Sep-09	Soil	12:45:55	27	5	D7-SWALE-2a	0-1 ft bgs
30-Sep-09	Soil	12:46:48	21	5	D7-SWALE-2a	0-1 ft bgs
30-Sep-09	Soil	12:47:35	20	5	D7-SWALE-2a	0-1 ft bgs
			21.5		D7-SWALE-2a Average	0-1 ft bgs

Table 1. Fairway 4 (Remediation Area D7) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
30-Sep-09	Soil	13:07:02	17	4	D7-SWALE-2b	0-1 ft bgs
30-Sep-09	Soil	13:07:48	10	4	D7-SWALE-2b	0-1 ft bgs
30-Sep-09	Soil	13:08:34	15	5	D7-SWALE-2b	0-1 ft bgs
30-Sep-09	Soil	13:09:16	12	4	D7-SWALE-2b	0-1 ft bgs
			13.5		D7-SWALE-2b Average	0-1 ft bgs
30-Sep-09	Soil	12:50:37	25	5	D7-SWALE-3a	0-1 ft bgs
30-Sep-09	Soil	12:51:40	19	5	D7-SWALE-3a	0-1 ft bgs
30-Sep-09	Soil	12:52:24	23	5	D7-SWALE-3a	0-1 ft bgs
30-Sep-09	Soil	12:53:09	17	5	D7-SWALE-3a	0-1 ft bgs
			21		D7-SWALE-3a Average	0-1 ft bgs
30-Sep-09	Soil	13:18:02	20	6	D7-SWALE-3b	0-1 ft bgs
30-Sep-09	Soil	13:19:22	13	6	D7-SWALE-3b	0-1 ft bgs
30-Sep-09	Soil	13:20:13	12	6	D7-SWALE-3b	0-1 ft bgs
30-Sep-09	Soil	13:21:05	25	6	D7-SWALE-3b	0-1 ft bgs
			17.5		D7-SWALE-3b Average	0-1 ft bgs
30-Sep-09	Soil	13:32:49	9	6	D7-SWALE-3c	0-1 ft bgs
30-Sep-09	Soil	13:33:34	15	5	D7-SWALE-3c	0-1 ft bgs
30-Sep-09	Soil	13:34:20	11	4	D7-SWALE-3c	0-1 ft bgs
30-Sep-09	Soil	13:35:05	10	4	D7-SWALE-3c	0-1 ft bgs
			11.25		D7-SWALE-3c Average	0-1 ft bgs
30-Sep-09	Soil	13:00:23	20	5	D7-SWALE-4a	0-1 ft bgs
30-Sep-09	Soil	13:01:23	7	5	D7-SWALE-4a	0-1 ft bgs
30-Sep-09	Soil	13:02:13	15	4	D7-SWALE-4a	0-1 ft bgs
30-Sep-09	Soil	13:03:05	17	5	D7-SWALE-4a	0-1 ft bgs
			14.75		D7-SWALE-4a Average	0-1 ft bgs
30-Sep-09	Soil	13:25:23	5	4	D7-SWALE-4b	0-1 ft bgs
30-Sep-09	Soil	13:26:17	9	5	D7-SWALE-4b	0-1 ft bgs
30-Sep-09	Soil	13:27:03	5	5	D7-SWALE-4b	0-1 ft bgs
30-Sep-09	Soil	13:27:50	18	4	D7-SWALE-4b	0-1 ft bgs
			9.25		D7-SWALE-4b Average	0-1 ft bgs
30-Sep-09	Soil	13:36:53	13	4	D7-SWALE-5a	0-1 ft bgs
30-Sep-09	Soil	13:37:38	12	4	D7-SWALE-5a	0-1 ft bgs
30-Sep-09	Soil	13:38:24	8	4	D7-SWALE-5a	0-1 ft bgs
30-Sep-09	Soil	13:39:11	11	4	D7-SWALE-5a	0-1 ft bgs
			11		D7-SWALE-5a Average	0-1 ft bgs
30-Sep-09	Soil	13:43:52	18	4	D7-SWALE-6a	0-1 ft bgs
30-Sep-09	Soil	13:45:15	10	4	D7-SWALE-6a	0-1 ft bgs
30-Sep-09	Soil	13:46:01	16	4	D7-SWALE-6a	0-1 ft bgs
30-Sep-09	Soil	13:46:46	8	4	D7-SWALE-6a	0-1 ft bgs
			13		D7-SWALE-6a Average	0-1 ft bgs

Table 1. Fairway 4 (Remediation Area D7) XRF Screening Results

Date	Matrix	Time	XRF Uncorrected Arsenic Concentration (mg/kg) *	Error Range As +/-	Field ID	Depth
30-Sep-09	Soil	13:51:10	18	6	D7-SWALE-7a	0-1 ft bgs
30-Sep-09	Soil	13:52:21	8	5	D7-SWALE-7a	0-1 ft bgs
30-Sep-09	Soil	13:53:04	23	5	D7-SWALE-7a	0-1 ft bgs
30-Sep-09	Soil	13:53:50	18	5	D7-SWALE-7a	0-1 ft bgs
			16.75		D7-SWALE-7a Average	0-1 ft bgs
30-Sep-09	Soil	14:06:47	17	5	D7-SWALE-7b	0-1 ft bgs
30-Sep-09	Soil	14:07:52	20	5	D7-SWALE-7b	0-1 ft bgs
30-Sep-09	Soil	14:08:36	24	5	D7-SWALE-7b	0-1 ft bgs
30-Sep-09	Soil	14:09:22	16	5	D7-SWALE-7b	0-1 ft bgs
			19.25		D7-SWALE-7b Average	0-1 ft bgs
30-Sep-09	Soil	14:21:56	23	5	D7-SWALE-7c	0-1 ft bgs
30-Sep-09	Soil	14:22:47	7	7	D7-SWALE-7c	0-1 ft bgs
30-Sep-09	Soil	14:23:28	9	5	D7-SWALE-7c	0-1 ft bgs
30-Sep-09	Soil	14:24:21	10	5	D7-SWALE-7c	0-1 ft bgs
			12.25		D7-SWALE-7c Average	0-1 ft bgs
30-Sep-09	Soil	14:00:02	14	4	D7-SWALE-8a	0-1 ft bgs
30-Sep-09	Soil	14:01:04	10	4	D7-SWALE-8a	0-1 ft bgs
30-Sep-09	Soil	14:01:47	13	4	D7-SWALE-8a	0-1 ft bgs
30-Sep-09	Soil	14:02:28	17	4	D7-SWALE-8a	0-1 ft bgs
			13.5		D7-SWALE-8a Average	0-1 ft bgs

* XRF concentration used is an average of 4 or more individual readings.

