

June 1, 2018

Mr. Bradley S. Nave  
Remediation Principal Project Manager  
Chemours  
500 West Jefferson Street  
Suite 1600  
Louisville, KY 40202

**Re: Waste Management Progress Report No. 6  
For Period May 19, 2017 to May 18, 2018  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Explosives Plant  
Remediation Variance Approval of May 22, 2012  
Remediation Variance Renewal Approval of May 18, 2017  
FID No.: 804009140  
EPA ID No.: WIR000133447  
BRRTS No. 02-04-000156**

Dear Mr. Nave:

This letter report provides a summary of work conducted in 2017 in conjunction with the ongoing Bioremediation Pilot Test Program (BPTP) at the Former E. I. du Pont de Nemours and Company (DuPont) Barksdale Works site (Figure 1). This letter and its attachments are provided for your communication to the Wisconsin Department of Natural Resources (WDNR) so that The Chemours Company, FC, LLC (Chemours) may fulfill Condition 8 of the Hazardous Waste Remediation Variance for Biodegradation of Contaminants and Removal of Residual Product and Debris (HWRV), which was originally issued for the site on May 22, 2012 and renewed on May 18, 2017. Condition 7 requires that annual progress reports be submitted to the department in accordance with s. NR 724.13(3), Wis. Adm. Code. The annual reports are required until the variance ends on May 18, 2022 and are due on or before June 1<sup>st</sup> of each year.

## **1.0 BACKGROUND INFORMATION**

### **1.1 REQUIREMENTS OF THE VARIANCE**

Condition 7 of the variance specifies that the progress reports shall be submitted in accordance with s. NR 724.13(3), and shall include:

- a. *Documentation of the type and amount of product residuals and debris removed from biopilot cells. Documentation of any characterization and container storage of product residuals and debris removed from biopilot cells. Documentation of disposal of any product residuals and debris removed from the biopilot cells including manifest copies.*
- b. *Documentation of any management, including consolidation, of discrete areas where impacted soil is located within narrow locations such as former ditches or locations that are contorted by the layout of former building features. Documentation of the location of those areas and the amount of soil that is moved. Documentation of the location of areas where the soil combined from discrete source areas is managed.*
- c. *Documentation of any alternative treatment of large debris that facilitates management, including washing and physical resizing of large debris for off-site disposal. Documentation of management of all impacted waste streams generated by these activities, including amounts and volumes of waste treated and generated.*

*In addition to the general progress reporting requirements in s. [NR 700.11](#), responsible parties shall submit semi-annual operation and maintenance progress reports to the department. Progress reports shall be sequentially numbered, starting with the first report which is due no later than 6 months after the remediation system begins operation. Information related to operation and maintenance shall be provided on a reporting form supplied by the department. The department may require progress reports be submitted at a different frequency than semi-annually.*

Certified laboratory analytical testing for effectiveness, waste collection, management, and disposal associated with construction and operation of the BPTP are addressed in this progress report. Laboratory reports for data referenced in this report are attached as appendices.

## **1.2 BIOREMEDIATION PILOT TEST PROGRAM HISTORY**

The Barksdale BPTP is focused on biodegradation of nitroaromatic and nitramine organic compounds (NNOCs) in soil. The BPTP began in 2007 with the construction of four in-situ till areas (cells) intended to evaluate the effect of water, oxygen, and pH on the rate of in-situ microbial degradation of 2,4- and 2,6-dinitrotoluene (DNT) in site soil as a possible alternative to conventional remedies. These original cells are identified as cell locations C01 through C04 on Figure 2.

Early results indicated that degradation of these two primary DNT isomers was feasible; however, the presence of various other NNOCs was observed to affect degradation rates. As such, in 2008 the program was expanded to evaluate the range of this observed effect by adding three more cells that contained less complex NNOC mixtures. After initiating tilling, several of the 2008 cells were found to contain solid pieces of residual product that adversely effected cell heterogeneity and limited analysis of the test results from the new cells. As a result, six additional cells within similar trinitrotoluene (TNT)/DNT ratios were constructed in 2009 at locations where the majority of such solids could be removed manually prior to tilling. Also in 2009, one of the 2008 cells was expanded to four times its original size with the construction of two contiguous new cells in order to evaluate potential economies of scale in cell operation. The 2008 through 2009 cells are identified as locations C05 through C15 on Figure 2.

In 2010, the investigation of new areas of the site discovered NNOCs within a sandy soil matrix. Because all cells constructed prior to 2010 had been in clayey soil, three additional cells were added in 2011 to evaluate degradation in the new soil types. These cells are identified as locations C16 through C18 on Figure 2. All debris and product residues encountered during development of the first 18 cells was collected, containerized, and shipped off-site for incineration.

Prior to the HWRV, there were several limitations with respect to construction; soil and waste handling; and test evaluation for the first 18 cells. These limitations included:

- Having to incinerate soil removed during cell construction, which would have otherwise been amenable to biodegradation.
- Having to remove product either by bulk removal prior to cell construction or by manually removing product solids on a periodic basis from the cell surface after tilling was initiated.
- Not having permission to consolidate disjointed areas for testing.
- Having limitations on the ability to control water content within the cells driven by the fact that all cells had to be constructed in-situ.

To address these constraints on the BPTP, Chemours, at the suggestion of WDNR, requested a hazardous waste remediation variance in July 2010. Following Chemours response to several sets of comments by the department, WDNR issued the HWRV on May 22, 2012. The permit specifies that a total of 10,000 cubic yards of soil may be treated as part of the operations permitted under the HWRV.

Since June of 2012, thirteen additional cells have been constructed to address waste being removed from within the area of concern (AOC). Cells C19, C20, C21, and C22 were constructed in 2012 to accommodate and evaluate material removed in and around areas investigated. Cell C22 has remained inactive since its

construction due to obstacles that halted investigation and removal of waste from its proposed waste source area.

Cell C23 was constructed in 2013 to run a study in conjunction with the United States Army Corp of Engineers (USACE) that addressed degradation of TNT and other NNOCs by introducing additional stimuli (including hydrated lime) to accelerate the waste degradation process. The study on cell C23 was completed in 2014 and waste soils were subsequently removed from the cell and stored for further study or to await treatment or incineration. While the cell structure is still present, it has been unused since 2014. Soils stored from the cell were placed in treatment cells C12, C17, and C22 during the 2017 field season.

Further site investigation during 2014 to 2017 uncovered soil that contained varying concentrations of TNT. Cells C24, C25, C26, C27, C28, C29, C30, C31 and C32 were constructed in 2015, 2016 and 2017 to store, test, and treat with methods developed as a direct result of the C23 study.

Table 1 list the cells currently in place and includes information regarding their volume, status, and contaminant mass. Pilot test activities performed under the HWRV are conducted within the designated AOC. Any debris or product removed from cells is handled in accordance with Resource Conservation and Recovery Act (RCRA) rules, including land disposal restrictions (LDRs) and Best Demonstrated Available Technology (BDAT) requirements.

## **2.0 REPORTING REQUIRED BY THE VARIANCE**

This section provides the information stipulated in HWRV.

### **2.1 PROGRESS OF THE BIOREMEDIATION PILOT TEST PROGRAM**

#### **2.1.1 Contaminant Removal**

Table 1 includes estimates of contaminant mass removed within the biopilot test program over the calendar year and to date, as well as estimated contaminant mass remaining for each cell and constituent of potential concern (COPC). The estimated masses indicated in Table 1 are based on averaged values for all samples collected in a given cell at the first sampling of a COPC (typically 8 to 12 samples per cell) and in the most recent event that included that COPC (typically 3 to 8 samples per cell). Observations on contaminant removal during the past pilot test season are bulleted below.

- Distribution of COPCs in the soil in the cells is heterogeneous. Few of the most recent events appear to show an increase using these end-point averages. However, statistical analysis based on data collected across the full 11 years of the program show concentrations are decreasing. Such heterogeneity effects are more apparent in the single season product removal estimates than in the long-term, overall removal values.
- To date, an estimated total of 11,438 pounds (lbs) of waste in soils have been destroyed/removed via on-site treatment efforts in the entirety of the BPTP (Table 1, page 4 of 4).
- Fluctuations were observed in the levels for the dimethyl-dinitrobenzenes (DNXs) and DNT isomers in 2017. Cell heterogeneity can account for most of the observed fluctuations in the reported mass trends. The DNT concentrations where the fluctuations occurred are low and generally near the detection limit. The changes in reported mass reflect concentration changes generally on the order of a few micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ), with the exception of the control cell. Over half of all the negative changes and of the indicated increases are due to changes in detection limits within the duration of the project.
- Over ninety percent of the COPCs being tracked have shown decreases over the life of the pilot program.
- Laboratory reporting limits (RLs) were evaluated by comparing them to risk-based levels in order to determine if they were low enough to make risk management decisions. Table 4 compares the laboratory RLs to default WDNR Residual Contaminant Levels (RCLs) as well as site-specific RCLs.

This comparison shows that in all cases the laboratory RLs are well below, i.e., 6 to 11,000 times below, the RCLs and are considered suitable for making risk management decisions.

### 2.1.2 Operational Issues

Heterogeneity of the contaminant mixtures in the cells has been an on-going issue. Increased and sustained soil moisture due to heavier than normal precipitation during the 2017 field season prevented routine tilling in various cells. Equipment access to the cells was limited due to the consistency of the till material. Alternative means to tilling the biopilot cell material are currently being researched.

### 2.1.3 Evaluation of System Effectiveness

In general, the BPTP results continually show promise for bioremediation of affected site soil, but ongoing evaluation is needed to determine if the process will be effective in reaching site-wide remedial goals for the varying COPC mixtures found in site soil.

Because this is a pilot test program the activities do not address all impacted areas on the site; therefore, discussion of site-wide monitored natural attenuation and case closure are not applicable.

The status of the biopilot cells active during the reporting period is as follows:

- Cells C02 through C06, C17, C24, C25, and C26 underwent tilling and sampling in July and October 2017. Cells C21, C27, and C31 received mixing using a bucket and / or mixing head attached to an excavator to mix the material in them.
- Cell C09 fell below calculated site-specific residual contaminant limits (SSRCLs) in 2010 and had been planted with willow trees in order to evaluate the ability of the trees to control pore water. Drawing down pore water will maintain an aerobic environment that promotes continued degradation of potential residual soil contaminants. The trees will also consume nitrates produced as part of the degradation process.
- Cells C08 through C11, C13, and C18 reached SSRCLs and have been allowed to sit fallow since spring 2012 in order to evaluate the soil for potential rebound effects. The 2013 sampling results indicated biodegradation was occurring at cells C08, C10, and C13. Slight increases in the concentration of DNTs were observed at cells C11 and C18; however, the results were within the range previously reported at these locations and remain well below site-specific action levels. These cells were seeded to establish vegetative cover in 2014.
- Similarly, cells C07 and C15 reached SSRCLs on average and have been allowed to sit fallow since spring 2014. They were seeded to establish vegetative cover at that time. Cells C14, C19 and C20 were seeded near the end of the 2017 field season to establish vegetative cover.
- Cell C12 initially held elevated NNOC concentrations above the anticipated biological degradation threshold (i.e., "microbial toxicity limit") of about 500 parts per million (ppm). The cell was modified in 2015 to allow for greater amounts of soil to be treated. As modifications were being made, unexpected encounters with impacted material under and around the cell forced deviations in the work plan. As a result, the cell was treated by pH adjustment, as allowed under the HWRV for treatment of elevated NNOC concentrations using hydrated lime, late in the 2015 season. Recent data suggests that the use of lime has decreased COPC concentrations in soil. However, C12 will require excavation of the underlying material in the future and subsequent lime treatment.
- Cell C23 was constructed in 2013. C23 was constructed to evaluate degradation of elevated concentrations of NNOCs above the anticipated biological degradation threshold (about 500 ppm). The soil tested in C23 during 2013 was containerized and staged in one of the on-site hazardous waste storage areas at the close of the 2013 season and has remained empty. The remaining contents were spread in C22 (1 cubic yard of impacted soils), C12 (0.9 cubic yard of impacted soils), and C17 (0.8 cubic yards of impacted soils) in spring 2017 based on the similarities of the constituents.
- Cells C24 and C25 were constructed in 2015. The cells were constructed to measure the impact of hydrated lime addition as a pH modifier. C25 was treated with hydrated lime and underwent tilling

thereafter. C24 was loaded and utilized as a temporary storage cell for impacted soils in the offseason. Lime was added to C24 in 2016 and the treatment is currently being evaluated.

- Cells C26 and C27 were constructed in 2016. Similar to cells C24 and C25, these cells were constructed to measure the impact of hydrated lime addition as a pH modifier. Cell C26 was loaded to capacity, treated with hydrated lime, tilled, and sampled for baseline analytical measurements. Cell C27 was partially loaded in 2016 and filled to capacity in 2017 and was mixed (using an excavator bucket), treated with lime, and sampled for baseline analytical measurements.
- Cells C06 and C21 were treated with lime in 2017. Both cells were converted to lime addition cells based on their elevated concentrations of site constituents. The lime was mixed into the cell through tilling and samples were collected. Cell C21 later underwent an additional mixing to test a specialized excavator soil screening bucket attachment.

Cells C28, C29, C30, C31, and C32 were constructed in 2017. Cell C28 was constructed similarly to cells C24 to C27, but with a larger capacity. It has been partially loaded and it is anticipated that lime addition, tilling, and sampling will occur in the 2018 field season. Cells C29 through C32 were developed in anticipation of testing smaller amounts of soil with higher concentrations of TNT. C31 was loaded with soil, treated with lime, saturated with water, mixed, and sampled. Cells C29, C30, and C32 remain empty as of end of 2017 field season. With soil added to three cells, C27, C28, and C31, adding approximately 225 cubic yards for treatment; the total volume of soil currently being evaluated under the HWRV is 4,750 cubic yards, which is within the permitted maximum of 10,000 cubic yards. See Figure 5 for the general design of cells C1 through C22. See Figure 6 for the general design of cells C24 through C32 (ex-situ, lime addition cells).

#### **2.1.4 System Status and Recommended Future Work**

The bioremediation project has treated an approximated 11,438 lbs of site contaminant to date (Table 1, page 5) Initial quantities of contaminants placed in all cells was approximated at 12,802 lbs. With the addition of 2017 contaminated soils, the approximated quantity of contamination in current treatment cells is 1,341 lbs. A visual representation of the cell data is available in Appendix C.

Activities proposed for the 2018 work season include:

- Cells C07, C08, C10, C11, C13, C14, C15, C18, C19 and C20 have fallen below SSRCLs prior to 2016 and have been seeded to evaluate application of vegetative covers (i.e., grasses). Results of that planting will continue to be evaluated in 2018 and re-seeding will be conducted if necessary.
- Cell C09 has fallen below SSRCLs prior in 2010. It will continue to be monitored via samples of plant detritus (leaves and roots) to evaluate the effectiveness of the willow trees influence on COPC containing soils.
- C12 will be reconfigured as part of the pH adjustment evaluation:
  - C12 has been treated with lime; however, areas in and around sections of the cell have not been fully investigated. Consequently, current treated soil will have to be moved to allow for subsequent investigation.
  - Treated soil that has reached SSRCLs will be removed from the cell and placed elsewhere to allow for adjacent and buried soil to be treated in its place.
- C22 remained dormant through the 2017 field season. It is not known if C22 will be active in 2018.
- Cell C23 will remain closed through 2018. It will be maintained for potential use in subsequent seasons.
- Cell C28 is anticipated to be filled to capacity from the 2018 field investigation activities and receive lime treatment.
- Cells C29, C30, and C32 are currently empty and will be utilized as needed in 2018.
- All remaining cells: C1 through C6, C12, C16, C17, C21, C24 through C27, and C31 will continue to receive monitoring, mixing/tilling, and/or sampling.

- Two new cells are proposed for construction in 2018. These cells will support an evaluation of pH adjustment (addition of lime as allowed in the variance). These cells will be built using the general design depicted in Figure 6.
  - C33 will be located in the central part of use area PAH. It is expected to hold soil impacted with high levels of refined TNT which contains less DNT and other process residues.
  - C34 will be constructed as needed, with a similar intended use as the other cells.

The total volume of soil anticipated to be treated under the HWRV as of the end of 2018 is between 5,500 to 6,500 cubic yards, which will be within the permitted maximum of 10,000 cubic yards.

## **2.2 SITE MAPS**

Site maps are provided in Figures 2 through 4. Figures 2 and 3 provide the locations of the test cells. Figures 3 through 6 provide details of the construction of the existing cells.

## **2.3 DATA PRESENTATION**

Table 1 provides data indicating the progress of soil bioremediation. Table 2 lists debris and residuals removed for off-site disposal in the reporting period. Table 3 lists the source and quantities of soil moved to test cells in the reporting period. Table 4 provides a list of site-specific analyte screening criteria and a comparison to laboratory detection limits.

Prior to 2015, data represented in tables assumed non-detected concentrations as half the laboratory method detection limit (MDL). Subsequent reports assumed a concentration of zero for analyte concentrations below the MDL. This report has re-aligned the “initial analyte” table to reflect the zero value for analyte concentrations below the MDL.

## **2.4 DATA DOCUMENTATION**

Materials containing residual or adhered contamination shipped off-site were declared hazardous and shipped to the chosen incinerator without confirmatory analyses. Materials not appropriate to incineration (i.e. metal, concrete, vitrified clay pip, etc.) were stored at on-site holding areas to either be cleaned or disposed of at a later date (Table 2).

Laboratory reports for bioremediation trend monitoring are attached in Appendix C.

## **2.5 REPORTING FORM**

A completed copy of WDNR Form 4400-194: “Operation, Maintenance, Monitoring and Optimization Reporting of Soil and Groundwater Remediation Systems” is attached to this letter in Appendix A.

## **2.6 PRODUCT RESIDUALS AND DEBRIS REMOVED FROM BIOREMEDIATION PILOT CELLS [CONDITION 7a]**

The cited variance condition requires:

- Documentation of the type and amount of product residuals and debris removed from biopilot cells.
- Documentation of any characterization and container storage of product residuals and debris removed from biopilot cells.
- Documentation and disposal of any product residuals and debris removed from the biopilot cells including manifest copies.

No product residuals or debris were removed from any of the bioremediation pilot cells during the current reporting period.

Approximately 975 cubic yards of soil was added to BPTP cells during the current reporting period (see Section 2.7).

Debris managed and/or removed by site investigation work during the current reporting period included scrap steel, wood, concrete, and product residues (see Section 2.6.5) from historical operations within the AOC that had previously been investigated or were being investigated during the current reporting period. Debris removal locations are indicated on Figure 4. Table 2 provides a summary of all debris handled on-site during the 2017 field season.

### **2.6.1 Concrete Debris**

Concrete from floors in buildings excavated to locate potentially explosive concentrations of NNOCs often needs to be removed in order to access the soil beneath. Subsurface concrete in foundation walls is typically left in place unless the walls obstructed investigation trenching. Concrete moved during investigations is field screened using an NNOC vapor detector (FIDO<sup>®</sup>) and Expray<sup>®</sup>. Concrete for which field screening does not indicate the presence of NNOCs is either returned to the source structure after completion of investigatory excavation or stockpiled for future reuse on-site. Concrete screening above background is stockpiled at a central storage site pending alternative treatment (see Section 2.8). All concrete moved during investigation work is managed within the AOC.

Concrete from the PAJ Wash House foundation that screened positive for residual product was moved within cell C28 in use area PAH. Concrete at this location that screened below background was returned to the respective source structure and buried under clean soil.

### **2.6.2 Metallic Debris**

Metallic debris such as pipes, sheet metal or other discarded equipment components is often encountered during investigation activities. Metallic debris with accessible, visible internal channels is field screened using FIDO<sup>®</sup> and Expray<sup>®</sup> technology. Field screening is limited to flat or solid objects or pipes that are not bent, plugged, crushed, or otherwise obstructed. Metallic debris screening without detections is segregated and managed as “clean”. “Clean” metallic debris is sent to an accumulation area pending pick-up by a recycler (see Section 2.8). Visually obstructed or bent metallic debris is accumulated on an impervious paved surface and fitted with a plastic cover to prevent contact with storm water. The materials in this accumulation pile are processed (as described in Section 2.8). All temporary storage of metallic debris is managed within the AOC.

Approximately 0.5 cubic feet of metallic debris was recovered during the current reporting period. This debris consisted of steel pipes from the PAJ Wash House foundation (Table 2). None of this metal screened above background levels; therefore, it was added to the uncontaminated stockpile (PAK-SP01). The stockpile remains on-site pending accumulation of a volume sufficient to form a complete load for recycling.

### **2.6.3 Adhered Soil**

Solids (soil and debris) generated during the site work have the potential to exhibit a characteristic of toxicity for dinitrotoluene (D030). As a result, these items are segregated for staging within the AOC until they are characterized and designated for disposal. Debris segregated consisted of soiled personal protective equipment (PPE), plastic buckets and drums, wood with adhered soil, soiled tarps and soiled plastic sheeting used during decontamination. A total of 2,810 lbs (2,560 lbs segregated from 2017 and 250 lbs segregated from 2016) of solids and debris were consolidated into a site-designated roll-off container within the AOC and after evaluation were declared D030 hazardous waste for disposal and removed from the AOC. The consolidated waste was shipped to Veolia Trade Waste Incinerator in Sauget, Illinois (EPA ID no: ILD098642424) for destruction by incineration upon further accumulation following the 2017 field season (Appendix B).

Liquid (water) collected in decontamination processes are declared D030 hazardous waste based on past generator testing. No water designated as hazardous waste was produced during 2017 activities.

The spent granular activated carbon (GAC) cylinders from the waste water treatment unit (WWTU) are exempt from solid waste regulation when sent for reclamation per 40 CFR 261.2(c)(3). The WWTU was not operated in 2017.

#### **2.6.4 Asbestos Containing Material (ACM)**

A small amount (< 2 lbs) of material suspected to be ACM was identified during excavation. The potential ACM material was appropriately containerized (following state guidelines outlined in NR 447) and stored on-site.

#### **2.6.5 Residual Solid Product**

Residual solid product (RSP), identified by visual evidence and colorimetric test sprays (Expray<sup>®</sup>), was encountered during the current reporting period at dispersed locations within the Wash House production areas and the Refined Triton East Graining house overflow area (in use area PAJ).

RSP removed during the current reporting period consisted of approximately 28 cubic feet (2,824-pounds) of residual TNT product from the PAJ investigation area (Table 2). This RSP was wetted to remove explosive characteristics. As part of the biopilot testing the RSP was placed in treatment cell C31, saturated, and lime was mixed into the RSP / soil matrix. No RSP was sent off-site for incineration in 2017. Approximately 1 cubic foot of soil containing an estimated 7-pounds of residual TNX (a total of 130 lbs of product, soil, and added water) was sent to the US Army Corp of Engineers in Vicksburg, Mississippi for testing (Appendix B).

#### **2.6.6 Wood Debris**

Wood debris (Table 2) was collected during the current reporting period in the form of 2" to 8" wide by 2" thick by 2' to 8' long boards from PAJ Wash House area foundation and area ditches (10 cubic feet). The boards were entrained with the recovered TNT and placed in a covered, lined site roll-off container and shipped off-site for incineration at the Veolia facility in Sauget, Illinois (Appendix B).

#### **2.6.7 Vitrified Clay Pipes (VCP)**

No VCP was encountered in the 2017 field investigations.

### **2.7 MOVEMENT OF SOIL INTO PILOT CELLS [CONDITION 7b]**

The cited variance condition requires:

- Documentation of any management, including consolidation, of discrete areas where impacted soil is located within narrow locations such as former ditches or locations that are contorted by the layout of former building features.
- Documentation of the location of those areas and the amount of soil that is moved.
- Documentation of the location of areas where the soil combined from discrete source areas is managed.

Approximately 975 cubic yards of soil was moved into bio-cells in the current reporting period.

A total of 211 cubic yards of soil was moved to cell C27 for treatability testing. A total of 11.4 cubic yards of soil was placed in cell C31 for treatability testing. 750 cubic yards of soil was placed in cell C28. This soil remains in C28 for future treatability testing. Residual soil from C23 was placed within three existing cells; C12, C17, and C22. Each of these cells received approximately one cubic yard of soil of the stored C23 soils.

Table 3 lists the source areas and destinations of the soil managed during the current reporting period, while Figure 3 depicts the locations listed in Table 3.

### **2.8 ALTERNATIVE TREATMENT OF LARGE DEBRIS [CONDITION 7c]**



The cited variance condition requires:

- Documentation of any alternative treatment of large debris that facilitates management, including washing and physical resizing of large debris for off-site disposal.
- Documentation of management of all impacted waste streams generated by these activities, including amounts and volumes of waste treated and generated.

This section describes alternative treatment of debris that potentially contained RCRA hazardous constituents. As detailed in Section 2.6, most of the debris recovered did not test positive for hazardous constituents and was managed as non-regulated debris. Some non-regulated debris was resized to facilitate on-site reuse as aggregate or to meet off-site industrial facility acceptance requirements.

### **2.8.1 Alternative Treatment of Metallic Debris**

As discussed in Section 2.6.2, metallic debris (pipes) collected during investigation of former process building sites are typically field screened using FIDO<sup>®</sup> and Expray<sup>®</sup> at the time of discovery. Pipes that can be fully inspected and that do not have detections based on the screening are sent to an accumulation area in PAK (stockpile site PAK-SP01) for storage until pick-up by Chemours approved local steel recycling firm, Chicago Iron and Supply.

Due to the small amount of metallic debris encountered (about 0.5 cubic feet), no shipments were made to the recycler during the current reporting period. The recovered material remains at PAK-SP01 pending accumulation of sufficient metal to form a shipment.

Pipes that are bent, plugged, crushed, or otherwise obstructed from adequate initial inspection are managed as potentially hazardous wastes based on the potential for shock reactivity (D003). Segregated pipes are sent to a hazardous waste accumulation area within the HWRV AOC (stockpile PAR-SP01 in use area PAR) until a sufficient amount is accumulated to set up remote controlled pipe opening equipment.

Accumulated pipes are transported to the site decontamination pad where they are sorted based on size and type of obstruction. Pipes that have one end accessible are scraped of loose internal debris with a wire pipe snake. Pipes that are closed too tightly to allow washing the interiors are transported to a remotely operated power hacksaw which is used to cut the obstruction(s) from the pipe. Cut pipes are returned to the decontamination pad.

Once opened, the pipes are processed using the alternative debris treatment method of “Water Washing and Spraying” (40 CFR 268.45, Table 1). Rinse water is collected in the decontamination pad’s sump where gravity flow settling baffles removed solids and pass rinse water to the on-site treatment system. Solids from the washing operation are added to the decontamination pad’s solid accumulation drums and subsequently shipped off-site for incineration. Rinse water is treated through the WWTU and disposed with other equipment decontamination fluids.

Once flushed, the pipe interiors are FIDO<sup>®</sup> screened then wipe tested using the wire snake and Expray<sup>®</sup> wipe pads. If the tests indicate continued contamination, the item is reprocessed using the above procedure.

Solids from the metallic debris washing operation are added to the decontamination solids accumulation drums which are subsequently shipped off-site for incineration (see Section 2.6) or placed in treatment cells.

Rinse water from the metallic debris washing operation is either treated by GAC in the WWTU and disposed with other equipment decontamination fluids (see Section 2.6) or used to hydrate biopilot treatment cells.

As stated in Section 2.8.1, treated metallic debris is sent to Chicago Iron and Supply once it passes on-site screening. No metallic debris was treated in the 2017 field season.

### **2.8.1 Management of Alternative Treatment Residuals**

No alternative debris encountered during the current reporting period screened above background levels therefore alternative treatment was not required.

### 3.0 SUMMARY

The information contained within this report will allow Chemours to comply with the reporting requirements of the May 18, 2017 Hazardous Waste Remediation Variance issued for the Former DuPont Barksdale Works site and this report should be included with the filing.

Should you have any questions or comments, please do not hesitate to contact us.

Sincerely,



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#### Attachments:

Table 1: Contaminant Progress Summary  
Table 2: Debris and Residuals Removed  
Table 3: Soil Moved to Test Cells  
Table 4: Comparison of Pace Analytical Detection Limits to RCLs

Figure 1: Regional Site Location  
Figure 2: Site Layout and Bio-Cell Locations  
Figure 3: Impacted Soil Recovery Locations  
Figure 4: Debris Removal Locations  
Figure 5: Typical Biopilot Sites Operation Stage 2007-2010  
Figure 6: General pH Adjustment Cell Configuration

Appendix A: WDNR Form 4400-194: Remediation Site Operation, Maintenance, Monitoring and Optimization Report

#### Appendix B: Waste Documentation

State of Wisconsin Annual Hazardous Waste Report  
Manifest - NA3077 Solids (Roll-off) – 001196395 VES  
Manifest - D003 Solids (Product) – 896-055764 XPOLogistics

Appendix C: Barksdale Summary Graphs 2017 Year End

#### Appendix D: Biodegradation Evaluation Lab Data

- Pace Reports  
A172301 Final Report 07132017 1723 (July Bioremediation Pilot Test Samples)  
A174119 Final Report 12152017 1141 (December Bioremediation Pilot Test Samples)  
A174145 Final Report 12222017 1428 (December Bioremediation Pilot Test Samples)  
- TestAmerica Reports  
280-96404-1 Final Report 05092017 1234 (May Bioremediation Pilot Test Samples)  
280-98726-1 Final Report 08292017 1646 (August Bioremediation Pilot Test Samples)

## **TABLES**

**Table 1**  
**2017 Contaminant Progress Summary**  
 Waste Management Progress Report No. 6  
 For Period May 19, 2017 to May 18., 2018  
 Bioremediation Pilot Test – 2017 Field Season  
 Former DuPont Barksdale Explosives Plant  
 Remediation Variance Approval of May 22, 2012  
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 Bayfield County, Wisconsin

Analyte	Amount remaining (lbs) as of 2017	Initial Amount (lbs)	Amount Decreased from 2016 to 2017 (lbs)	Amount Decreased (lbs) to Date for all Cells
2,4,6-TNT	787.29	7,909.75	987.7	7117.4
2-A-4,6-DNT	17.62	56.60	2.3	38.3
4-A-2,6-DNT	25.82	60.41	2.1	29.5
2,3-DNT	0.65	102.41	0.6	101.5
2,4-DNT	8.32	2,564.71	29.4	2554.9
2,5-DNT	0.30	0.51	(0.2)	0.2
2,6-DNT	4.86	908.18	(1.4)	902.3
3,4-DNT	0.83	136.00	0.9	134.4
3,5-DNT	0.11	2.80	0.0	2.6
Total DNT <sup>1</sup>	15.08	3,714.61	6.0	3695.8
1,2-DM-3,4-DNB	41.75	92.77	15.8	51.0
1,2-DM-3,5-DNB	37.60	92.83	(7.7)	55.2
1,2-DM-3,6-DNB	10.04	23.49	(1.8)	13.4
1,2-DM-4,5-DNB	13.25	29.09	(0.3)	15.8
1,3-DM-2,4-DNB	99.63	255.03	0.6	153.2
1,3-DM-2,5-DNB	0.26	0.00	(0.2)	(0.3)
1,4-DM-2,3-DNB	65.63	145.03	22.8	78.1
1,4-DM-2,5-DNB	8.18	12.35	(1.3)	4.2
1,4-DM-2,6-DNB	29.31	25.32	(4.3)	(4.8)
1,5-DM-2,3-DNB	3.88	5.84	(0.7)	2.0
1,5-DM-2,4-DNB	179.01	349.84	55.5	168.0
Total DNX	488.53	1,031.60	78.3	536.0
2,4,6-TNX	6.47	13.32	(4.0)	6.3
1,3,5-TNB	0.18	4.80	(0.2)	4.6
1,3-DNB	0.27	6.71	(0.1)	6.4
NB	0.00	0.56	0.0	0.6
3-NT	0.00	1.74	0.0	1.7
4-NT	0.00	0.39	0.0	0.4
2-NT	0.00	1.16	0.0	1.2
NG	0.00	0.00	NA	0.00
HMX	NA	0.00	NA	0.00
<b>All Analyte Totals</b>	<b>1,844.88</b>	<b>17,547.85</b>	<b>1,180.10</b>	<b>11,438.27</b>

**NOTES:**

<sup>1</sup> Total DNT calculated by adding 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, and 3,5-DNT isomers.	
Data listed	Is (most recent reported concentration)*lbs tilled averaged from each subcell.
Red Data (#.#)	This format implies a gain in concentration of a constituent over time.

**Data Compilation Summary**

Results posted in these tables are calculated using average analyte concentrations of multiple samples from each cell (generally 3 to 8 samples per cell)

Concentrations that have readings below the method detection limit (MDL) have been rounded to zero. This is a consequence of trying to compare varying/changing MDLs: over multiple years, using different laboratories, concentration dilutions, etc.

An average soil weight was calculated at 2,700 lbs per cubic yard to use as a standard to calculate concentration weight for site soils.

**To calculate analyte weights, the following formula was used:**

Average Analyte Concentration per Cell (Average of Laboratory Results)	X	Volume of Soil in Cell	X	Standard for Soil Weight per Cubic Yard of Soil (2,700 lbs/cuyd)	X	Soil Concentration Conversion Factor from Parts Per Million	=	Recorded Analyte Concentration per Cell in Pounds
---	---	------------------------	---	---	---	---	---	---

**Formula Variable Locations:**

(Appendix D)	(Table 1 - row labeled "Size")	(Standard = 2,700)	(Conversion Factor = 1 / 1,000,000)	(Reported Value used in Table 1)
--------------	--------------------------------	--------------------	-------------------------------------	----------------------------------











**Table 2**  
**2017 Debris and Residuals Removed**  
Waste Management Progress Report No. 6  
For Period May 19, 2017 to May 18., 2018  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Explosives Plant  
Remediation Variance Approval of May 22, 2012  
Remediation Variance Renewal Approval of May 18, 2017  
Bayfield County, Wisconsin

Items For Off-site Disposal						
Source	Material Description	Quantity (cf)	Weight as received by vendor (lbs)	On Site Holding Location	Off-site Disposal Destination	Manifest
<b>Product</b>						
PAI TNX Trinitration House 2, 3, 4, 5 (PAIB0020, PAIB0027, PAIB0033, PAIB0038) & TNX Neutralizer House 4 (PAIB0031)	TNX / soil mix	1.0	150	Magazine	US Army Corp of Engineers Vicksburg, MS	XPOLogistics 896-055764
<b>Wood</b>						
PAJ Refined Triton Wash House and Wash house area ditches (PAJB0006, PAJB0021, & PAJB0024)	8" x 2" Planks, 8' x 4' Plywood sheets, other various sized pieces	10.0	950	Lined and covered roll-off container staged at accumulation pad (SAJ-WP01)	VES Sauget, IL	001196395 VES
<b>Other</b>						
Emptied plastic process / storage containers	Plastic buckets and drums with impacted soil exposure	39.8	1,460	Lined and covered roll-off container staged at accumulation pad (SAJ-WP01)	VES Sauget, IL	001196395 VES
Introduced materials	Impacted tarps, plastic, PPE, sampling scoops, and other materials	4.5	150	Lined and covered roll-off container staged at accumulation pad (SAJ-WP01)	VES Sauget, IL	001196395 VES
Previously added waste materials (Added during the 2016 field season)	Wood, sample jars, and impacted PPE, tarps, garbage bags, etc	24.5	125	Lined and covered roll-off container staged at accumulation pad (SAJ-WP01)	VES Sauget, IL	001196395 VES

Items Not Requiring Off-site Disposal						
Source	Material Description	Quantity (cf)		On Site Holding Location	Off-site Disposal Destination	Manifest
<b>Concrete</b>						
PAJ Wash House foundation	concrete screening > background	~ 550	not weighed	Placed in C28	--	--
PAJ Wash House foundation	concrete screening < background	~ 370	not weighed	Left at source	--	--
<b>Pipe, Steel</b>						
PAJ Refined Triton Wash House and Wash house catch box (PAJB0006 & PAJB0024)	steel pipes screening clean & rebar/bolts	0.5	--	PAR-SP01	Chicago Iron	pending
<b>Other</b>						
Potential asbestos containing material	Whitish fibrous material	0.1	--	Secured within two asbestos disposal bags placed in steel drum, stored at decon area	--	pending

**Table 3**  
**2017 Soil Moved to Test Cells**  
Waste Management Progress Report No. 6  
For Period May 19, 2017 to May 18., 2018  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Explosives Plant  
Remediation Variance Approval of May 22, 2012  
Remediation Variance Renewal Approval of May 18, 2017  
Bayfield County, Wisconsin

Source	Destination	Volume (CY)	Date
Test soils from C23	C27	0.87	06/20/18
<b>Total C12</b>	<b>C27</b>	<b>0.87</b>	<b>2017</b>
Test soils from C23	C27	0.83	06/20/18
<b>Total C17</b>	<b>C27</b>	<b>0.83</b>	<b>2017</b>
Test soils from C23	C27	1.00	06/20/18
<b>Total C22</b>	<b>C27</b>	<b>1.00</b>	<b>2017</b>
PAJ Wash House eastern drain (PAJD0021)	C27	58.75	07/19/17
PAJ WASH Hosue Catch Box (PAJD0024)	C27	55.00	08/22/17
PAJ Wash House (PAJB0006)	C27	97.25	09/13/17

**Table 4**  
**Comparison of Pace Analytical Detection Limits to RCLs**

Waste Management Progress Report No. 6  
For Period May 19, 2017 to May 18., 2018  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Explosives Plant  
Remediation Variance Approval of May 22, 2012  
Remediation Variance Renewal Approval of May 18, 2017  
Bayfield County, Wisconsin