TABLE 2
Soil Sample Analytical Results
Fairway 4, Remediation Area D7
Greenville Overlook

Sample ID	DNREC URS for Protection of Human Health Non-Critical Water Resource Area (mg/kg)	D7-SCREENING				D7-SCREENING 4- S101 10/8/2009 mg/Kg
		2- S001 10/8/2009 mg/Kg	3- S001 10/8/2009 mg/Kg	4- S001 10/8/2009 mg/Kg		
Sampling Date	Unrestricted Use					
Sample Depth (ft bgs)						
Units						
Analyte						
PESTICIDES/PCBs						
Aldrin	0.040	0.0083 U	0.0084 U	0.0082 U	0.0083 U	0.0083 U
alpha-Chlordane	2	0.0083 U	0.0084 U	0.0082 U	0.0083 U	0.0083 U
Dieldrin	0.040	0.0083 U	0.0084 U	0.0082 U	0.0083 U	0.0083 U
gamma-Chlordane	2	0.0083 U	0.0084 U	0.0082 U	0.0083 U	0.0083 U
Heptachlor epoxide	0.070	0.0083 U	0.0084 U	0.0082 U	0.0083 U	0.0083 U
No other pesticides were required to be analyzed						
METALS						
Arsenic	11'	9.2	11.0	8.4	9.5	
Cadmium	4	1.2 U	1.3 U	1.2 U	1.2 U	
Lead	400	22.9	24.9	18.3	23.4	
Mercury	10	0.15	0.17	0.11	0.13	
No other metals were required to be analyzed						
WET CHEMISTRY						
Percent Moisture (%)		19.6	20.0	18.4	18.9	
Percent Solids (%)		80.4	80.0	81.6	81.1	

* - below ground surface

NR: Not analyzed.

t - Delaware background concentration (DNREC, 2007)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

p: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

U: Indicates the analyte was analyzed for but not detected.

TABLE 2
Soil Sample Analytical Results
Fairway 4, Remediation Area D7
Greenville Overlook

Sample ID Sampling Date Sample Depth (ft bgs) Units	DNREC URS for Protection of Human Health Non- Critical Water Resource Area (mg/kg)	D7-SCREENING 5- S001 10/8/2009 1 mg/Kg		D7-SCREENING 6- S001 10/8/2009 1 mg/Kg		D7-SCREENING 7- S001 10/8/2009 1 mg/Kg	
		Unrestricted Use					
PESTICIDES/PCBs							
Aldrin	0.040	0.0082	U	0.0083	U	0.0081	U
alpha-Chlordane	2	0.0082	U	0.0035	J P	0.0081	U
Dieldrin	0.040	0.0082	U	0.0083	U	0.0081	U
gamma-Chlordane	2	0.0082	U	0.0083	U	0.0081	U
Heptachlor epoxide	0.070	0.0082	U	0.0083	U	0.0081	U
No other pesticides were required to be analyzed							
METALS							
Arsenic	11 [†]	7.7		10		9.6	
Cadmium	4	1.2	U	1.2	U	1.2	U
Lead	400	17.1		21.4		22.9	
Mercury	10	0.087		0.11		0.15	
No other metals were required to be analyzed							
WET CHEMISTRY							
Percent Moisture (%)		18.1		19.4		17.1	
Percent Solids (%)		81.9		80.6		82.9	

* - below ground surface

NR: Not analyzed.

† - Delaware background concentration (DNREC, 2007)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

P: The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

U: Indicates the analyte was analyzed for but not detected.

APPENDIX D

Laboratory Sample Data (Electronic)

Remedial Action Completion Report
Hercules Road Property (Greenville Overlook)
Wilmington, Delaware



APPENDIX E

Final Visual Asbestos Abatement Report



BrightFields, Inc.
Environmental Services

Final Visual Inspection for Property Redevelopment

Project number: 1938.03tm.21 TRANSITE PIPE TRENCH

Date: 5/12/2009

Project name / address: Former Hercules Golf Course (irrigation system), 500 Hercules Road, Wilmington, Delaware

Building owner: Toll Brothers, Inc., 4 Hillman Drive, Chadds Ford, PA 19317
Phone # (610) -358-3611 (ext. 204) – Contact: Mr. James Boston

BrightFields, Inc. has conducted a final visual asbestos abatement inspection to confirm that asbestos-containing building materials (ACBM) identified and excavated by the owner were properly removed by County Environmental prior to the slated property redevelopment. County Environmental conducted the remediation and disposal activities: April 21 through May 1, 2009.

BRIGHTFIELDS' NESHAP REPORT DATE: N/A File # N/A

ASBESTOS ABATEMENT CONTRACTOR: COUNTY ENVIRONMENTAL
Contact: Mr. Ben Hodgdon DE Contractor # C:0026 Phone # 302-322-8946

Pursuant to your request, a BrightFields EPA certified Building Inspector completed the final visual inspection on 5/1/2009.

The inspector found no visible asbestos regulated materials or associated visible debris during the time of the inspection. BrightFields personnel were present during the asbestos abatement activities and collected project representative PCM air samples for analyses (see attachments). County Environmental removed an estimated 4,875 linear feet of underground Transite irrigation asbestos cementitious pipe in a continuous non-friable wetted manner. No visible emissions were noted during the remediation activities. Materials were properly sealed / bagged and disposed as per federal, state and local regulations.

VISUAL INSPECTION RESULTS

PASS (PLEASE CIRCLE ONE) FAIL

Signature of Inspector: Monty W. Krough, Sr.

Date of Inspection: 5/1/2009

List Action Items to be completed if failed initial visual inspection: **N/A PASSED**

Attachment: EMSL Laboratory Results.

Notification of Demolition or Renovation

Notification ID and Dates

Notification ID: DEN090142A PostMark Date: 04/07/2009 Resubmit Date:

Facility Information

Owner: Toll DE II LP
Address: 250 Gibraltar Rd
City: Horsham County: Montgomery State: Pennsylvania Zip: 19044
Contact: B Hodgdon Telephone: 610-555-1212 E-mail ID:

Removal Contractor

Contractor: County Environmental
Address: 461 New Churchmans Rd
City: New Castle County: State: DE Zip: 19720
Site Contact: Telephone: 302-322-8946 E-mail ID: ewalsh@countygrp.com

Demolition Contractor/Other

Contractor: Lewis Environmental Group
Address: 455 Railroad Plz
City: Royersford County: State: PA Zip: 194681951
Site Contact: Telephone: 610-495-6695 E-mail ID:

Certified Professional Services Firm

Services Firm : Brightfield Inc.
Address: 801 Industrial Street, Suite 1
City: Wilmington County: State: DE Zip: 19801
Site Contact: Telephone: 302-656-9600 E-mail ID: mkrough@brightfieldsinc.com

Type of Notification / Operation

Type of Notification: Courtesy Del
Type of Operation: Renovation (State)
Is Asbestos Present?: Yes

Facility Description

Building Name: Former Hercules Golf Club
Address #1: 500 Hercules Rd
Address #2:
City: Wilmington County: New Castle State: Delaware Zip: 19808
Site Location: back 9 Public Use?: No
Building Size: 0SF Number of Floors: 0 Age in Years: 65
Present Use: Vacant Prior Use: Miscellaneous