CAS Number	Chemical Constituent	WDNR Non-Industrial RCL January 2018 (mg/kg)	WDNR Industrial RCL January 2018 (mg/kg)	Site-specific Recreational RCL January 2018 (mg/kg)	Lowest Potential RCL (mg/kg)	Pace Analytical Laboratory Reporting Limit (mg/kg)
99-35-4	1,3,5-Trinitrobenzene	2,250	32,400	13,100	2,250	0.2
99-65-0	1,3-Dinitrobenzene	6.32	82.1	36.9	6.32	0.2
118-96-7	2,4,6-Trinitrotoluene	21.3	96	124	21.3	0.2
121-14-2	2,4-Dinitrotoluene	1.21	5.11	7.03	1.21	0.2
606-20-2	2,6-Dinitrotoluene	1.21	5.11	7.03	1.21	0.2
35572-78-2	2-Amino-4,6-Dinitrotoluene	154	2,280	900	154	0.2
88-72-2	2-Nitrotoluene	3.16	14.9	18.4	3.16	0.2
99-08-1	3-Nitrotoluene	6.32	82.1	36.9	6.32	0.2
19406-51-0	4-Amino-2,6-Dinitrotoluene	153	2,250	893	153	0.2
99-99-0	4-Nitrotoluene	33.9	144	198	33.9	0.2
98-95-3	Nitrobenzene	7.41	32.4	43.2	7.41	0.2
2691-41-0	HMX	3,860	57,000	22,500	3,860	Not analyzed
78-11-5	PETN	126	574	737	126	Not analyzed
121-82-4	RDX	6.06	28	35.4	6.06	Not analyzed
479-45-8	Tetryl	156	2,330	911	156	Not analyzed
55-63-0	Nitroglycerin	6.32	82.1	36.9	6.32	Not analyzed
602-01-7	2,3-Dinitrotoluene	1.21	5.11	7.03	1.21	0.2
618-85-9	3,5-Dinitrotoluene	1.21	5.11	7.03	1.21	0.2
610-39-9	3,4-Dinitrotoluene	1.21	5.11	7.03	1.21	0.2
619-15-8	2,5-Dinitrotoluene	1.21	5.11	7.03	1.21	0.2
632-92-8	2,4,6-Trinitro-3-Xylene	21.3	96	124	21.3	0.2
616-69-3	1,2-Dimethyl-3,5-Dinitrobenzene	19	247	111	19	0.2
603-02-1	1,3-Dimethyl-2,4-Dinitrobenzene	19	247	111	19	0.2
711-41-1	1,4-Dimethyl-2,6-Dinitrobenzene	19	247	111	19	0.2
65151-56-6	1,5-Dimethyl-2,3-Dinitrobenzene	19	247	111	19	0.2
616-72-8	1,5-Dimethyl-2,4-Dinitrobenzene	19	247	111	19	0.2
EVS0672	1,2-Dimethyl-3,4-Dinitrobenzene	19	247	111	19	0.2
EVS0709	1,2-Dimethyl-3,6-Dinitrobenzene	19	247	111	19	0.2
EVS0670	1,2-Dimethyl-4,5-Dinitrobenzene	19	247	111	19	0.2
EVS0708	1,3-Dimethyl-2,5-Dinitrobenzene	19	247	111	19	0.2
EVS0671	1,4-Dimethyl-2,3-Dinitrobenzene	19	247	111	19	0.2

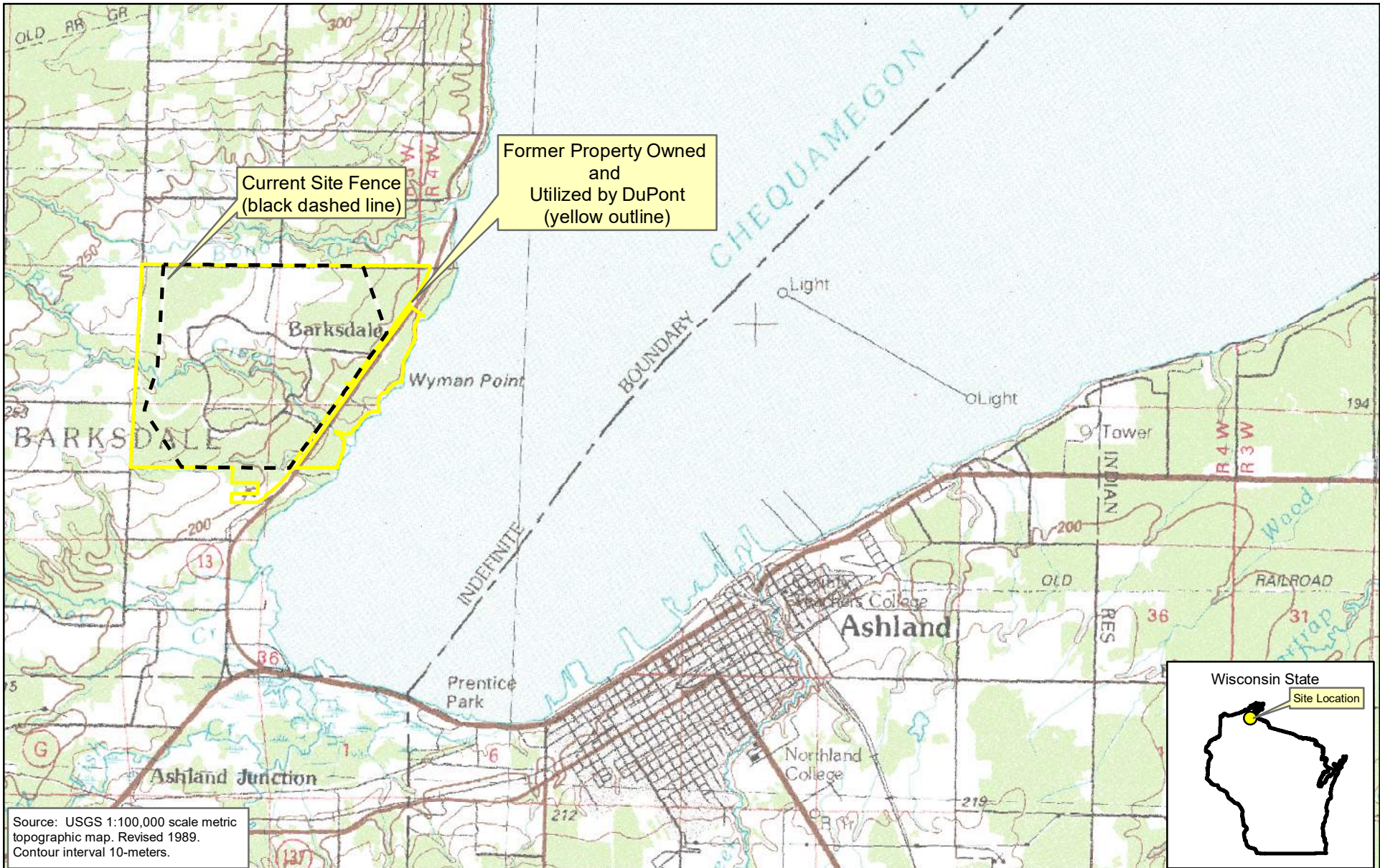
**Notes:**

Not analyzed = With the exception of nitroglycerin, none of these compounds were historically used or manufactured on-site. Previous analytical sampling for these compounds supports this fact. Nitroglycerin was manufactured on-site; however, the manufacturing operation was located in the Boyd Creek valley and not associated with the bio-pilot test cells.

- = No value available

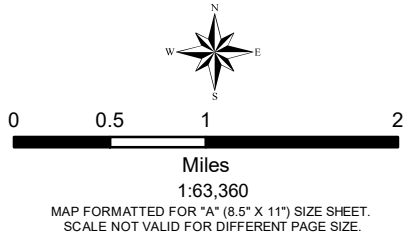
No RCL = No associated RCL is provided in the WDNR table.

## **FIGURES**



G:\Projects\Barksdale\GIS\Maps\Maps 2018\WMM Progress Report 2017 Field Season\Fig01\_Site\_Loc.mxd

Area Map (Optional)



FILE NUMBER:

DESIGNED BY: NS

DRAWN BY: VN

DATA QUALITY CHECK BY: NS

**AECOM**

AECOM  
500 West Jefferson Street  
Suite 1600  
Louisville, Kentucky 40202

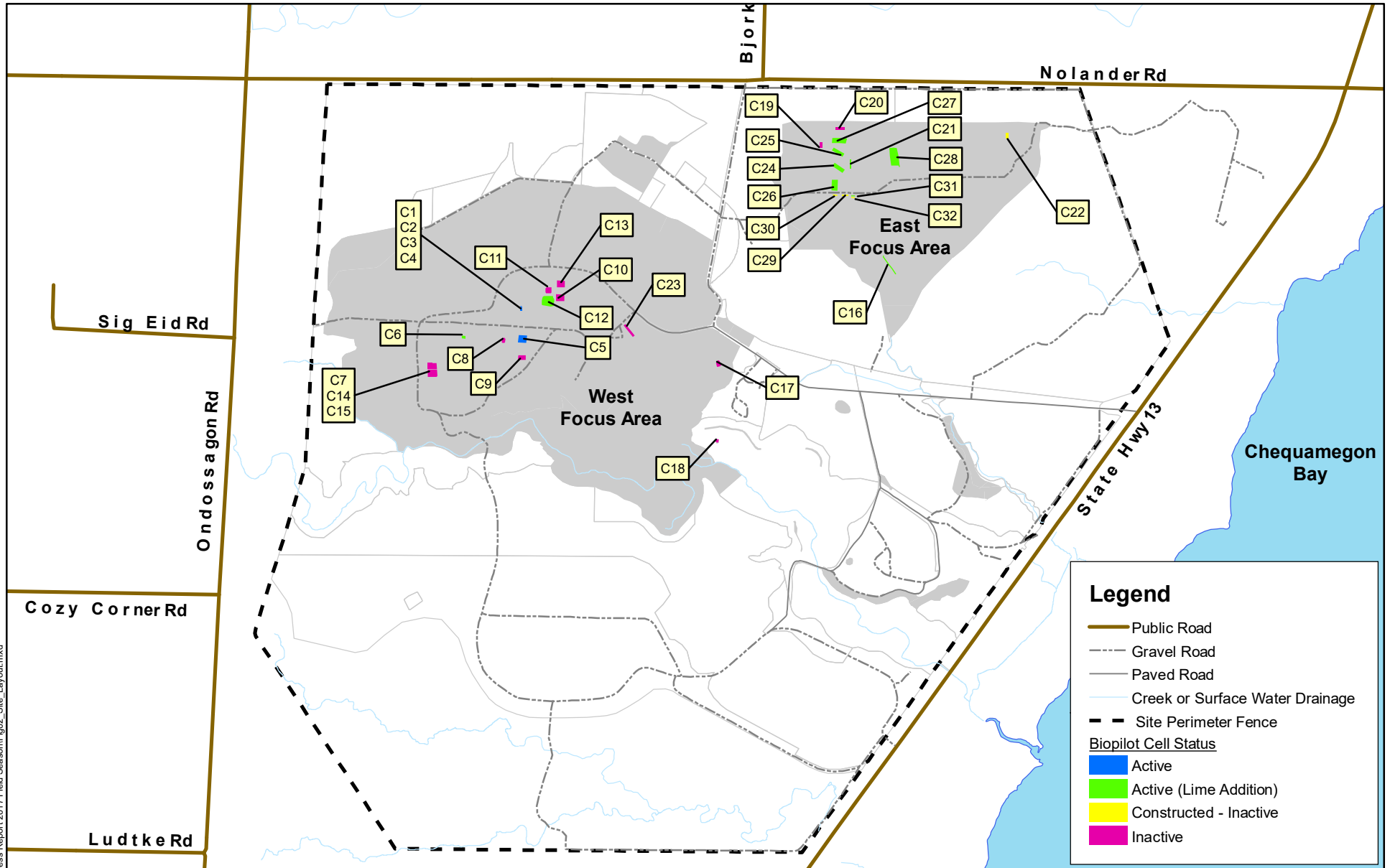
## Regional Site Location

Waste Management Progress Report No. 6  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Works  
Barksdale, Wisconsin 54806

PROJECT NUMBER:  
60525839

DATE:  
April 2018

FIGURE NUMBER:  
1



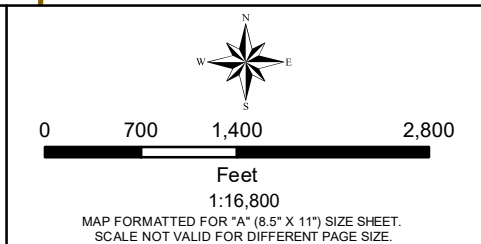
**Legend**

- Public Road
- Gravel Road
- Paved Road
- Creek or Surface Water Drainage
- Site Perimeter Fence

**Biopilot Cell Status**

- Active
- Active (Lime Addition)
- Constructed - Inactive
- Inactive

Area Map (Optional)



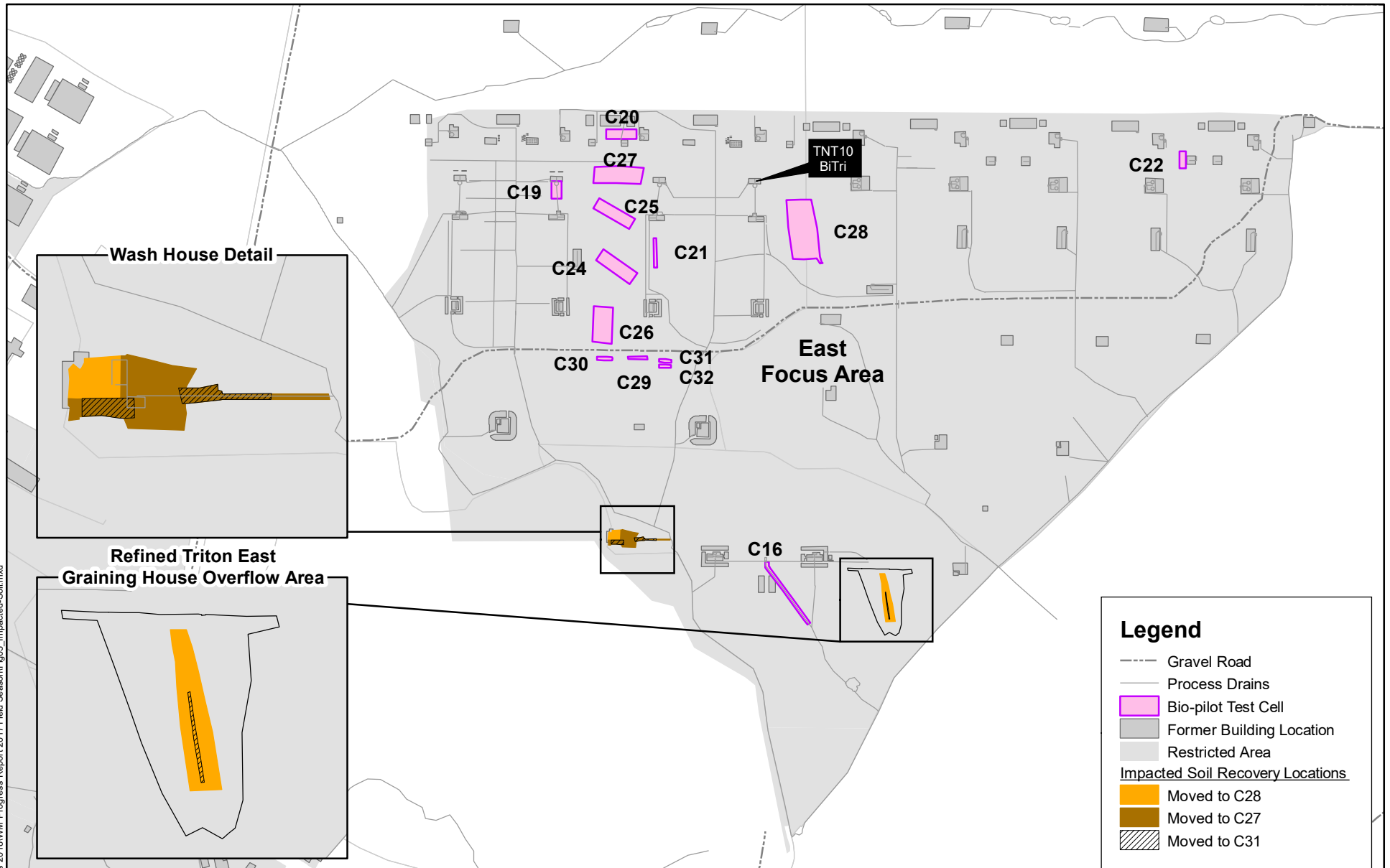
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DESIGNED BY: NS  
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DATA QUALITY CHECK BY: NS

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AECOM  
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Suite 1600  
Louisville, Kentucky 40202

**Site Layout and Bio-cell Locations**  
Waste Management Progress Report No. 6  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Works  
Barksdale, Wisconsin 54806

PROJECT NUMBER:  
60525839  
DATE:  
April 2018  
FIGURE NUMBER:  
2

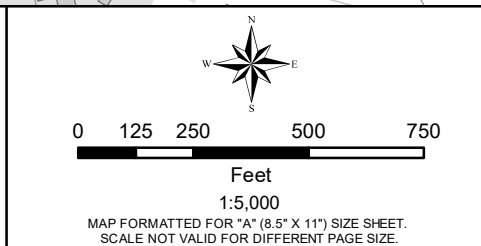
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**Legend**

- Gravel Road
- Process Drains
- Bio-pilot Test Cell
- Former Building Location
- Restricted Area
- Impacted Soil Recovery Locations
- Moved to C28
- Moved to C27
- Moved to C31

Area Map (Optional)



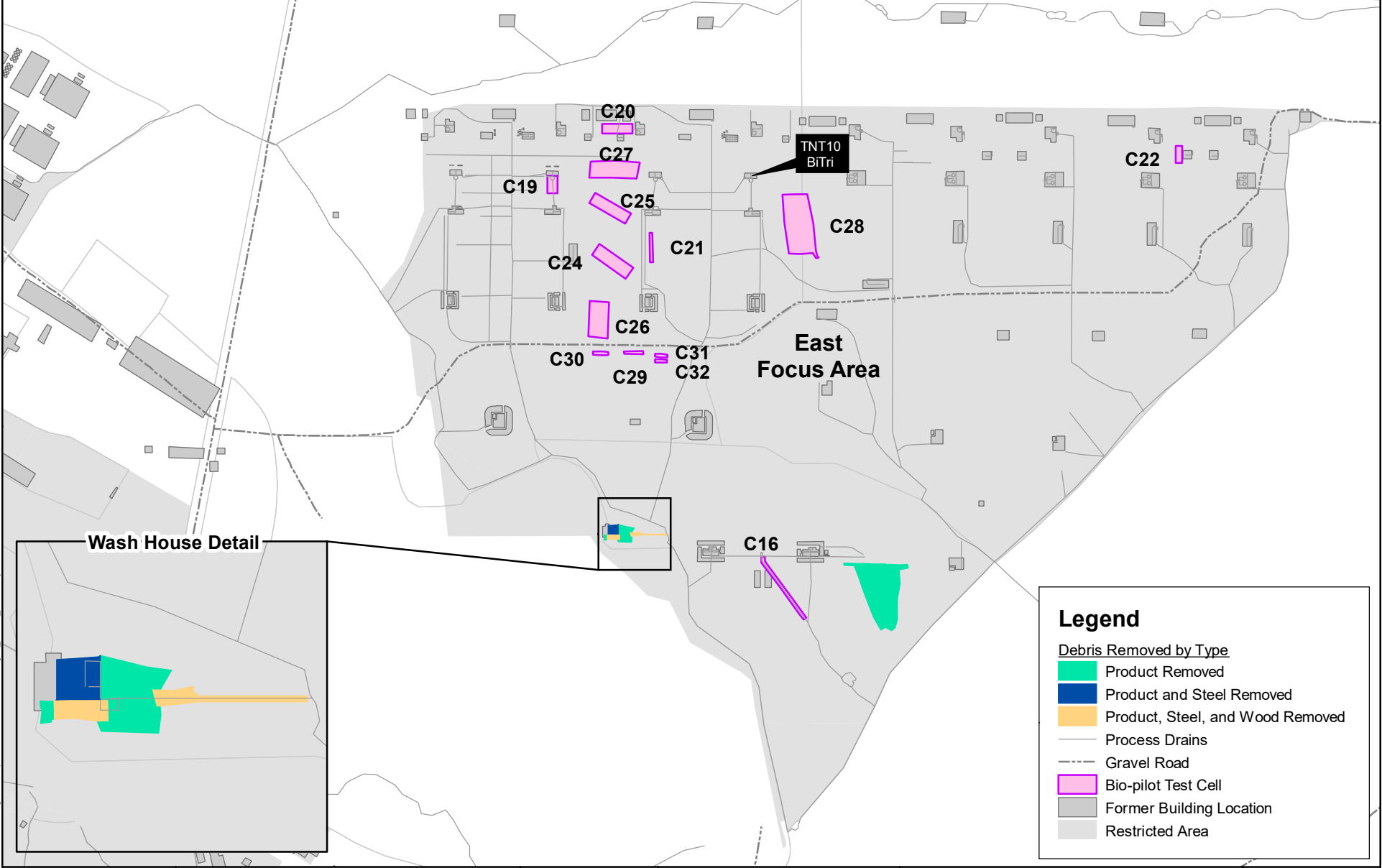
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AECOM  
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Louisville, Kentucky 40202

**2017 Impacted Soil Recovery Locations**  
Waste Management Progress Report No. 6  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Works  
Barksdale, Wisconsin 54806

PROJECT NUMBER:  
60525839  
DATE:  
April 2018  
FIGURE NUMBER:  
**3**

G:\Projects\Barksdale\GIS\Maps\2018\WM Progress Report 2017 Field Season\Fig04\_Debris\_Recovery.mxd

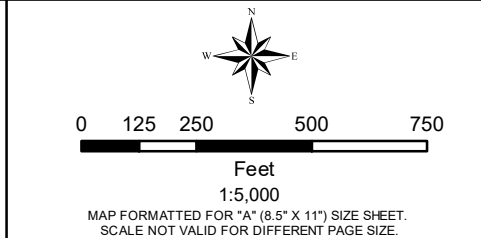


**Legend**

Debris Removed by Type

- Product Removed
- Product and Steel Removed
- Product, Steel, and Wood Removed
- Process Drains
- Gravel Road
- Bio-pilot Test Cell
- Former Building Location
- Restricted Area

Area Map (Optional)



FILE NUMBER:  
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DRAWN BY: VN  
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Louisville, Kentucky 40202

**2017 Debris Removal Locations**

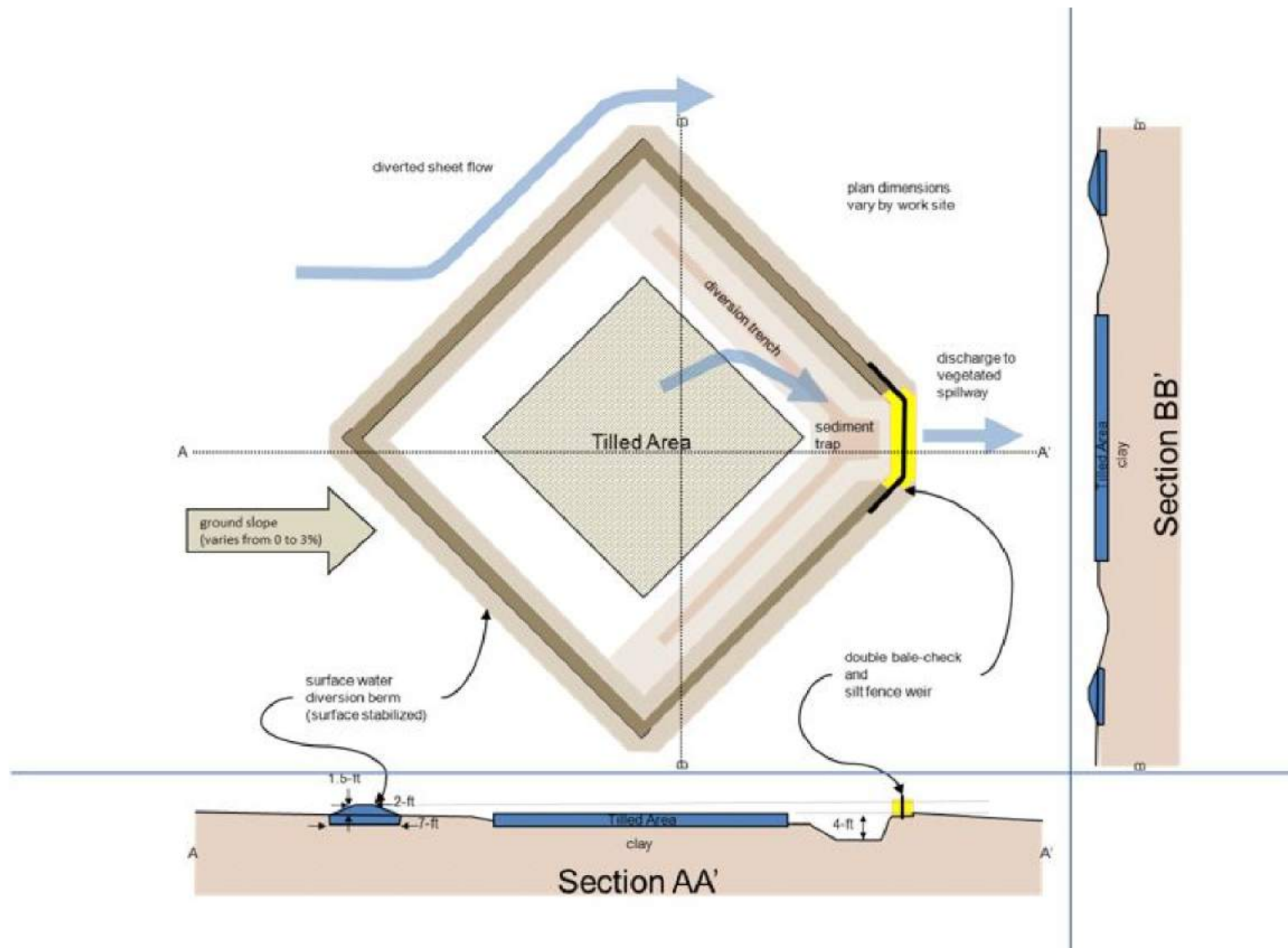
Waste Management Progress Report No. 6  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Works  
Barksdale, Wisconsin 54806

PROJECT NUMBER:  
60525839

DATE:  
April 2018

FIGURE NUMBER:  
**4**





Area Map (Optional)

FILE NUMBER:  
 DESIGNED BY: NS  
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 DATA QUALITY CHECK BY: NS

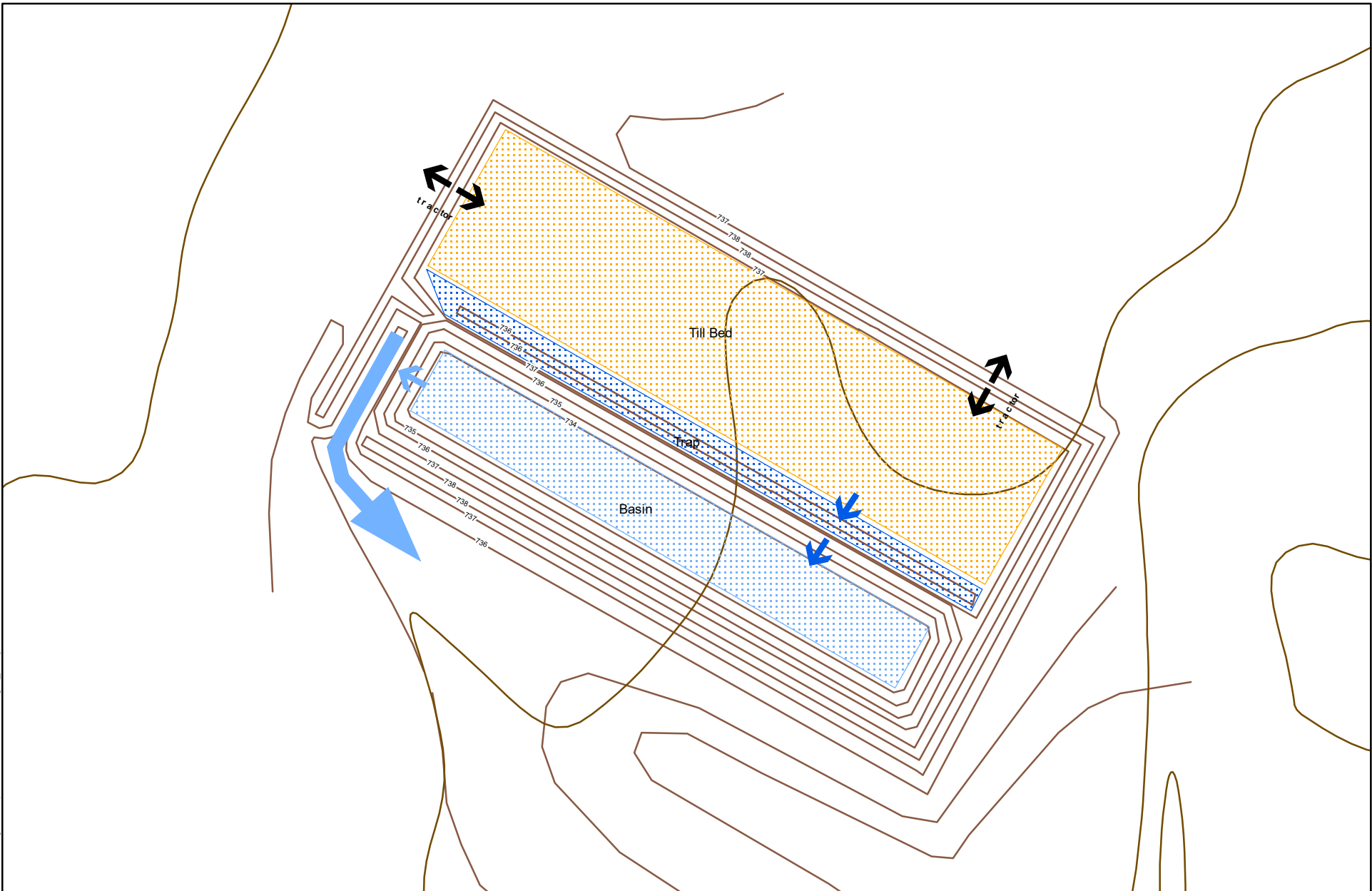
**AECOM**  
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 500 West Jefferson Street  
 Suite 1600  
 Louisville, Kentucky 40202

Typical Biopilot Sites  
 Operational Stage 2007-2010

Waste Management Progress Report No. 6  
 Bioremediation Pilot Test – 2017 Field Season  
 Former DuPont Barksdale Works  
 Barksdale, Wisconsin 54806

PROJECT NUMBER:  
 60525839  
 DATE:  
 April 2018  
 FIGURE NUMBER:  
**5**

G:\Projects\Barksdale\GIS\Maps\Maps 2018\WMM Progress Report 2017 Field Season\Fig06\_phAdjustmentL.mxd



Area Map (Optional)

FILE NUMBER:
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DRAWN BY:
DATA QUALITY CHECK BY:

NS  
VN  
NS



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Suite 1600  
Louisville, Kentucky 40202

### General pH Adjustment Cell Configuration

Waste Management Progress Report No. 6  
Bioremediation Pilot Test – 2017 Field Season  
Former DuPont Barksdale Works  
Barksdale, Wisconsin 54806

PROJECT NUMBER:
DATE:

60525839  
April 2018  
FIGURE NUMBER:

6

## **APPENDIX A**

# Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

**GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM:** Completion of this form is required under s. NR 724.13(3), Wis. Adm. Code. A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation of s. NR 724.13(3), Wis. Adm. Code, and is subject to the penalties in s. 292.99, Wis. Stats. This form must be submitted every six months for soil or groundwater remediation projects that report operation and maintenance progress in accordance with s. NR 724.13(3), Wis. Adm. Code.

Note: Long-term monitoring results submitted in accordance with s. NR 724.17(3), Wis. Adm. Code are required to be submitted within 10 business days of receiving sampling results and are not required to be submitted using this form. However, portions of this form require monitoring data summary information that may be based on information previously submitted in accordance with s. NR 724.17(3), Wis. Adm. Code.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if this form is required to be submitted at sites responded to under the Federal Comprehensive Environmental Response and Compensation Act (commonly known as Superfund) or an equivalent State lead Superfund response.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and obtain prior written approval for any omissions or changes.

Submittal of this form is not a substitute for reporting required by Department programs such as Waste Water or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). Unless otherwise noted, all citations refer to Wisconsin Administrative Code.

Note: There is a separate semi-annual report required under s. NR 700.11(1), Wis. Adm. Code. Reporting under that provision is through an internet-based form:

<http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf>

## Section GI - General Site Information

### A. General Information

#### 1. Site name

Former DuPont Barksdale Works

2. Reporting period from: 05/22/2017 To: 05/21/2018 Days in period: 365

3. Regulatory agency (enter DNR, DATCP and/or other) 4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific)  
 WDNR 02-04-000156

#### 5. Site location

Region	County	Address						
NE	4	72315 State Highway 13 South						
Municipality name <input type="radio"/> City <input checked="" type="radio"/> Town <input type="radio"/> Village			Township	Range	<input type="radio"/> E <input checked="" type="radio"/> W	Section	¼	¼
Town of Barksdale, Bayfield County			48 N	5		24	NW	

6. Responsible party Name	7. Consultant	
Mr. Bradley S. Nave, Project Director, Chemours	<input checked="" type="checkbox"/> Select if the following information has changed since the last submittal	
Mailing address	Company name	
7204 Overlook Cove, Georgetown, IN 47122	AECOM - Attention: Cary Pooler	
Phone number	Mailing address	Phone number
(812) 923-1136	500 WJefferson St., 1600 Lou., KY 40202	(502) 252-5878

#### 8. Contaminants

Nitramine and Nitroaromatic Organic Compounds (NNOCs): TNT, DNT, DNX, TNX, NT

#### 9. Soil types (USCS or USDA)

CL / SM-ML / SC

#### 10. Hydraulic conductivity(cm/sec):

NA

#### 11. Average linear velocity of groundwater (ft/yr)

NA

Site name: Former DuPont Barksdale Works

# Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Reporting period from: 05/22/2017 To: 05/21/2018

Form 4400-194 (R 11/14)

Days in period: 365

12. If soil is treated ex situ, is the treatment location off site?  Yes  No

If yes, give location: Region

County

Municipality name  City  Town  Village

Township

Range

E

Section

1/4

1/4

1/4

N

W

## B. Remediation Method

Only submit sections that apply to an individual site. Check all that apply:

- Groundwater extraction (submit a completed Section GW-1).
- Free product recovery (submit a completed Section GW-1).
- In situ air sparging (submit a completed Section GW-2).
- Groundwater natural attenuation (submit a completed Section GW-3).
- Other groundwater remediation method (submit a completed Section GW-4).
- Soil venting (including soil vapor extraction building venting and bioventing submit a completed Section IS-1).
- Soil natural attenuation (submit a completed Section IS-2).
- Other in situ soil remediation method (submit a completed Section IS-3).
- Biopiles (submit a completed Section ES-1).
- Landspreading/thinspreading of petroleum contaminated soil (submit a completed Section ES-2).
- Other ex situ remediation method (submit a completed Section ES-3).
- Site is a landfill (submit a completed Section LF-1).

## C. General Effectiveness Evaluation for All Active Systems

If the remediation is active (not natural attenuation), complete this subsection.

1. Is the system operating at design rates and specifications?  Yes  No

If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design. System is a pilot test, There are no applicable specifications.

2. Are modifications to the system warranted to improve effectiveness  Yes  No

If yes, explain:

Results of prior seasons' testing are used to improve system performance in subsequent test cells. Current data indicate that elevated (above ground) cells and adjustments to pH are likely to accelerate remediation, however, data are still being acquired to support this finding.

3. Is natural attenuation an effective low cost option at this time?  Yes  No

4. Is closure sampling warranted at this time?  Yes  No

5. Are there any modifications that can be made to the remediation to improve cost effectiveness?  Yes  No

If yes, explain:

## D. Economic and Cost Data to Date

1. Total investigation cost: \$0.00

2. Implementation costs (design, capital and installation costs, excluding investigation costs): \$0.00

3. Total costs during the previous reporting period: \$0.00

4. Total costs during this reporting period: \$0.00

5. Total anticipated costs for the next reporting period: \$0.00

6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above?  Yes  No

Site name: Former DuPont Barksdale Works

Reporting period from: 05/22/2017 To: 05/21/2018

Days in period: 365

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

If yes, explain:

System is a pilot test. Economic and cost data is not applicable.

7. If closure is anticipated within 12 months, estimated costs for project closeout: \$0.00

### E. Name(s), Signature(s) and Date of Person(s) Submitting Form

Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form for sites with any ongoing active remediation, monitoring or an investigation. Other persons may sign this form for sites with no response activities during the six month reporting period.