Procedure Used to Identify the Presence of Asbestos

Procedure / Analytical Method Used: Presumed Asbestos Report

Notification of Demolition or Renovation

Amount of Regulated Asbestos-Containing Material (RACM) to be Removed

Approximate Amount of Asbestos	RACM to be Removed	Nonfriable Asbestos Not to be Removed		Nonfriable Asbestos to be Removed		Unit
		CAT I	CAT II	CAT I	CAT II	
Pipes:					12000	Linear Feet
Surface Area:						
Volume of Facility Component:						

Scheduled Dates and Working Hours

Scheduled Start: 04/20/2009 Finish: 05/08/2009
 Dates of Asbestos Removal/Demolition/Renovation:

Scheduled Start 07:00 Finish 15:30
 Working Hours Hour(HH:MM): Hour(HH:MM):
 (Shift Hours):

Description of Planned Demolition or Renovation work, and Methods To be Used

Description: excavation and removal of transite irrigation piping

Description of Engineering Controls and work Practices to be Used to Control Emissions of Asbestos at the Demolition or Renovation Site

Description: barrier tape, ppe, wet cutting methods

Waste Transporter

Waste Transporter #1: CAN - DO Services, Inc

Address: 185 A Old Churchman Rd, P O Box 12591

City: New Castle County: State: DE Zip: 19720

Telephone: 302-325-3100 E-mail ID:

Waste Disposal Site

Site Name: Cherry island landfill EPA Certification Number: DSW 001

Address: 12th & Hay St

City: Wilmington County: New Castle State: Delaware Zip: 19804

Site Contact: Telephone: 302-764-2732 E-mail ID:

Government Agency That Ordered Demolition

Agency Name: Title:

Authority:

Date of Order: Date Ordered to Begin:

Emergency Renovations

Emergency Renovation? N/A

Emergency Date: Hour(HH:MM):

Description of Sudden, Unexpected Event:
 Explanation of how the Event caused unsafe conditions, or a serious disruption of industrial operations:

Notification of Demolition or Renovation

Description of procedures to be followed in the event that unexpected asbestos is found or that previously non-friable asbestos material becomes crumbled pulverised, or reduced to powder

Description: demarkate area, wet and bag material, notify owner and dnrec

General Comments

Comments:

Signature

Signature:

Notification of Demolition or Renovation

Notification ID and Dates

Notification ID: DEN090175A PostMark Date: 04/30/2009 Resubmit Date: 04/30/2009

Facility Information

Owner: Toll DE II LP
Address: 250 Gibraltar Rd
City: Horsham County: Montgomery State: Pennsylvania Zip: 19044
Contact: B Hodgdon Telephone: 610-555-1212 E-mail ID:

Removal Contractor

Contractor: County Environmental
Address: 461 New Churchmans Rd
City: New Castle County: State: DE Zip: 19720
Site Contact: Telephone: 302-322-8946 E-mail ID: ewalsh@countygrp.com

Demolition Contractor/Other

Contractor: Lewis Environmental Group
Address: 455 Railroad Plz
City: Royersford County: State: PA Zip: 194681951
Site Contact: Telephone: 610-495-6695 E-mail ID:

Certified Professional Services Firm

Services Firm : Brightfield Inc.
Address: 801 Industrial Street, Suite 1
City: Wilmington County: State: DE Zip: 19801
Site Contact: Telephone: 302-656-9600 E-mail ID: mkrough@brightfieldsinc.com

Type of Notification / Operation

Type of Notification: Courtesy Del
Type of Operation: Renovation (State)
Is Asbestos Present?: Yes

Facility Description

Building Name: Former Hercules Golf Club
Address #1: 500 Hercules Rd
Address #2:
City: Wilmington County: New Castle State: Delaware Zip: 19808
Site Location: back 9 Public Use?: No
Building Size: 0SF Number of Floors: 0 Age in Years: 65
Present Use: Vacant Prior Use: Miscellaneous

Procedure Used to Identify the Presence of Asbestos

Procedure / Analytical Method Used: Presumed Asbestos Report

Notification of Demolition or Renovation

Amount of Regulated Asbestos-Containing Material (RACM) to be Removed

Approximate Amount of Asbestos	RACM to be Removed	Nonfriable Asbestos Not to be Removed		Nonfriable Asbestos to be Removed		Unit
		CAT I	CAT II	CAT I	CAT II	
Pipes:					6000	Linear Feet
Surface Area:						
Volume of Facility Component:						

Scheduled Dates and Working Hours

Scheduled Start: 04/20/2009 Finish: 04/30/2009
 Dates of Asbestos Removal/Demolition/Renovation:

Scheduled Start 07:00 Finish 15:30
 Working Hours Hour(HH:MM): Hour(HH:MM):
 (Shift Hours):

Description of Planned Demolition or Renovation work, and Methods To be Used

Description: excavation and removal of transite irrigation piping

Description of Engineering Controls and work Practices to be Used to Control Emissions of Asbestos at the Demolition or Renovation Site

Description: barrier tape, ppe, wet cutting methods

Waste Transporter

Waste Transporter #1: CAN - DO Services, Inc

Address: 185 A Old Churchman Rd, P O Box 12591

City: New-Castle County: State: DE Zip: 19720

Telephone: 302-325-3100 E-mail ID:

Waste Disposal Site

Site Name: G.R.O.W.S Landfill EPA Certification Number: 100148

Address: 1513 Bordentown Rd

City: Morrisville County: Bucks State: Pennsylvania Zip: 19067

Site Contact: Telephone: 215-736-0195 E-mail ID:

Government Agency That Ordered Demolition

Agency Name: Title:

Authority:

Date of Order: Date Ordered to Begin:

Emergency Renovations

Emergency Renovation? N/A

Emergency Date: Hour(HH:MM):

Description of Sudden, Unexpected Event:
 Explanation of how the Event caused unsafe conditions, or a serious disruption of industrial operations:

Notification of Demolition or Renovation

Description of procedures to be followed in the event that unexpected asbestos is found or that previously non-friable asbestos material becomes crumbled pulverised, or reduced to powder

Description: demarkate area, wet and bag material, notify owner and dnrec

General Comments

Comments: disposal facility has been revised

quantity and end date has been revised.