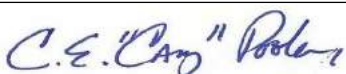
Registered Professional Engineers:

I hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Signature	Date


Hydrogeologists:

I hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Carroll E. Pooler, III	Project Manager, P.G. 1265
Signature 	Date 4/12/18

Scientists:

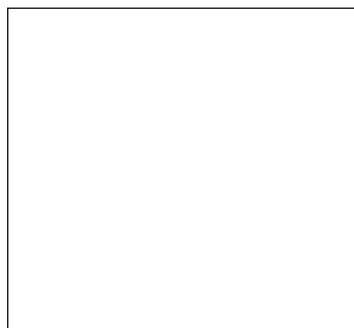
I hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Nicholas Shorkey	Staff Geologist
Signature 	Date 4/12/18

Other Persons:

Print name	Title
Signature	Date

Professional Seal(s), if applicable:



Site name: Former DuPont Barksdale Works

Reporting period from: 05/22/2017 To: 05/21/2018

Days in period: 365

## Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

### Section IS-3, Other In Situ Soil Remediation Methods

#### A. Effectiveness Evaluation

1. Describe the method used to remediate soil at the site:

The Bioremediation Pilot Test program is a preliminary evaluation of the efficacy of enhanced attenuation of NNOCs using periodic soil tilling with moisture and pH adjustment. The test program, initiated June 16, 2007, is currently evaluating alternate till bed configurations, tilling frequencies, and cell construction methods. Analytical data is currently being collected to evaluate the effects of soil moisture, pH and various NNOc mixtures on degradation pathways and is anticipated to provide information needed to implement a full scale program within several years.

2. List all information required by the DNR for this remediation method for this site:

This progress report was required to support the Remediation Variance issued by WDNR for the Bioremediation Pilot Test program. Methods to achieve remediation are currently not fully evaluated and will not be available until the test program is completed. Until such time, annual progress reports attached to this form will provide waste tracking data requested by the Remediation Variance for the following topics:

Product Residuals and Debris Removed from Bioremediation Pilot Cells

Movement of Impacted Soils into Bioremediation Pilot Cells

Alternative Treatment of Large Debris

This page IS-3 covers the test cells constructed in-situ: cells C01 through C18. These cells were constructed using the configuration shown on Figure 5 of the attached report. Contaminated soil in these cells is tilled in-place with surface and rain water diverted to the sides as much as possible.

#### B. Additional Attachments

Attach the following to this form:

- Any other attachments required by the DNR for this remediation method.

**Section ES-3, Other Ex Situ Soil Remediation Methods**

**A. Effectiveness Evaluation**

1. Describe the method used to remediate soil at the site:

The Bioremediation Pilot Test program is a preliminary evaluation of the efficacy of enhanced attenuation of NNOCs using periodic soil tilling with moisture and pH adjustment. The test program, initiated June 16, 2007, is currently evaluating alternate till bed configurations, tilling frequencies, and cell construction methods. Analytical data is currently being collected to evaluate the effects of soil moisture, pH and various NNOC mixtures on degradation pathways and is anticipated to provide information needed to implement a full scale program within several years.

2. List all information required by the DNR for this remediation method for this site:

This progress report was required to support the Remediation Variance issued by WDNR for the Bioremediation Pilot Test program. Methods to achieve remediation are currently not fully evaluated and will not be available until the test program is completed. Until such time, annual progress reports attached to this form will provide waste tracking data requested by the Remediation Variance for the following topics:

- Product Residuals and Debris Removed from Bioremediation Pilot Cells
- Movement of Impacted Soils into Bioremediation Pilot Cells
- Alternative Treatment of Large Debris

This page ES-3 covers the test cells constructed ex-situ: cells C19, C20, C21, C22, C23, C24, C25, C26, C27, and C28. These cells were constructed after receipt of the May 22, 2012 Hazardous Waste Remediation Variance issued for the project by the department. They use the configuration shown on Figure 6 of the attached report. Contaminated soil in these cells is excavated and placed into clay lined cells constructed above grade with drainage materials below the test soils to allow rain water to move out of the soil pore space thus increasing subsurface oxygen content. Smaller ex-situ clay-lined cells C29, C30, C31, and C32 were created with the purpose of keeping all water within the cell to evaluate how saturation may affect the cell contents.

**B. Additional Attachments**

Attach the following to this form:

- Any other attachments required by the DNR for this remediation method.



## **APPENDIX B**

Hazardous Waste Report Certification

Hazardous Waste Reporting-WA/5  
WI DNR  
PO BOX 7921  
Madison, WI 53707-7921

Site Name and Location

EPA ID : WIR000133447

Primary NAICS Code : 56291

Facility ID : 804009140

Site Name : FORMER DUPONT BARKSDALE WORKS

Mail Address :

Site Location: 72315 STH 13  
BARKSDALE, WI 54806

500 W JEFFERSON ST STE 1600  
LOUISVILLE, KY 40202


I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: ELIZABETH BISHOP

Title: WASTE CONSULTANT

Signature:

  
(on behalf of Chemours)

Date of Signature:

2-22-18

# Transportation Activity Report

JOB NO: 2920180000  
 BILL DOC NO LE70100056  
 GENERATOR NO 623264

WO NO: 2920180000  
 EPA ID: WIR000133447

BILL TO: CHEMOURS COMPANY, F.C., LLC  
 974 CETNRE RD. PO BOX 2900  
 CHESTNUT RUN PLAZA 735 3255-5  
 WILMINGTON, DE 19805  
 (302) 892-5739

JOB SITE: CHEMOURS BARKSDALE WORKS  
 72315 STATE HIGHWAY 13  
 WASHBURN, WI 54891  
 (303) 216-2558



CONTACT: GLENN JOHNSON

CONTACT: BETSY BISHOP

MANIFEST NUMBER(S):  
 001196395VES

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
9900296962		10/12/2017	CB2

TOTAL LOADING DEMURRAGE (HRS)	COMMENTS	TOTAL UNLOADING DEMURRAGE (HRS)
START TIME: <u>10:40<sup>17</sup></u>	UNIT IN #: <u>D020</u>	START TIME: _____
END TIME: <u>11:00<sup>17</sup></u>	UNIT OUT #: <u>V3017</u>	END TIME: _____
TOTAL (HRS): <u>1.0</u>	WASHOUT: YES / NO	TOTAL (HRS): _____
	USED: 0 / <input checked="" type="radio"/> 2 / 3 LINERS	

	SIGNATURES	DATES
CUSTOMER		<u>10/11/2017</u>
DRIVER		<u>10/11/17</u>

COMMENTS OR DELAY EXPLANATIONS:

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.

# Transportation Activity Report

JOB NO: 2920180000  
 BILL DOC NO LE70100056  
 GENERATOR NO 623264

WO NO: 2920180000  
 EPA ID: WIR000133447

BILL TO: CHEMOURS COMPANY, F.C., LLC  
 974 CETNRE RD. PO BOX 2900  
 CHESTNUT RUN PLAZA 735 3255-5  
 WILMINGTON, DE 19805  
 (302) 892-5739

JOB SITE: CHEMOURS BARKSDALE WORKS  
 72315 STATE HIGHWAY 13  
 WASHBURN, WI 54891  
 (303) 216-2558

CONTACT: GLENN JOHNSON

CONTACT: BETSY BISHOP

MANIFEST NUMBER(S):  
 001196395VES

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
9900296962		10/12/2017	CB2

DESCRIPTION	# CONT.	CONT./CODE	QTY	UOM	PG/LN	WASTE AREA
Manifest # 001196395VES WIP 781462 / Approval TWI374340 SOIL AND DEBRIS W/TRACE DINITROTOLUENE	1	30YDRO-CM	30	Y	1 / 1	

Misc. - MILEAGE LOADED	3962	725	MILE
Misc. - FUEL SURCHARGE	3400	1	EACH
Misc. - RENTAL ROLL-OFF	1518	4	MONTH
Misc. - MATERIAL HANDLING CHARGE	1445	1	EACH

Total Hours:	0
# of Containers:	1
Total Cubic	30

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.

# Land Disposal Restriction Notification Form

Generator Name CHEMOURS BARKSDALE WORKS

EPA ID Number WIR000133447

Manifest 001196395VES

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

Container Number: **LE-2920180000-001 (1/ 1)**

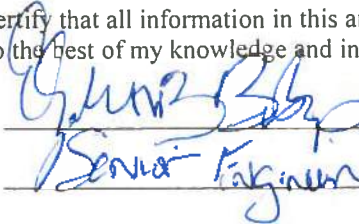
WIP / Approval Code: **781462 / TWI374340**  
Form Designation / CWA Status: **Non-Wastewater / Non-CWA**  
Waste Codes (Subcategories): **D007, D008 (NONE), D030**  
Constituents (F001 - F005): **None**  
UHCs Present: **None**  
Treatment Requirements: **Hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45**

Additional Notices:

I hereby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature

Title

 (on behalf of Chemours)

Date

10-7-17

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>W I R 0 0 0 1 3 3 4 4 7</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>(877) 818-0087</b>	4. Manifest Tracking Number <b>001196395 VES</b>		
5. Generator's Name and Mailing Address <b>CHEMOURS BARKSDALE WORKS 17221 W 17TH PL GOLDEN, CO 80401-2508</b>			Generator's Site Address (if different than mailing address) <b>72315 STATE HIGHWAY 13 WASHBURN, WI 54891</b>				
Generator's Phone <b>303 216-2558</b>			U.S. EPA ID Number <b>N J D 0 8 0 6 3 1 3 6 9</b>				
6. Transporter 1 Company Name <b>VEOLIA ES TECHNICAL SOLUTIONS</b>			U.S. EPA ID Number				
7. Transporter 2 Company Name			U.S. EPA ID Number				
8. Designated Facility Name and Site Address <b>VEOLIA ES TECHNICAL SOLUTIONS 7 MOBILE AVENUE SAUGET, IL 62201-1069</b>			U.S. EPA ID Number <b>I L D 0 9 8 6 4 2 4 2 4</b>				
Facility's Phone <b>618 271-2804</b>							
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
<b>X</b>	<b>1 NA3077, HAZARDOUS WASTE, SOLID, n.o.s., (DINITROTOLUENE (TRACE) IN SOIL, LEAD), 9, III, RQ (D030)</b>	<b>1</b>	<b>CM</b>	<b>30</b>	<b>Y</b>	<b>D007</b>	<b>D030</b>
	<b>2</b>					<b>D008</b>	
	<b>3</b>						
	<b>4</b>						
14. Special Handling Instructions and Additional Information <b>ER Service Contracted by VESTS + ER SERVICES CONTRACTED BY VESTS VEOLIA SUPPLIES PLACARDS AND ERG BOOK O/U 36210 + 1) ERG 171 W.781462 A.TWI374340 PO# 9900296962</b>							
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offeror's Printed/Typed Name <b>Elizabeth Bishop</b>			Signature <i>Elizabeth Bishop</i> (on behalf of Chemours)			Month Day Year <b>10 11 17</b>	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit Date leaving U.S.							
17. Transporter Acknowledgment of Receipt of Materials							
Transporter 1 Printed/Typed Name <b>Bryan Wenz</b>			Signature <i>Bryan Wenz</i>			Month Day Year <b>10 11 17</b>	
Transporter 2 Printed/Typed Name			Signature			Month Day Year	
18. Discrepancy							
18a. Discrepancy Indicator Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection							
Manifest Reference Number							
18b. Alternate Facility (or Generator) U.S. EPA ID Number							
Facility's Phone							
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.		2.		3.		4.	
20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name			Signature			Month Day Year	

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number WIR000133447	2. Page 1 of	3. Emergency Response Phone (777) 818-0087	4. Manifest Tracking Number <b>001196395 VES</b>			
5. Generator's Name and Mailing Address BETSY BISHOP CHEMOURS BARRICKDALE WORKS 17221 W 17TH PL. GOLDEN, CO 80401-2508			Generator's Site Address (if different than mailing address) 72315 STATE HIGHWAY 13 WARHURN, WI 54891					
Generator's Phone: 303 216-2558								
6. Transporter 1 Company Name VEOLIA ES TECHNICAL SOLUTIONS				U.S. EPA ID Number NJ D080631389				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address VEOLIA ES TECHNICAL SOLUTIONS 7 MOBILE AVENUE SAUGERT, IL 62201-1009				U.S. EPA ID Number IL D098642424				
Facility's Phone: 618 271-2804								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	1. NA3077, HAZARDOUS WASTE, SOLID, B.O.S., (DINITROTOLUENE (TRACHE) IN SOL, LEAD), 9, III, RQ (D030)	1	CM	30	Y	D007	R030	
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information ER Service Contracted by VEETA +/- ER SERVICES CONTRACTED BY YBSTG. VEOLIA SUPPLIES PLACARDS AND ERG BOOK C/136210 +/- 1) ERG.171 W.781462 A.TW1374340 PC# 9900296962								
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name Elizabeth Bishop				Signature <i>(Signature)</i>		Month 10	Day 11	Year 17
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Bryson W...				Signature <i>(Signature)</i>		Month 10	Day 11	Year 17
Transporter 2 Printed/Typed Name				Signature		Month	Day	Year
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
Manifest Reference Number: _____								
18b. Alternate Facility (or Generator)				U.S. EPA ID Number				
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator)						Month	Day	Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name				Signature		Month	Day	Year

**CONTAINS HAZARDOUS MATERIALS**

SCAC:  
CNWY

**STRAIGHT**  
XPO Logistics

Driver's signature acknowledges receipt of freight only. Received shipment is subject to terms of a written contract, if any, otherwise subject to the terms, conditions and limitations of liability set forth in XPO Logistics Freight, Inc. rules tariff. (see www.xpo.com)

**896-055764**



Shipper's No. CRGM 2017-001  
 Carrier's No. \_\_\_\_\_  
 SCAC CNWY Date 11/29/2017

**TO:**  
 Consignee US Army Core of Engineers-D. Felt  
 Street 3909 Halls Ferry Road  
 Destination Vicksburg, TN **MS** ZIP 39180

**FROM:**  
 Shipper Chemours Barksdale Works  
 Street 72315 Highway 13 South  
 Origin Ashland, WI ZIP 54806

Route:		Vehicle Number					
Number and Type of Packages	HM	I.D. Number	Kind of Packages, Description of Articles, (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME)	HAZARD CLASS	Packing Group	WEIGHT in LBS.	NMFC CLASS
1	X	UN1356	RQ Trinitrotoluene, wetted, with no less than 30% water by weight (2) 5-gallon buckets overpacked into a 1A2, 55-gallon steel drum	4.1	1	150	-
			Non DOT, non RCRA soil for testing (2) 5-gallon plastic buckets	none		120	

EMERGENCY RESPONSE TELEPHONE NUMBER ( 8004249301 ) ChemTrec NAME OR CONTRACT NUMBER

Remit C.O.D. To: Chemours c/o Cassport payment systems  
 Address: PO Box 17628  
 City: St. Louis State: MO Zip: 63178

**COD Amt: \$**  
 C.O.D. FEE:  
 Prepaid   
 Collect  \$

NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ \_\_\_\_\_ per \_\_\_\_\_  
 Where the applicable tariff provisions specify a limitation on the carrier's liability (NMFC Item 172), if there is no release or value declaration by the shipper, and the shipper does not declare a value or release the carrier's liability, that liability shall be limited to the extent provided by NMFC Item 172. California interstate shipments must comply with NMFC Item 173.

RECEIVED, subject to the classifications and lawfully filed tariff in effect on the date of issue of the Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown) marked consigned and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification not the date of shipment.  
 Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation per Elizabeth Bishop (on behalf of Chemours)  
 PLACARDS REQUIRED  No  YES  NO-FURNISHED BY CARRIER  
 PLACARDS SUPPLIED  YES  NO-FURNISHED BY CARRIER  
 DRIVERS SIGNATURE: \_\_\_\_\_

SHIPPER: Chemours Barksdale Works  
 PER: Elizabeth Bishop (on behalf of Chemours)  
 DATE: 11-29-2017

CARRIER: XPO LOGISTICS LTL  
 PER: [Signature]  
 DATE: 11/29/17

CONTAINS HAZARDOUS MATERIALS

CONTAINS HAZARDOUS MATERIALS

**CONTAINS HAZARDOUS MATERIALS**



## POTENTIAL HAZARDS

## FIRE OR EXPLOSION

- Flammable/combustible material.
- May be ignited by heat, sparks or flames.
- **DRIED OUT** material may explode if exposed to heat, flame, friction or shock; Treat as an explosive (GUIDE 112).
- Keep material wet with water or treat as an explosive (GUIDE 112).
- Runoff to sewer may create fire or explosion hazard.

## HEALTH

- Some are toxic and may be fatal if inhaled, swallowed or absorbed through skin.
- Contact may cause burns to skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

## PUBLIC SAFETY

- **CALL Emergency Response Telephone Number on Shipping Paper first.** If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Ventilate closed spaces before entering.

## PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing will only provide limited protection.

## EVACUATION

## Large Spill

- Consider initial evacuation for 500 meters (1/3 mile) in all directions.

## Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

## EMERGENCY RESPONSE

## FIRE

## CARGO Fires

- **DO NOT** fight fire when fire reaches cargo. Cargo may EXPLODE!
- Stop all traffic and clear the area for at least 800 meters (1/2 mile) in all directions and let burn.

- Do not move cargo or vehicle if cargo has been exposed to heat.

## TIRE or VEHICLE Fires

- Use plenty of water - FLOOD it! If water is not available, use CO<sub>2</sub>, dry chemical or dirt.
- If possible, and WITHOUT RISK, use unmanned hose holders or monitor nozzles from maximum distance to prevent fire from spreading to cargo area.
- Pay special attention to tire fires as re-ignition may occur. Stand by with extinguisher ready.

## SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flames, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.

## Small Spills

- Flush area with flooding quantities of water.