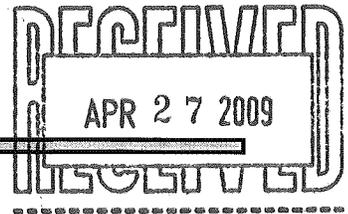
project is finished

Signature

Signature:



EMSL Analytical, Inc.
 107 Haddon Ave., Westmont, NJ 08108
 Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontaslab@EMSL.com



Attn: **Monty W. Krough, Sr.**
BrightFields, Inc.
801 Industrial Street
Suite 1
Wilmington, DE 19801

Customer ID: WIK50
 Customer PO: 9267
 Received: 04/22/09 10:30 AM
 EMSL Order: 040909900

Fax: (302) 656-9700 Phone: (302) 656-9600
 Project: 1938.03.21/ACM TRENCH

EMSL Proj:
 Analysis Date: 4/22/2009
 Report Date: 4/22/2009

**Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3,
 Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/mm ²	Fibers/cc	Notes
PCM-01 040909900-0001	O/S DOWNWIND	4/21/2009	915.00	<5.5	100	0.003	<7.0	<0.003	
PCM-02 040909900-0002	O/S UPWIND	4/21/2009	912.00	<5.5	100	0.003	<7.0	<0.003	
PCM-03 040909900-0003	BLANK	4/21/2009		<5.5	100		<7.0		Field Blank

The results reported have been blank corrected as applicable.

Analyst(s)
 Delores Beard (3)

Stephen Siegel, CIH, Laboratory Manager
 or other approved signatory

Limit of detection is 7 fibers/mm². EMSL interlaboratory Sr value = 0.29 The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Analysis performed by EMSL Westmont (NY State ELAP #10872, AIHA #100194)

Chain of Custody - Asbestos Lab Services

Company:	BrightFields, Inc.	Bill To:	BrightFields, Inc.
Address1:	801 Industrial Street	Address1:	801 Industrial Street
Address2:	Suite 1	Address2:	Suite 1
City, State:	Wilmington, Delaware	City, State:	Wilmington, Delaware
Zip/Post Code:	19801	Zip/Post Code:	19801
Contact Name:	Monty W. Krough, Sr.	Attn:	Monty W. Krough, Sr.
Phone:	(302) 656-9600	Phone:	(302) 656-9600
Fax:	(302) 656-9700	Fax:	(302) 656-9700
EMSL Rep:	John Van Voorhees	P.O. Number:	9267

040909900

Project Name/Number: ACM Trench 1938.03.21

MATRIX				TURNAROUND			
<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Soil	<input type="checkbox"/> Micro-Vac	<input type="checkbox"/> 3 Hours	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input checked="" type="checkbox"/> 24 Hours (1 day)	
<input type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> 48 Hours (2 days)	<input type="checkbox"/> 72 Hours (3 days)	<input type="checkbox"/> 96 Hours (4 days)	<input type="checkbox"/> 120 Hours (5 days)		
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater	<input type="checkbox"/> 144+ hours (6-10 days)					

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

*12 hours (must arrive by 11:00a.m. Mon -Fri), Please Refer to Price Quote

<p>PCM - Air</p> <p><input checked="" type="checkbox"/> NIOSH 7400(A) Issue 2: August 1994</p> <p><input type="checkbox"/> OSHA w/TWA</p> <p><input type="checkbox"/> Other:</p> <p>PLM - Bulk</p> <p><input type="checkbox"/> EPA 600/R-93/116</p> <p><input type="checkbox"/> EPA Point Count</p> <p><input type="checkbox"/> NY Stratified Point Count</p> <p><input type="checkbox"/> PLM NOB (Gravimetric) NYS 198.1</p> <p><input type="checkbox"/> NIOSH 9002:</p> <p><input type="checkbox"/> EMSL Standard Addition:</p> <p>SEM Air or Bulk</p> <p><input type="checkbox"/> Qualitative</p> <p><input type="checkbox"/> Quantitative</p>	<p>TEM Air</p> <p><input type="checkbox"/> AHERA 40 CFR, Part 763 Subpart E</p> <p><input type="checkbox"/> NIOSH 7402</p> <p><input type="checkbox"/> EPA Level II</p> <p>TEM BULK</p> <p><input type="checkbox"/> Drop Mount (Qualitative)</p> <p><input type="checkbox"/> Chatfield SOP - 1988-02</p> <p><input type="checkbox"/> TEM NOB (Gravimetric) NYS 198.4</p> <p><input type="checkbox"/> EMSL Standard Addition:</p> <p>PLM Soil</p> <p><input type="checkbox"/> EPA Protocol Qualitative</p> <p><input type="checkbox"/> EPA Protocol Quantitative</p> <p><input type="checkbox"/> EMSL MSD 9000 Method fibers/gram</p>	<p>TEM WATER</p> <p><input type="checkbox"/> EPA 100.1</p> <p><input type="checkbox"/> EPA 100.2</p> <p><input type="checkbox"/> NYS 198.2</p> <p>TEM Microvac/Wipe</p> <p><input type="checkbox"/> ASTM D 5755-95 (quantative method)</p> <p><input type="checkbox"/> Wipe Qualitative</p> <p>XRD</p> <p><input type="checkbox"/> Asbestos</p> <p><input type="checkbox"/> Silica NIOSH 7500</p> <p>OTHER</p> <p><input type="checkbox"/></p>
--	---	--

09 APR 22 11:10:46
 RECEIVED
 EMSL ANALYTICAL INC.

Client Sample # (s) <u>PCMO1</u> - <u>PCMO3</u>	Total Samples # <u>3</u>
Relinquished: Monty W. Krough, Sr. <u>MS</u>	Date: <u>4/21/09</u>
Received: <u>KW FX 10:30</u>	Date: _____
Relinquished: _____	Date: _____
Received: _____	Date: _____
Time: _____	Time: _____
Time: _____	Time: _____

LS

SAMPLES ACCEPTED
 FOR ANALYSIS BY
 EMSL ANALYTICAL INC.

040909900

Asbestos Air Sampling Data Form

(TRANSFERS & I/AE)

Client: Lewis Env't.

Date: 4/26/2009

Sampled By: Monty W. Krough, Sr.

Rotometer No.: LVRBF01 / HVRBF01

Work Area: TRENCH

Project No.: 1938.03.21



BrightFields, Inc. Environmental Services

P.O. # 9267

Sample No. Pump No.	Sample Location	Code	Time		Total Minutes	Flow Rate		Total Volume	# of Fibers / 100	Results (f/cc)
			Start	Stop		Start	Stop			
1 PCM01	outside - Downwind,	2.0	0930	1435	305	2.9	3.0	915		
2 PCM02	outside - upwind,	2.0	0933	1437	304	3.0	3.0	912		
3 PCM03	Blank	M								
4										
5										
6										
7										
8										
9										
10										
11										
12										

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

Codes: 1. Pre-test 2. Project 3. Final 4. Investigative 5. Personal 6. Aggressive 7. Dormant 8. Turnaround 9. 1 Day (24 hr) 10. 2 Day (48 hr) 11. Inside Work Area 12. Outside Work Area 13. E. Excursion 14. T. TWA

Analysis: TEM AHERA TEM Philadelphia PCM NIOSH 7400

Relinquished by: Monty W Krough, Sr. Date/Time: _____ Received: _____ Date/Time: _____

Analyst: _____ Disposal By/Date: _____



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontlab@EMSL.com

Attn: **Monty W. Krough, Sr.**
BrightFields, Inc.
801 Industrial Street
Suite 1
Wilmington, DE 19801