## Large Spills

- Wet down with water and dike for later disposal.
- **KEEP "WETTED" PRODUCT WET BY SLOWLY ADDING FLOODING QUANTITIES OF WATER.**

## FIRST AID

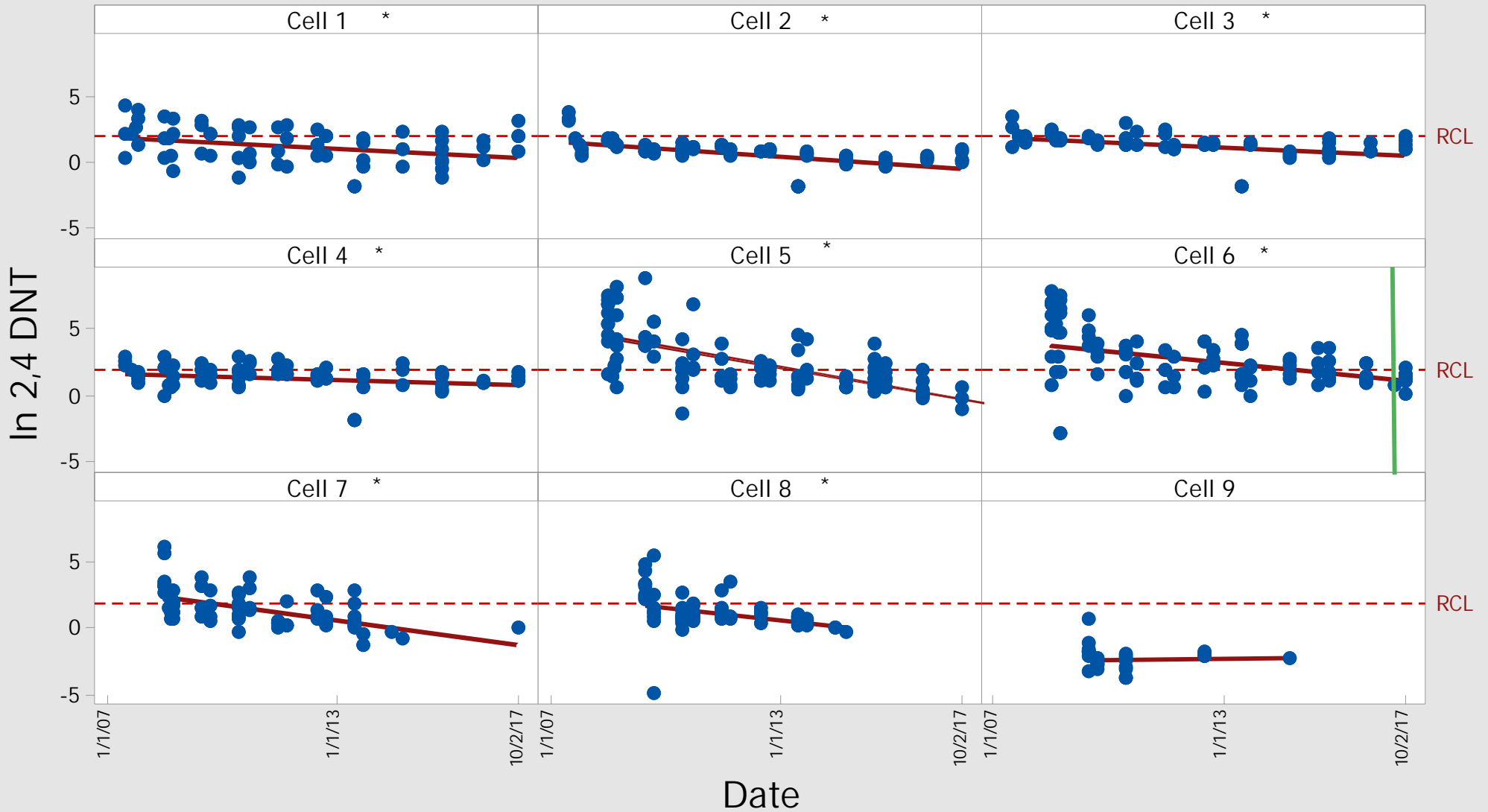
- Move victim to fresh air. • Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## **APPENDIX C**

# Barksdale Summary Graphs 2017 Year End

DNT, TNT, DNX, TNX,  
NB, Amino DNT

# Scatterplot of In 2,4 DNT vs Date

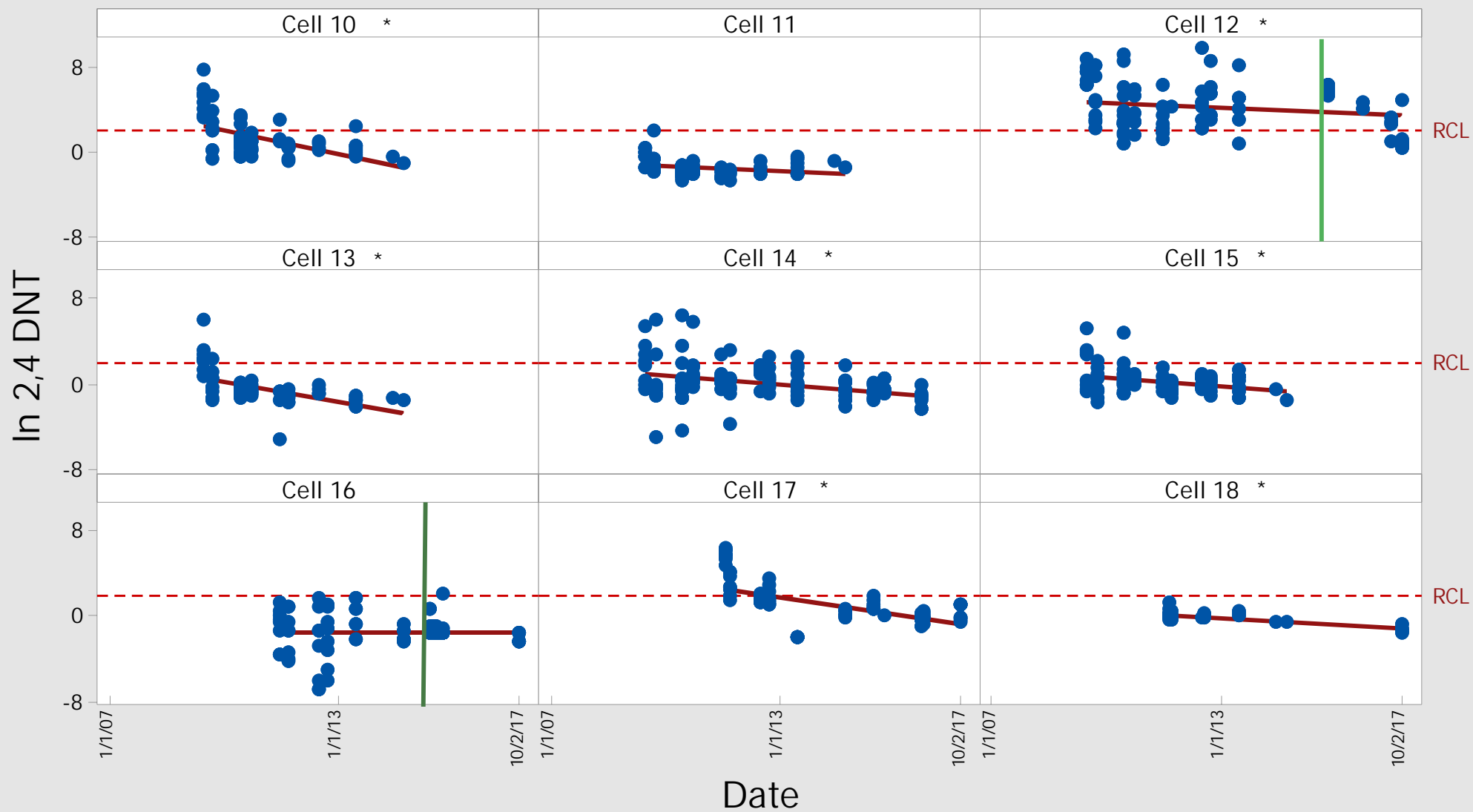


The natural logarithm of the RCL (7.03 mg/kg) is shown.

Vertical green line indicates beginning of lime addition

\* Indicates a significant reduction over time

# Scatterplot of In 2,4 DNT vs Date

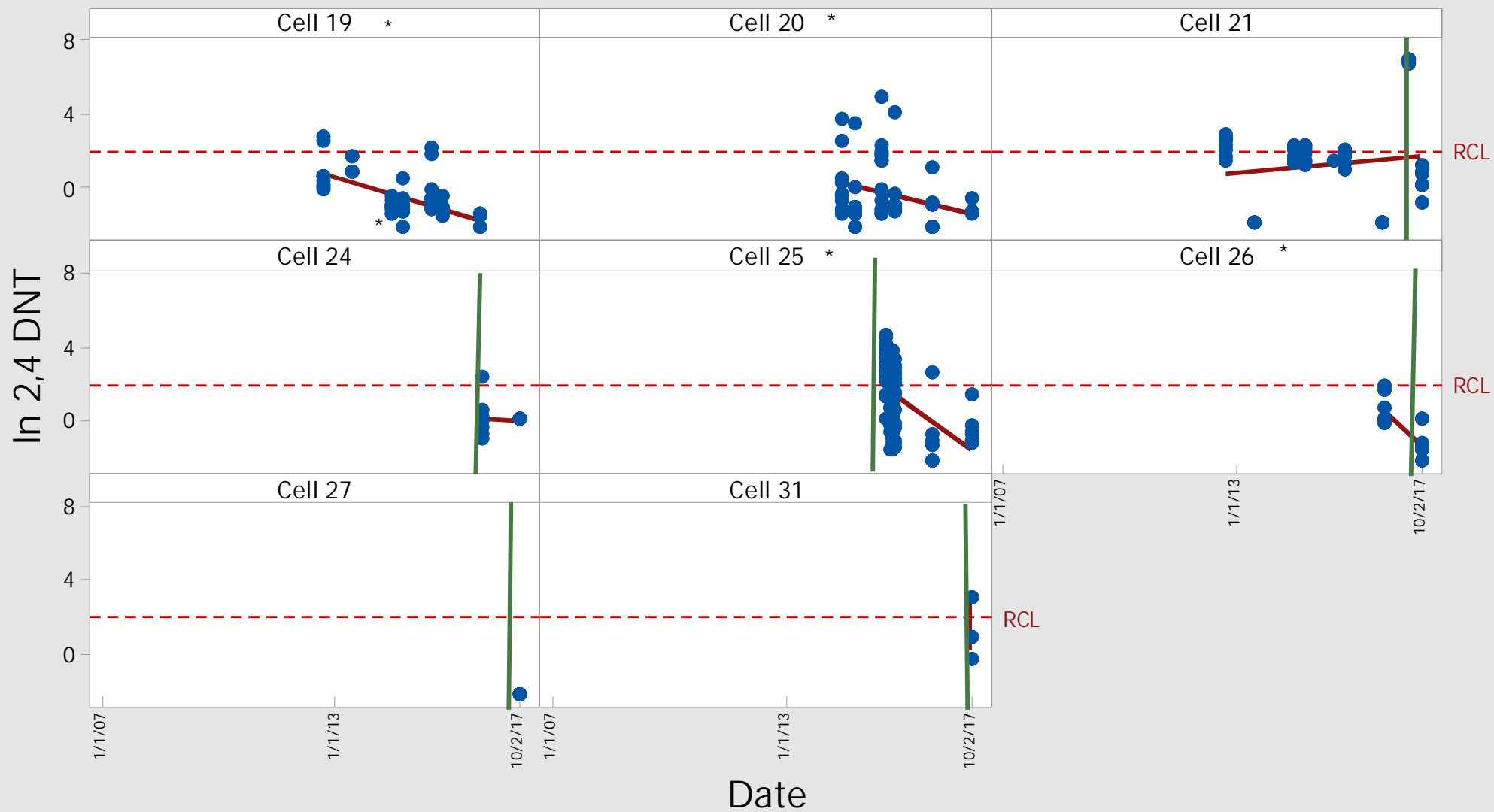


The natural logarithm of the RCL (7.03 mg/kg) is shown.

Vertical green line indicates beginning of lime addition

\* Indicates a significant reduction over time

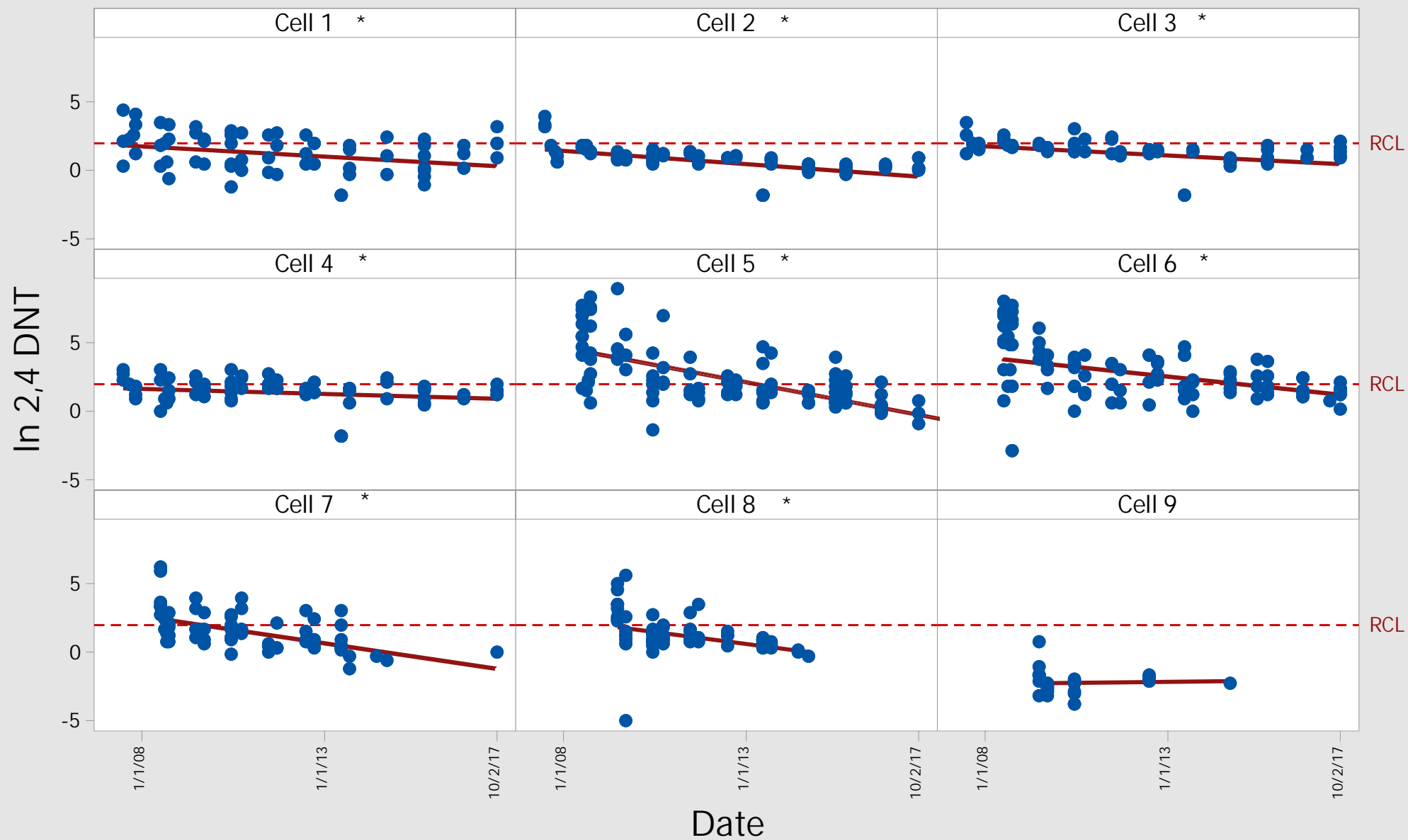
# Scatterplot of In 2,4 DNT vs Date



The natural logarithm of the RCL (7.03 mg/kg) is shown.

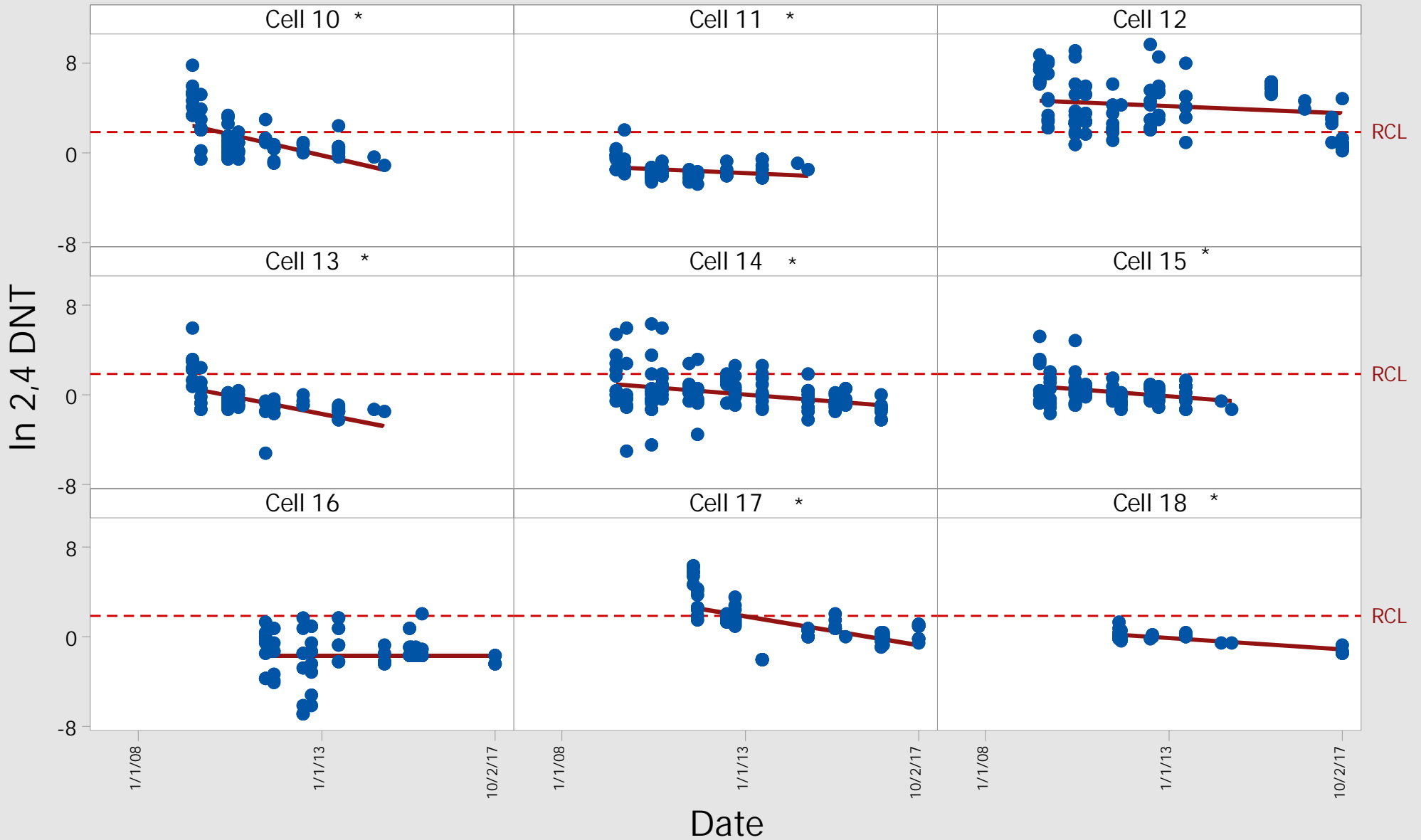
Vertical green line indicates beginning of lime addition  
 \* Indicates a significant reduction over time