Customer ID: WIK50
Customer PO: 9267
Received: 04/23/09 10:30 AM
EMSL Order: 040910028

Fax: (302) 656-9700 Phone: (302) 656-9600
Project: 1938.03.21/ ACM TRENCH

EMSL Proj:
Analysis Date: 4/23/2009
Report Date: 4/23/2009

**Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3,
Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume			LOD (fib/cc)	Fibers/ mm ²	Fibers/ cc	Notes
			(liters)	Fibers	Fields				
PCM-01 040910028-0001	O/S TRENCH DOWNWIND	4/22/2009	1230.00	<5.5	100	0.002	<7.0	<0.002	
PCM-02 040910028-0002	O/S TRENCH UPWIND	4/22/2009	1195.00	<5.5	100	0.002	<7.0	<0.002	
PCM-03 040910028-0003	BLANK	4/22/2009		<5.5	100		<7.0		Field Blank

The results reported have been blank corrected as applicable.

Analyst(s)

Delores Beard (3)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Limit of detection is 7 fibers/mm². EMSL interlaboratory Sr value = 0.29. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Analysis performed by EMSL Westmont (NY State ELAP #10872, AIHA #100194)

Chain of Custody - Asbestos Lab Services

Company:	BrightFields, Inc.	Bill To:	BrightFields, Inc. 040910028
Address1:	801 Industrial Street	Address1:	801 Industrial Street
Address2:	Suite 1	Address2:	Suite 1
City, State:	Wilmington, Delaware	City, State:	Wilmington, Delaware
Zip/Post Code:	19801	Zip/Post Code:	19801
Contact Name:	Monty W. Krough, Sr.	Attn:	Monty W. Krough, Sr.
Phone:	(302) 656-9600	Phone:	(302) 656-9600
Fax:	(302) 656-9700	Fax:	(302) 656-9700
EMSL Rep:	John Van Voorhees	P.O. Number:	9267

Project Name/Number: ACM TRENCH 1938.03.21

MATRIX				TURNAROUND			
<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Soil	<input type="checkbox"/> Micro-Vac	<input type="checkbox"/> 3 Hours	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input checked="" type="checkbox"/> 24 Hours (1 day)	
<input type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> 48 Hours (2 days)	<input type="checkbox"/> 72 Hours (3 days)	<input type="checkbox"/> 96 Hours (4 days)	<input type="checkbox"/> 120 Hours (5 days)		
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater	<input type="checkbox"/> 144+ hours (6-10 days)					

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour int, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.
 *12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

PCM - Air	TEM Air	TEM WATER
<input checked="" type="checkbox"/> NIOSH 7400(A) Issue 2: August 1994	<input type="checkbox"/> AHERA 40 CFR, Part 763 Subpart E	<input type="checkbox"/> EPA 100.1
<input type="checkbox"/> OSHA w/TWA	<input type="checkbox"/> NIOSH 7402	<input type="checkbox"/> EPA 100.2
<input type="checkbox"/> Other:	<input type="checkbox"/> EPA Level II	<input type="checkbox"/> NYS 198.2
PLM - Bulk	TEM BULK	TEM Microvac/Wipe
<input type="checkbox"/> EPA 600/R-93/116	<input type="checkbox"/> Drop Mount (Qualitative)	<input type="checkbox"/> ASTM D 5755-95 (quantative method)
<input type="checkbox"/> EPA Point Count	<input type="checkbox"/> Chatfield SOP - 1988-02	<input type="checkbox"/> Wipe Qualitative
<input type="checkbox"/> NY Stratified Point Count	<input type="checkbox"/> TEM NOB (Gravimetric) NYS 198.4	
<input type="checkbox"/> PLM NOB (Gravimetric) NYS 198.1	<input type="checkbox"/> EMSL Standard Addition:	XRD
<input type="checkbox"/> NIOSH 9002:		<input type="checkbox"/> Asbestos
<input type="checkbox"/> EMSL Standard Addition:	PLM Soil	<input type="checkbox"/> Silica NIOSH 7500
SEM Air or Bulk	<input type="checkbox"/> EPA Protocol Qualitative	
<input type="checkbox"/> Qualitative	<input type="checkbox"/> EPA Protocol Quantitative	OTHER
<input type="checkbox"/> Quantitative	<input type="checkbox"/> EMSL MSD 9000 Method fibers/gram	

RECEIVED
 WESTMONTAIN
 09 APR 28 AM 11:04

Client Sample # (s) PCMU01 - PCMU03 Total Samples #: 3

Relinquished: Monty W. Krough, Sr. (MK) Date: 4/22/2009 Time: 10:30 AM

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

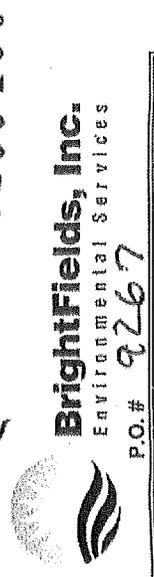
Received: KN FX10^{3d} Date: _____ Time: _____

SAMPLES ACCEPTED FOR ANALYSIS BY WESTMONTAIN

Asbestos Air Sampling Data Form

[TRANSFER TO 489570028]

Client: Lewis Envir. Date: _____
 Sampled By: Monty Krough, Sr. Rotometer No.: LVR8F01
 Work Area: TRENCH Project No.: 1938, 03, 21



Sample No. Pump No.	Sample Location	Code	Time		Total Minutes	Flow Rate		Total Volume	# of Fibers / 100	Results (f/cc)
			Start	Stop		Start	Stop			
PCW01	OUTSIDE TRENCH - DOWNWIND	20	0800	1450	410	3.0	2.9	1230		
PCW02	OUTSIDE TRENCH - UPWIND	20	0804	1456	412	3.0	2.8	1195		
PCW03	Blank	M								

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC

Codes: 1. Pre-test Project 3. Final Investigative 5. Personal 6. Aggressive B. Dormant 7. Inside Work Area 8. Outside Work Area 9. Excursion T. TWA

Analysis: TEM AHERA TEM Philadelphia Turnaround: 1 Day (24 hr) 2 Day (48 hr) Same Day (12 hr)

Relinquished by: Monty W Krough, Sr. Date/Time: 4/22/08 10:30hrs Received: _____ Date/Time: _____
 Analyst: _____ Disposal By/Date: _____

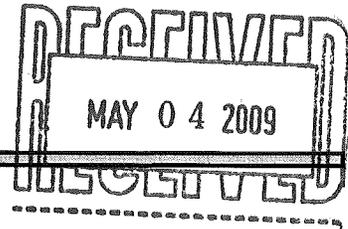
BrightFields, Inc. • 801 Industrial Street, Suite 1, Wilmington, DE 19801 • Phone: (302) 656-9600 • Fax: (302) 656-9700
 www.BrightFieldsInc.com