# Scatterplot of In 2,4 DNT vs Date



The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

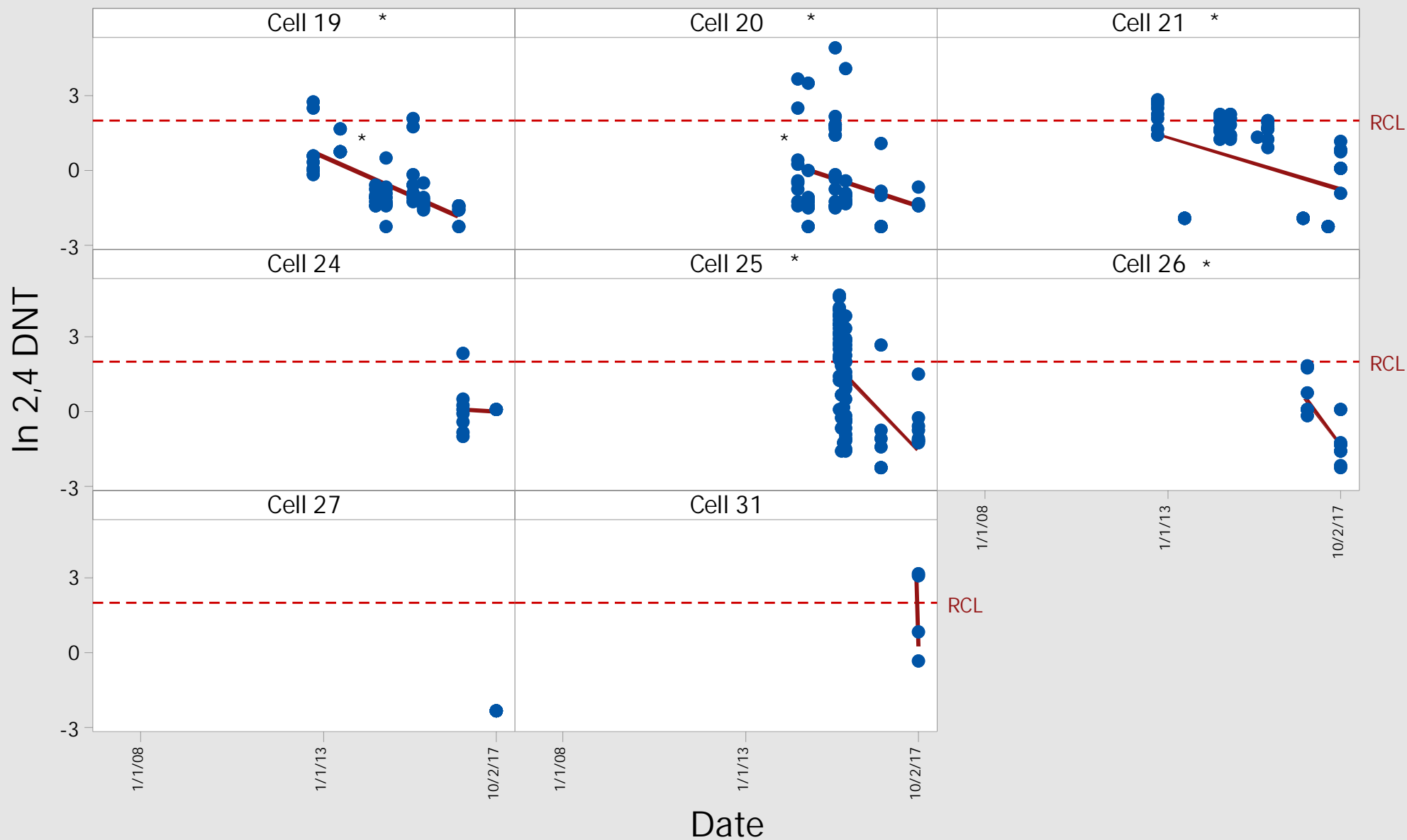
# Scatterplot of In 2,4 DNT vs Date



The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

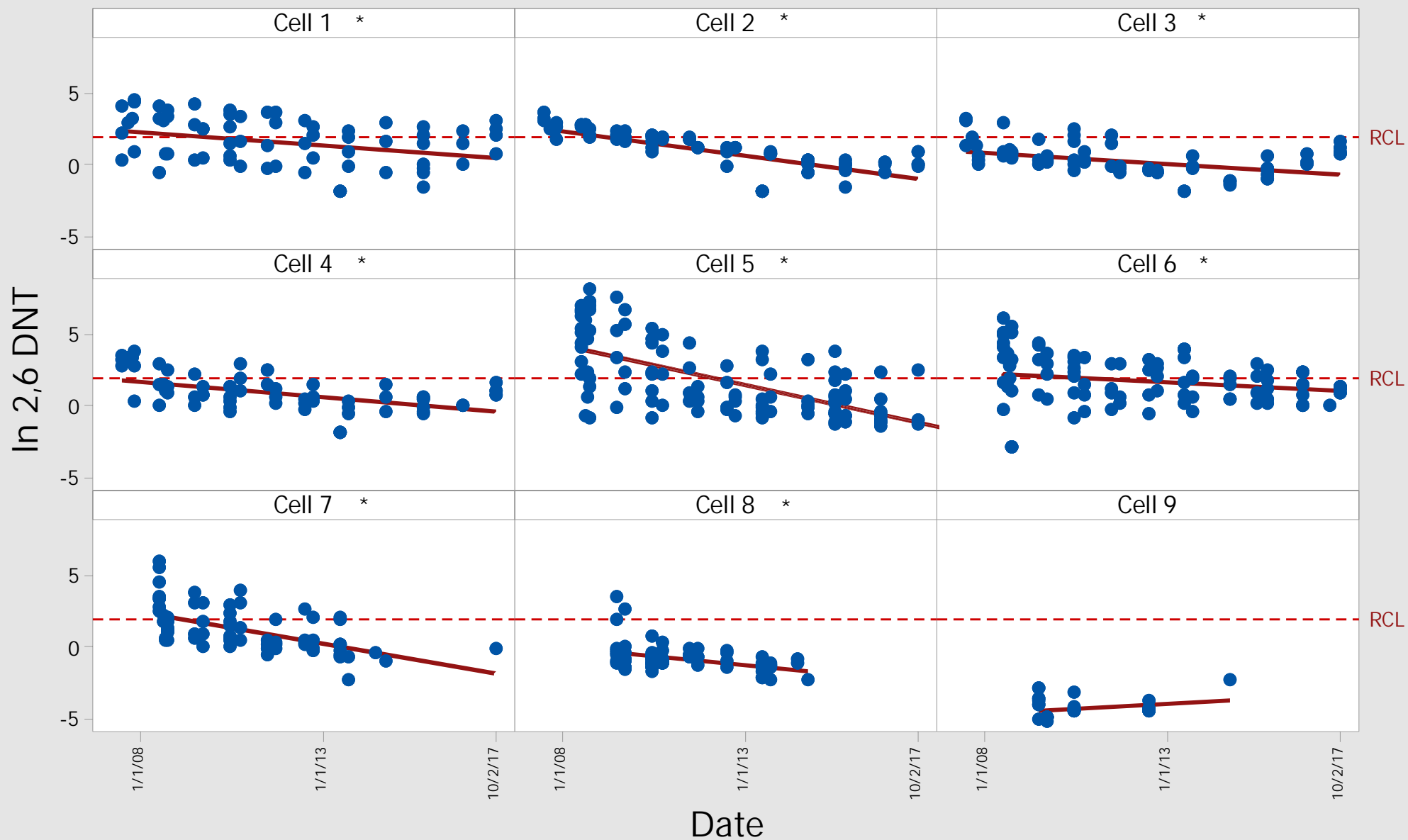


# Scatterplot of In 2,4 DNT vs Date



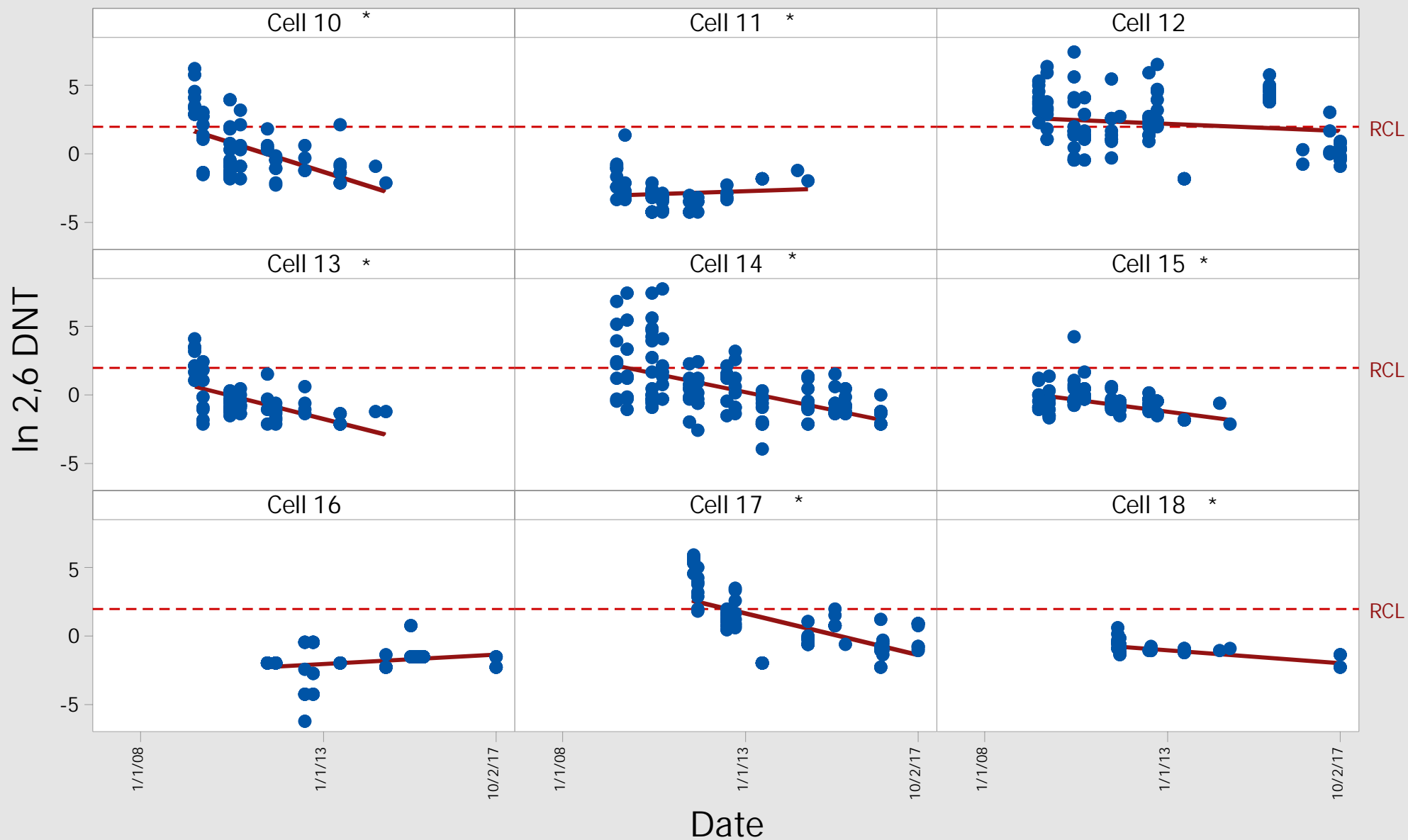
The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In 2,6 DNT vs Date



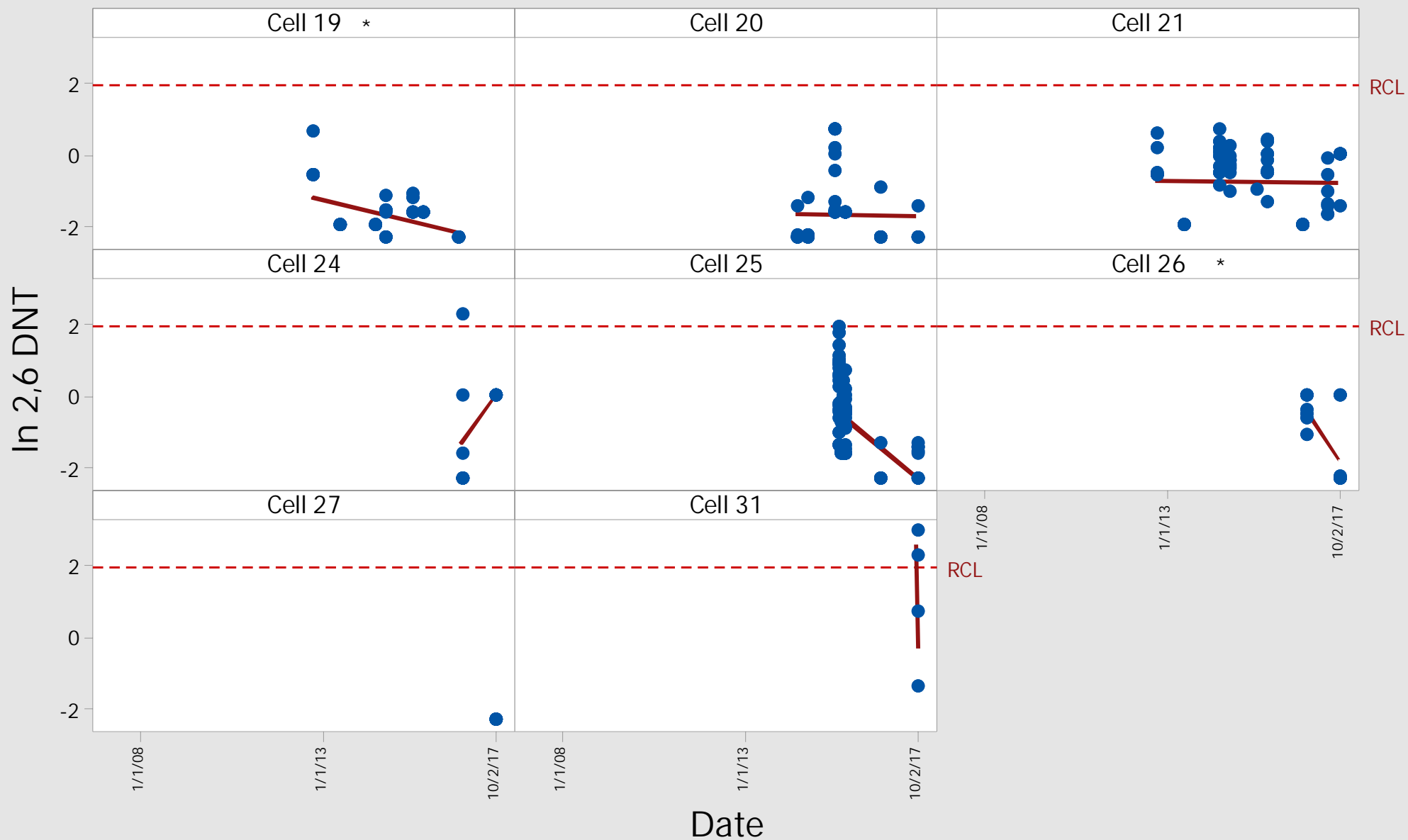
The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In 2,6 DNT vs Date



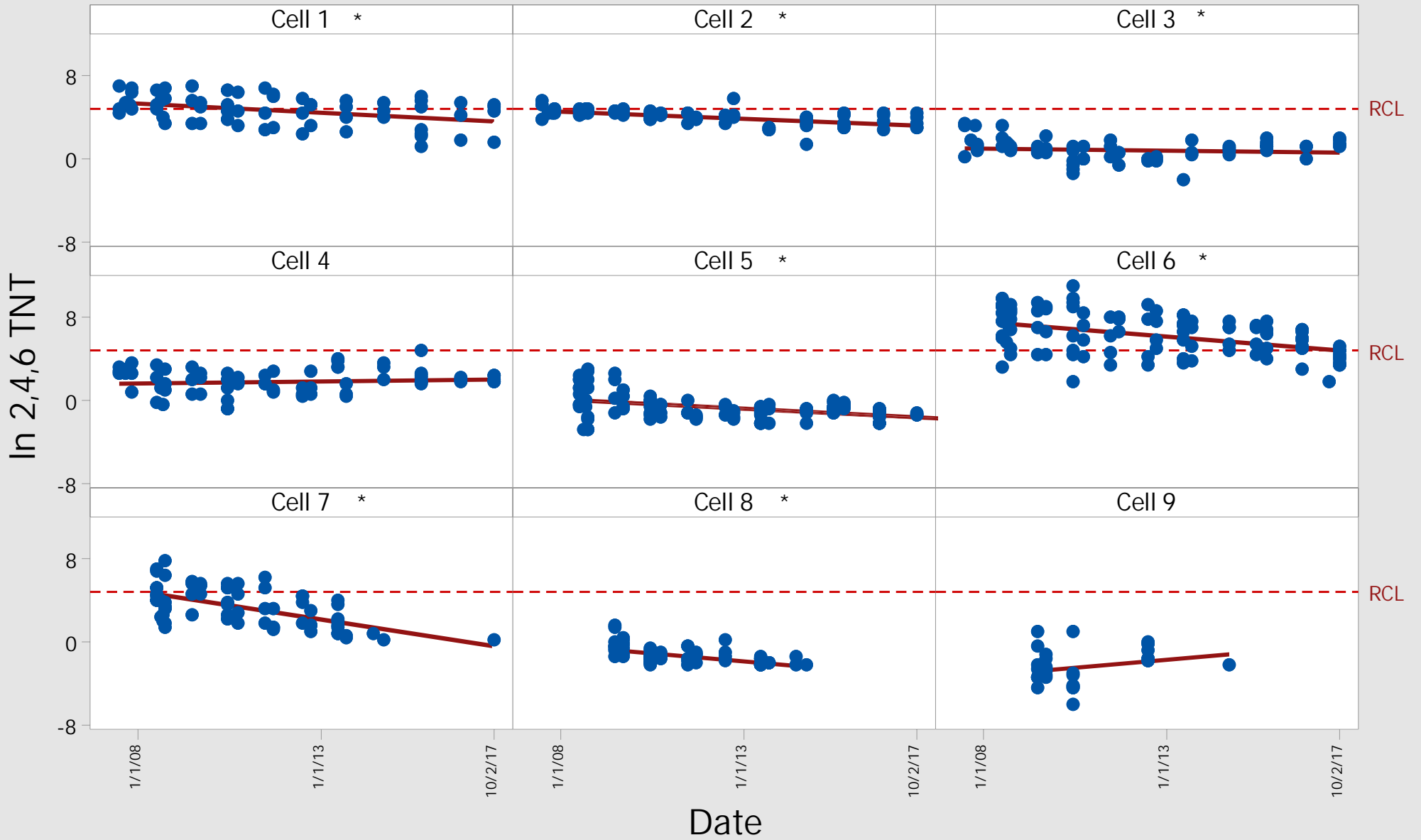
The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In 2,6 DNT vs Date