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmont@emsl.com



Attn: **Monty W. Krough, Sr.**
BrightFields, Inc.
801 Industrial Street
Suite 1
Wilmington, DE 19801

Customer ID: WIK50
Customer PO: 9267
Received: 04/24/09 10:30 AM
EMSL Order: 040910161

Fax: (302) 656-9700 Phone: (302) 656-9600
Project: 1938.03.21/ACM TRENCH

EMSL Proj:
Analysis Date: 4/24/2009
Report Date: 4/24/2009

Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/mm ²	Fibers/cc	Notes
PCM01 040910161-0001	OUTSIDE TRENCH-DOWNWIND	4/23/2009	1299.00	<5.5	100	0.002	<7.0	<0.002	
PCM02 040910161-0002	OUTSIDE TRENCH-UPWIND	4/23/2009	1353.00	<5.5	100	0.002	<7.0	<0.002	
PCM03 040910161-0003	BLANK	4/23/2009		<5.5	100		<7.0		Field Blank

The results reported have been blank corrected as applicable.



Analyst(s)
Delores Beard (3)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Limit of detection is 7 fibers/mm². EMSL interlaboratory Sr value = 0.29. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Analysis performed by EMSL Westmont (NY State ELAP #10872, AIHA #100194)

Chain of Custody - Asbestos Lab Services

Company:	BrightFields, Inc.	Bill To:	BrightFields, Inc.
Address1:	801 Industrial Street	Address1:	801 Industrial Street
Address2:	Suite 1	Address2:	Suite 1
City/State:	Wilmington, Delaware	City/State:	Wilmington, Delaware
Zip/Post Code:	19801	Zip/Post Code:	19801
Contact Name:	Monty W. Krough, Sr.	Attn:	Monty W. Krough, Sr.
Phone:	(302) 656-9600	Phone:	(302) 656-9600
Fax:	(302) 656-9700	Fax:	(302) 656-9700
EMSL Rep:	John Van Voorhees	P.O. Number:	9267

Project Name/Number: ACM TRENCH 1938.03.21

MATRIX **TURNAROUND**

<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Soil	<input type="checkbox"/> Micro-Vac	<input type="checkbox"/> 3 Hours	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input checked="" type="checkbox"/> 24 Hours (1 day)
<input type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> 48 Hours (2 days)	<input type="checkbox"/> 72 Hours (3 days)	<input type="checkbox"/> 96 Hours (4 days)	<input type="checkbox"/> 120 Hours (5 days)	
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater	<input type="checkbox"/> 144+ hours (6-10 days)				

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.
 *12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

040910161

PCM - Air	TEM Air	TEM WATER
<input checked="" type="checkbox"/> NIOSH 7400(A) Issue 2: August 1994	<input type="checkbox"/> AHERA 40 CFR, Part 763 Subpart E	<input type="checkbox"/> EPA 100.1
<input type="checkbox"/> OSHA w/TWA	<input type="checkbox"/> NIOSH 7402	<input type="checkbox"/> EPA 100.2
<input type="checkbox"/> Other:	<input type="checkbox"/> EPA Level II	<input type="checkbox"/> NYS 198.2
PLM - Bulk	TEM BULK	TEM Microvac/Wipe
<input type="checkbox"/> EPA 600/R-93/116	<input type="checkbox"/> Drop Mount (Qualitative)	<input type="checkbox"/> ASTM D 5755-95 (quantitative method)
<input type="checkbox"/> EPA Point Count	<input type="checkbox"/> Chatfield SOP - 1988-02	<input type="checkbox"/> Wipe Qualitative
<input type="checkbox"/> NY Stratified Point Count	<input type="checkbox"/> TEM NOB (Gravimetric) NYS 198.4	XRD
<input type="checkbox"/> PLM NOB (Gravimetric) NYS 198.1	<input type="checkbox"/> EMSL Standard Addition:	<input type="checkbox"/> Asbestos
<input type="checkbox"/> NIOSH 9002:	PLM Soil	<input type="checkbox"/> Silica NIOSH 7500
<input type="checkbox"/> EMSL Standard Addition:	<input type="checkbox"/> EPA Protocol Qualitative	OTHER
SEM Air or Bulk	<input type="checkbox"/> EPA Protocol Quantitative	<input type="checkbox"/>
<input type="checkbox"/> Qualitative	<input type="checkbox"/> EMSL MSD 9000 Method fibers/gram	
<input type="checkbox"/> Quantitative		

RECEIVED
EMSL
WILMINGTON, NJ
09 APR 26 AM 10:52

Client Sample # (s) PCMO1 - PCMO3 Total Samples #: 3

Relinquished: Monty W. Krough, Sr. (Signature) Date: 4/23/09 Time: 1630hrs.

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: KJFD1030 Date: _____ Time: _____

15

SAMPLES ACCEPTED FOR ANALYSIS BY EMCLA ANALYTICAL INC.

Asbestos Air Sampling Data Form

[TRANSPARE PAPP] 040910161
BrightFields, Inc.
 Environmental Services
 P.O.# 9267

Client: Lewis Envir.
 Sampled By: Monty Krough, Sr.
 Work Area: TRENCH
 Date: 4/23/2009
 Rotometer No.: CVRBF01
 Project No.: 1938.03.21



Sample No. Pump No.	Sample Location	Code	Time		Total Minutes	Flow Rate		Total Volume	# of Fibers / 100	Results (f/cc)
			Start	Stop		Start	Stop			
1 PCM01	OUTSIDE TRENCH - DOWNWIND	2.0	0735	1503	448	3.0	2.9	1299		
2 PCM02	OUTSIDE TRENCH - UPWIND	2.0	0739	1510	451	3.0	3.0	1353		
3 PCM03	Blank	M								
4										
5										
6										
7										
8										
9										
10										
11										
12										

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL, INC.

RECEIVED EMSL WESTMONT NJ 09 APR 24 10 10:52

Codes: 1. Pre-test Project 3. Final Investigative 5. Personal E. Excursion T. TWA

Analysis: TEM AHERA TEM Philadelphia

Relinquished by: Monty W Krough, Sr. Date/Time: 4/23/09 16:20:05 Received: [Signature] Date/Time: _____

Analyst: _____ Disposal By/Date: _____

I. Inside Work-Area 0. Outside Work-Area Same Day (12 hr) 1 Day (24 hr) 2 Day (48 hr)

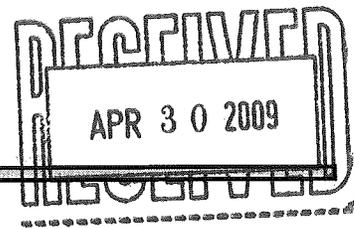
A. Aggressive B. Dormant Turnaround



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontaslab@EMSL.com



Attn: Monty W. Krough, Sr.
BrightFields, Inc.
801 Industrial Street
Suite 1
Wilmington, DE 19801

Customer ID: WIK50
Customer PO: 9267
Received: 04/25/09 10:00 AM
EMSL Order: 040910303

Fax: (302) 656-9700 Phone: (302) 656-9600
Project: ACM TRENCH 1938.03.21

EMSL Proj:
Analysis Date: 4/25/2009
Report Date: 4/25/2009

Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/mm ²	Fibers/cc	Notes
PCM01 040910303-0001	OUTSIDE TRENCH DOWNWIND	4/24/2009	1128.00	<5.5	100	0.002	<7.0	<0.002	
PCM02 040910303-0002	OUTSIDE TRENCH UPWIND	4/24/2009	1178.00	<5.5	100	0.002	<7.0	<0.002	
PCM03 040910303-0003	BLANK	4/24/2009		<5.5	100		<7.0		Field Blank

The results reported have been blank corrected as applicable.

Analyst(s)

Delores Beard (3)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Limit of detection is 7 fibers/mm². EMSL interlaboratory Sr value = 0.29. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Analysis performed by EMSL Westmont (NY State ELAP #10872, AIHA #100194)

Chain of Custody - Asbestos Lab Services

Company:	BrightFields, Inc.	Bill To:	BrightFields, Inc.
Address1:	801 Industrial Street	Address1:	801 Industrial Street
Address2:	Suite 1	Address2:	Suite 1
City, State:	Wilmington, Delaware	City, State:	Wilmington, Delaware
Zip/Post Code:	19801	Zip/Post Code:	19801
Contact Name:	Monty W. Krough, Sr.	Att:	Monty W. Krough, Sr.
Phone:	(302) 656-9600	Phone:	(302) 656-9600
Fax:	(302) 656-9700	Fax:	(302) 656-9700
EMSL Rep:	John Van Voorhees	P.O. Number:	9267

Project Name/Number: ACM TRENCH 1938.03.21

MATRIX				TURNAROUND			
<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Soil	<input type="checkbox"/> Micro-Vac	<input type="checkbox"/> 3 Hours	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input checked="" type="checkbox"/> 24 Hours (1 day)	
<input type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> 48 Hours (2 days)	<input type="checkbox"/> 72 Hours (3 days)	<input type="checkbox"/> 96 Hours (4 days)	<input type="checkbox"/> 120 Hours (5 days)		
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater	<input type="checkbox"/> 144+ hours (6-10 days)					

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.
 *12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

<p>PCM - Air</p> <p><input checked="" type="checkbox"/> NIOSH 7400(A) Issue 2: August 1994</p> <p><input type="checkbox"/> OSHA w/TWA</p> <p><input type="checkbox"/> Other:</p> <p>PLM - Bulk</p> <p><input type="checkbox"/> EPA 600/R-93/116</p> <p><input type="checkbox"/> EPA Point Count</p> <p><input type="checkbox"/> NY Stratified Point Count</p> <p><input type="checkbox"/> PLM NOB (Gravimetric) NYS 198.1</p> <p><input type="checkbox"/> NIOSH 9002:</p> <p><input type="checkbox"/> EMSL Standard Addition:</p> <p>SEM Air or Bulk</p> <p><input type="checkbox"/> Qualitative</p> <p><input type="checkbox"/> Quantitative</p>	<p>TEM Air</p> <p><input type="checkbox"/> AHERA 40 CFR, Part 763 Subpart E</p> <p><input type="checkbox"/> NIOSH 7402</p> <p><input type="checkbox"/> EPA Level II</p> <p>TEM BULK</p> <p><input type="checkbox"/> Drop Mount (Qualitative)</p> <p><input type="checkbox"/> Chatfield SOP - 1988-02</p> <p><input type="checkbox"/> TEM NOB (Gravimetric) NYS 198.4</p> <p><input type="checkbox"/> EMSL Standard Addition:</p> <p>PLM Soil</p> <p><input type="checkbox"/> EPA Protocol Qualitative</p> <p><input type="checkbox"/> EPA Protocol Quantitative</p> <p><input type="checkbox"/> EMSL MSD 9000 Method fibers/gram</p>	<p>TEM WATER</p> <p><input type="checkbox"/> EPA 100.1</p> <p><input type="checkbox"/> EPA 100.2</p> <p><input type="checkbox"/> NYS 198.2</p> <p>TEM Microvac/Wipe</p> <p><input type="checkbox"/> ASTM D 5755-95 (quantitative method)</p> <p><input type="checkbox"/> Wipe Qualitative</p> <p>XRD</p> <p><input type="checkbox"/> Asbestos</p> <p><input type="checkbox"/> Silica NIOSH 7500</p> <p>OTHER</p> <p><input type="checkbox"/></p>
--	---	--

Client Sample # (s) PCMO1 - PCMO3 **Total Samples #:** 3

Relinquished: Monty W. Krough, Sr.	Date: <u>4/24/09</u>	Time: <u>1700hrs.</u>
Received: <u>JW fx 10am</u>	Date: _____	Time: _____
Relinquished: _____	Date: _____	Time: _____
Received: _____	Date: _____	Time: _____

AS

APR 25 AM 9:41
 RECEIVED
 SAMPLES ACCEPTED FOR ANALYSIS BY
 EMSL ANALYTICAL INC.

Asbestos Air Sampling Data Form

[TRANSCITE PPG] 040910303
BrightFields, Inc.
 Environmental Services
 P.O. # 9267

Client: Lewis Envir. Date: 4/24/05
 Sampled By: Monty Krough, Sr. Rotometer No.: CVRBF01
 Work Area: TRENCH Project No.: 1938.03.21

Sample No. Pump No.	Sample Location	Code	Time		Total Minutes	Flow Rate		Total Volume	# of Fibers / 100	Results (f/cc)
			Start	Stop		Start	Stop			
1 PCM01	OUTSIDE TRENCH - DOWNWIND	2.0	0118	1503	470	2.5	2.3	1128		
2 PCM02	OUTSIDE TRENCH - UPWIND	2.0	0718	1509	471	2.5	2.4	1178		
3 PCM03	Blank	M								
4										
5										
6										
7										
8										
9										
10										
11										
12										

Codes: 1. Pre-test Project 3. Final Investigative 5. Personal 7. Aggressive 9. Excursion T. TWA

Analysis: TEM AHERA TEM Philadelphia TEM NIOSH 2400

Relinquished by: Monty W Krough, Sr. Date/Time: 4/24/2009 17:00 Received: _____ Disposal By/Date: _____

Flow Rate: Inside Work Area Outside Work Area

Turnaround: 1 Day (24 hr) 2 Day (48 hr)

Same Day (12 hr) Same Day (12 hr)



EMSL Analytical, Inc.

107 Haddon Ave., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: Monte Krough
BrightFields, Inc.
801 Industrial Street
Suite 1
Wilmington, DE 19801

Customer ID: WIK50
Customer PO: 9267
Received: 04/28/09 10:30 PM
EMSL Order: 040910479

Fax: (302) 656-9700 Phone: (302) 656-9600
Project: ACM TRENCH 1938.03.21

EMSL Proj:
Analysis Date: 4/28/2009
Report Date: 4/28/2009

Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Table with 10 columns: Sample, Location, Sample Date, Volume (liters), Fibers, Fields, LOD (fib/cc), Fibers/mm², Fibers/cc, Notes. Contains 3 rows of data for samples PCM01, PCM02, and PCM03.

The results reported have been blank corrected as applicable.

Analyst(s)
Delores Beard (3)

Handwritten signature of Stephen Siegel

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Limit of detection is 7 fibers/mm³. EMSL interlaboratory Sr value = 0.29. The laboratory is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted. NY ELAP 10872, AIHA IHLAP 100194

Chain of Custody - Asbestos Lab Services

Company:	BrightFields, Inc.	Bill To:	BrightFields, Inc.
Address 1:	801 Industrial Street	Address 1:	801 Industrial Street
Address 2:	Suite 1	Address 2:	Suite 1
City, State:	Wilmington, Delaware	City, State:	Wilmington, Delaware
Zip/Post Code:	19801	Zip/Post Code:	19801
Contact Name:	Monty W. Krough, Sr.	Attn:	Monty W. Krough, Sr.
Phone:	(302) 656-9600	Phone:	(302) 656-9600
Fax:	(302) 656-9700	Fax:	(302) 656-9700
EMSL Rep:	John Van Voorhees	P.O. Number:	9267

Project Name/Number: ACU TRENCH 1938.03.21

MATRIX				TURNAROUND			
<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Soil	<input type="checkbox"/> Micro-Vac	<input type="checkbox"/> 3 Hours	<input type="checkbox"/> 6 Hours	<input type="checkbox"/> Same Day or 12 Hours*	<input checked="" type="checkbox"/> 24 Hours (1 day)	
<input type="checkbox"/> Bulk	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> 48 Hours (2 days)	<input type="checkbox"/> 72 Hours (3 days)	<input type="checkbox"/> 96 Hours (4 days)	<input type="checkbox"/> 120 Hours (5 days)		
<input type="checkbox"/> Wipe	<input type="checkbox"/> Wastewater	<input type="checkbox"/> 144+ hours (6-10 days)					

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

*12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote

PCM - Air	TEM Air	TEM WATER
<input checked="" type="checkbox"/> NIOSH 7400(A) Issue 2: August 1994	<input type="checkbox"/> AHERA 40 CFR, Part 763 Subpart E	<input type="checkbox"/> EPA 100.1
<input type="checkbox"/> OSHA w/TWA	<input type="checkbox"/> NIOSH 7402	<input type="checkbox"/> EPA 100.2
<input type="checkbox"/> Other:	<input type="checkbox"/> EPA Level II	<input type="checkbox"/> NYS 198.2
PLM - Bulk	TEM BULK	TEM Microvac/Wipe
<input type="checkbox"/> EPA 600/R-93/116	<input type="checkbox"/> Drop Mount (Qualitative)	<input type="checkbox"/> ASTM D 5755-95 (quantative method)
<input type="checkbox"/> EPA Point Count	<input type="checkbox"/> Chatfield SOP - 1988-02	<input type="checkbox"/> Wipe Qualitative
<input type="checkbox"/> NY Stratified Point Count	<input type="checkbox"/> TEM NOB (Gravimetric) NYS 198.4	
<input type="checkbox"/> PLM NOB (Gravimetric) NYS 198.1	<input type="checkbox"/> EMSL Standard Addition:	XRD
<input type="checkbox"/> NIOSH 9002:		<input type="checkbox"/> Asbestos
<input type="checkbox"/> EMSL Standard Addition:	PLM Soil	<input type="checkbox"/> Silica NIOSH 7500
SEM Air or Bulk	<input type="checkbox"/> EPA Protocol Qualitative	OTHER
<input type="checkbox"/> Qualitative	<input type="checkbox"/> EPA Protocol Quantitative	
<input type="checkbox"/> Quantitative	<input type="checkbox"/> EMSL MSD 9000 Method fibers/gram	

RECEIVED
EMSL
WILMINGTON, NJ
09 APR 28 AM 11:00

Client Sample # (s) PCW01 - PCW03 Total Samples #: 3

Relinquished: Monty W. Krough, Sr. (MK) Date: 4/27/2009 Time: 1630hrs.

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: KW FY 1030 Date: _____ Time: _____

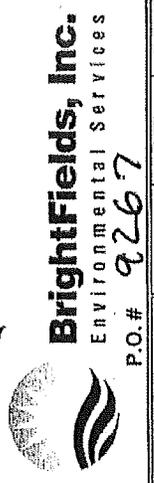
SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

[TRANSPARE PAPER]

040910479

Asbestos Air Sampling Data Form

Client: Lewis Envir. Date: 4/27/2009
 Sampled By: Monty Krough, Sr. Rotometer No.: LVBBF01
 Work Area: TRENCH Project No.: 1938, 03, 21



Sample No. Pump No.	Sample Location	Code	Time		Total Minutes	Flow Rate		Total Volume	# of Fibers / 100	Results (f/cc)
			Start	Stop		Start	Stop			
1 PCM01	OUTSIDE TRENCH - DOWNWIND	2.0	0845	1506	381	3.0	3.0	1143		
2 PCM02	OUTSIDE TRENCH - UPWIND	2.0	0849	1511	382	3.0	2.9	1146		
3 PCM03	Blank	M								
4										
5										
6										
7										
8										
9										
10										
11										
12										

SAMPLES ACCEPTED
FOR ANALYSIS BY
EMSL ANALYTICAL INC.

RECEIVED
ENSL
WESTMONT, NJ
09 APR 28 AM 11:00

Codes: 1. Pre-test Project 2. Final Project 3. Final Investigative 4. Investigative 5. Personal 6. Aggressive 7. Dormant 8. Inside Work Area 9. Outside Work Area 10. Same Day (12 hr) 11. 1 Day (24 hr) 12. 2 Day (48 hr) 13. Excursion T. TWA

Analysis: TEM AHERA TEM Philadelphia TEM NIOSH 7100

Relinquished by: Monty W Krough, Sr. Date/Time: 4/27/2009 1636 hrs. Received: _____ Date/Time: _____
 Analyst: _____ Disposal By/Date: _____

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 www.BrightFieldsInc.com

APPENDIX F

Asbestos Containing Material Disposal Certificates (Electronic)

APPENDIX G

Non-Hazardous Soil Disposal Documentation (Electronic)

APPENDIX G.1 -Waste Characterization Sample Data for Stags Leap
Ranch Development Facility

APPENDIX G.2 -Waste Characterization Sample Data for Conestoga
Landfill

APPENDIX G.3 - Stags Leap Ranch Development Facility
Disposal Certificates

APPENDIX G.4 - Conestoga Landfill Disposal Certificates