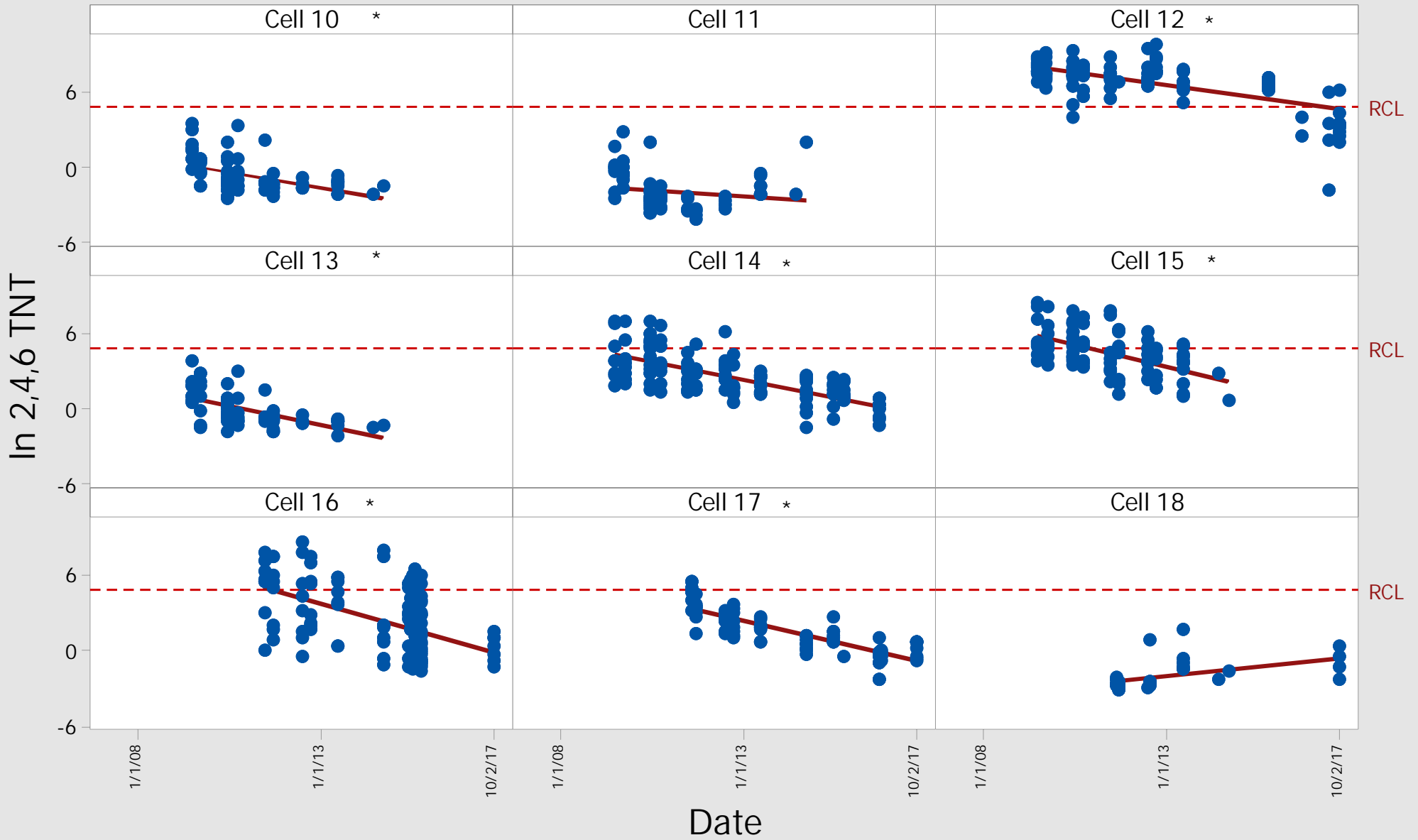
The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In 2,4,6 TNT vs Date



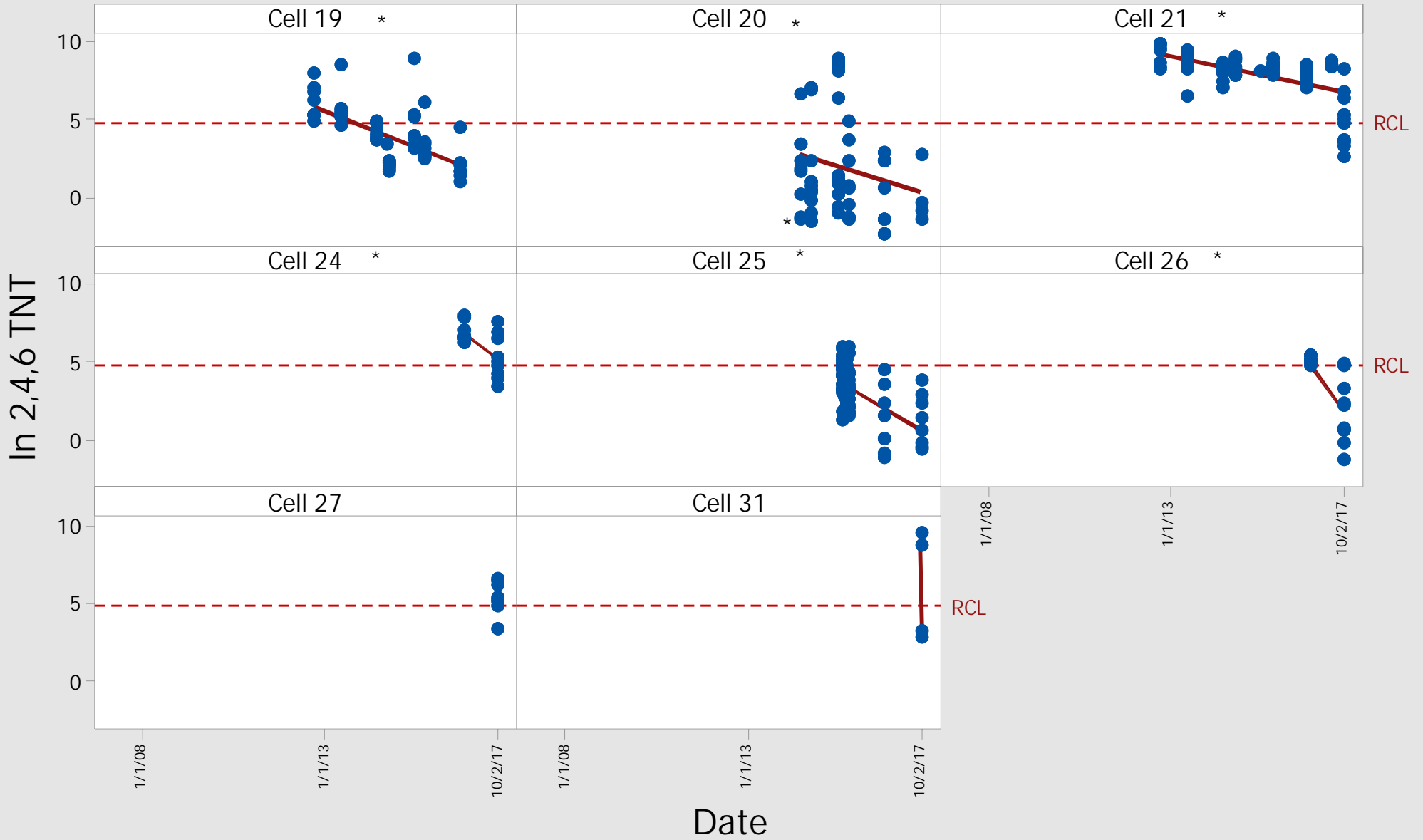
The logarithm of the RCL (124 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In 2,4,6 TNT vs Date



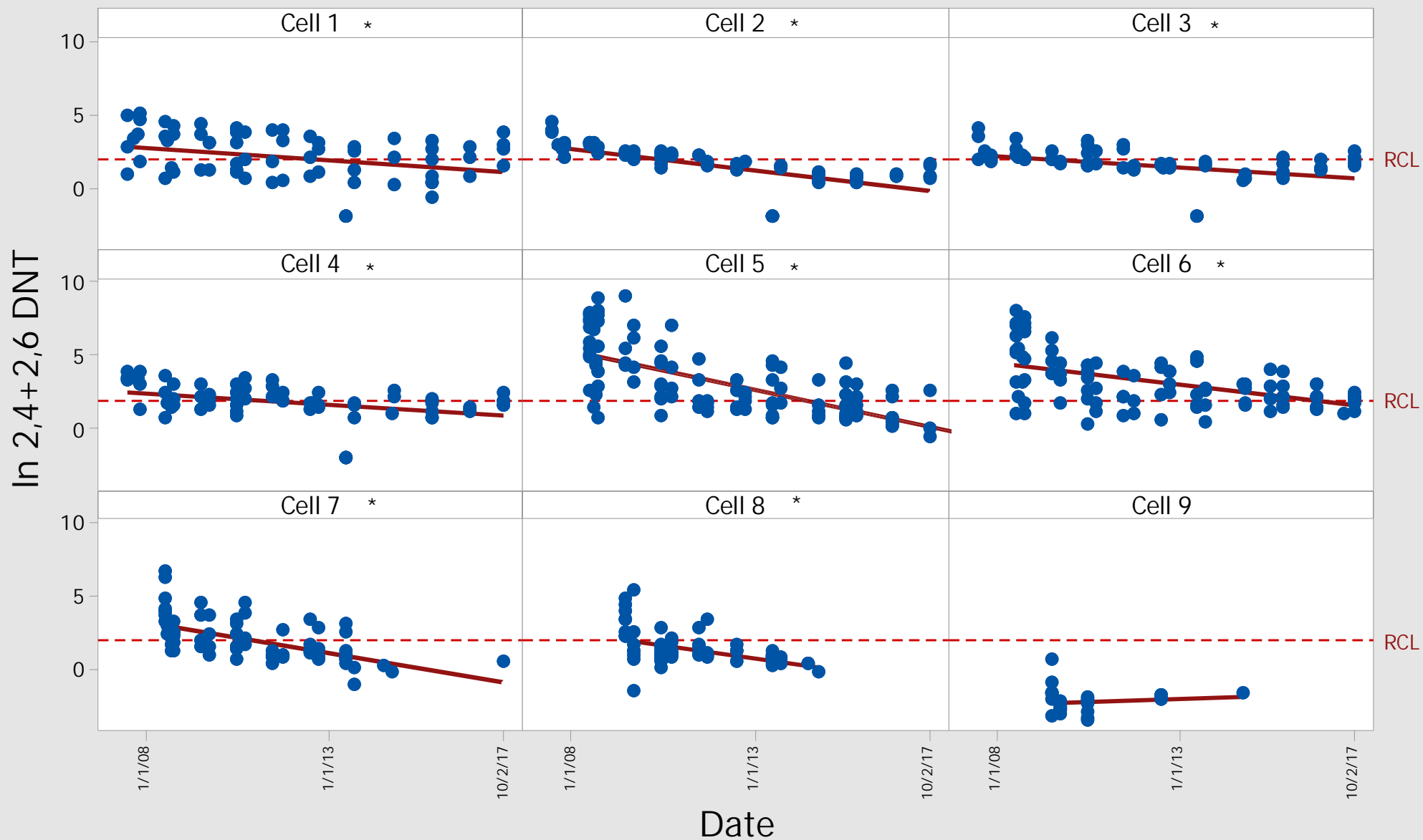
The logarithm of the RCL (124 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In 2,4,6 TNT vs Date



The logarithm of the RCL (124 mg/Kg) is shown. \* indicates a significant reduction over time.

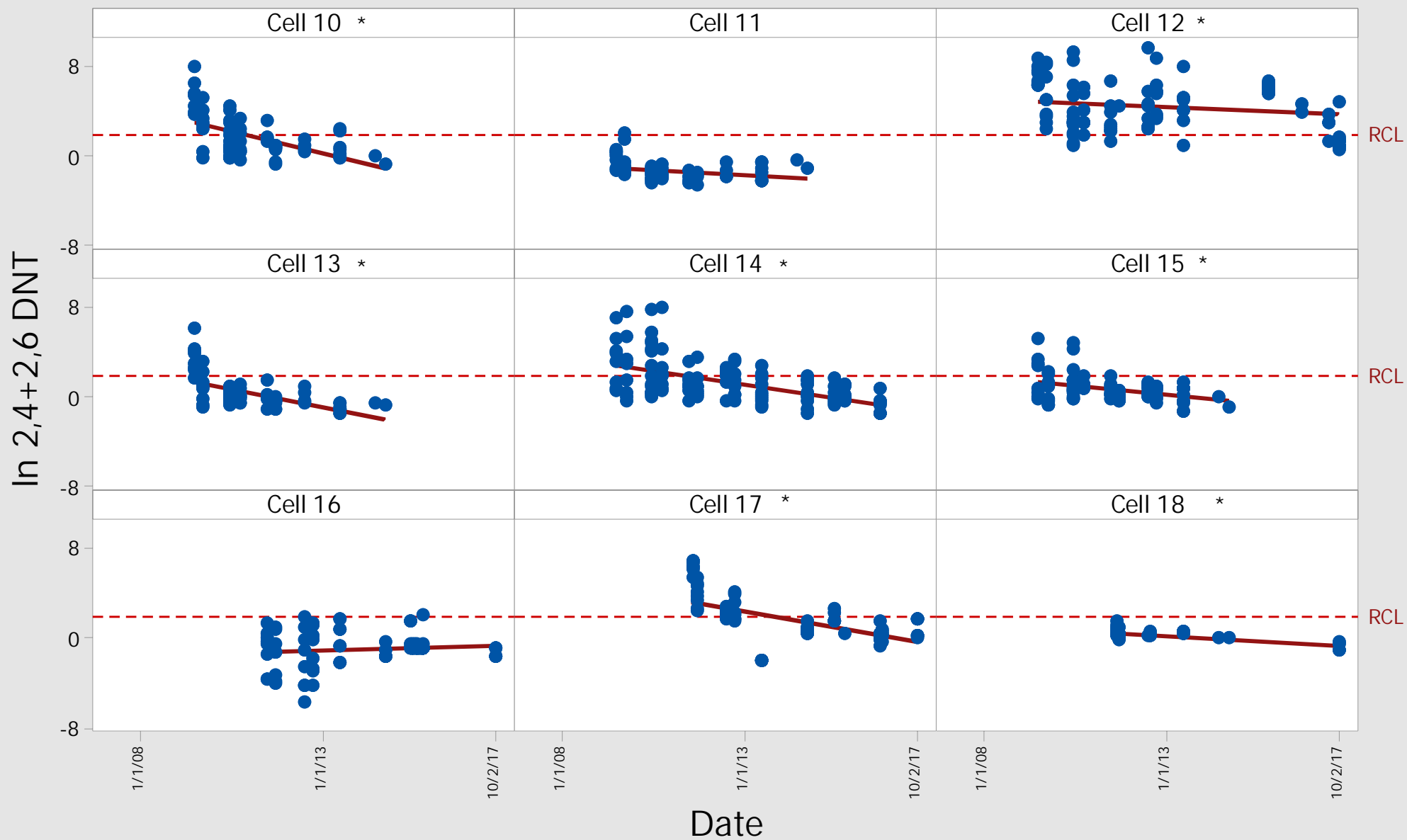
# Scatterplot of In 2,4+2,6 DNT vs Date



The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

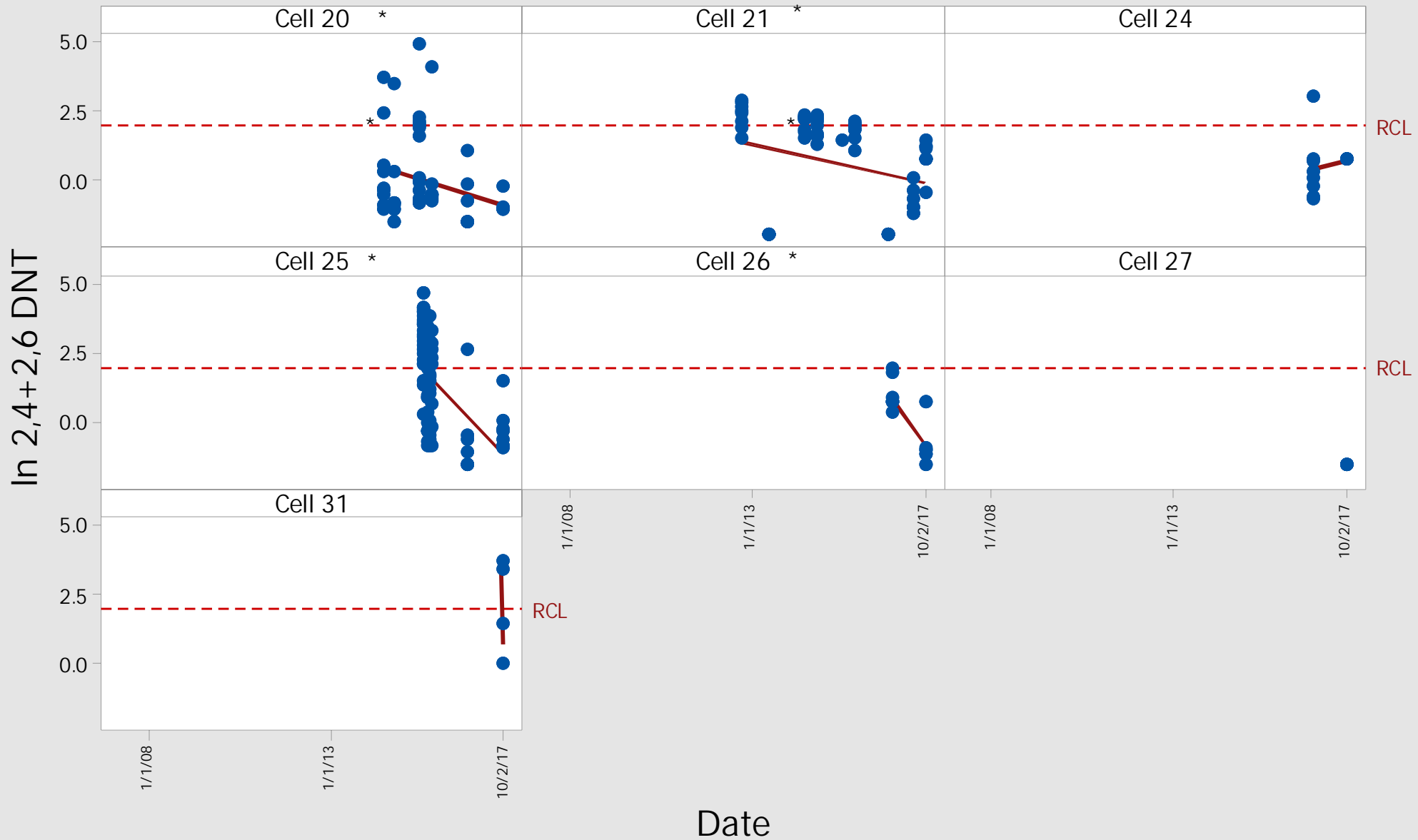


# Scatterplot of In 2,4+2,6 DNT vs Date



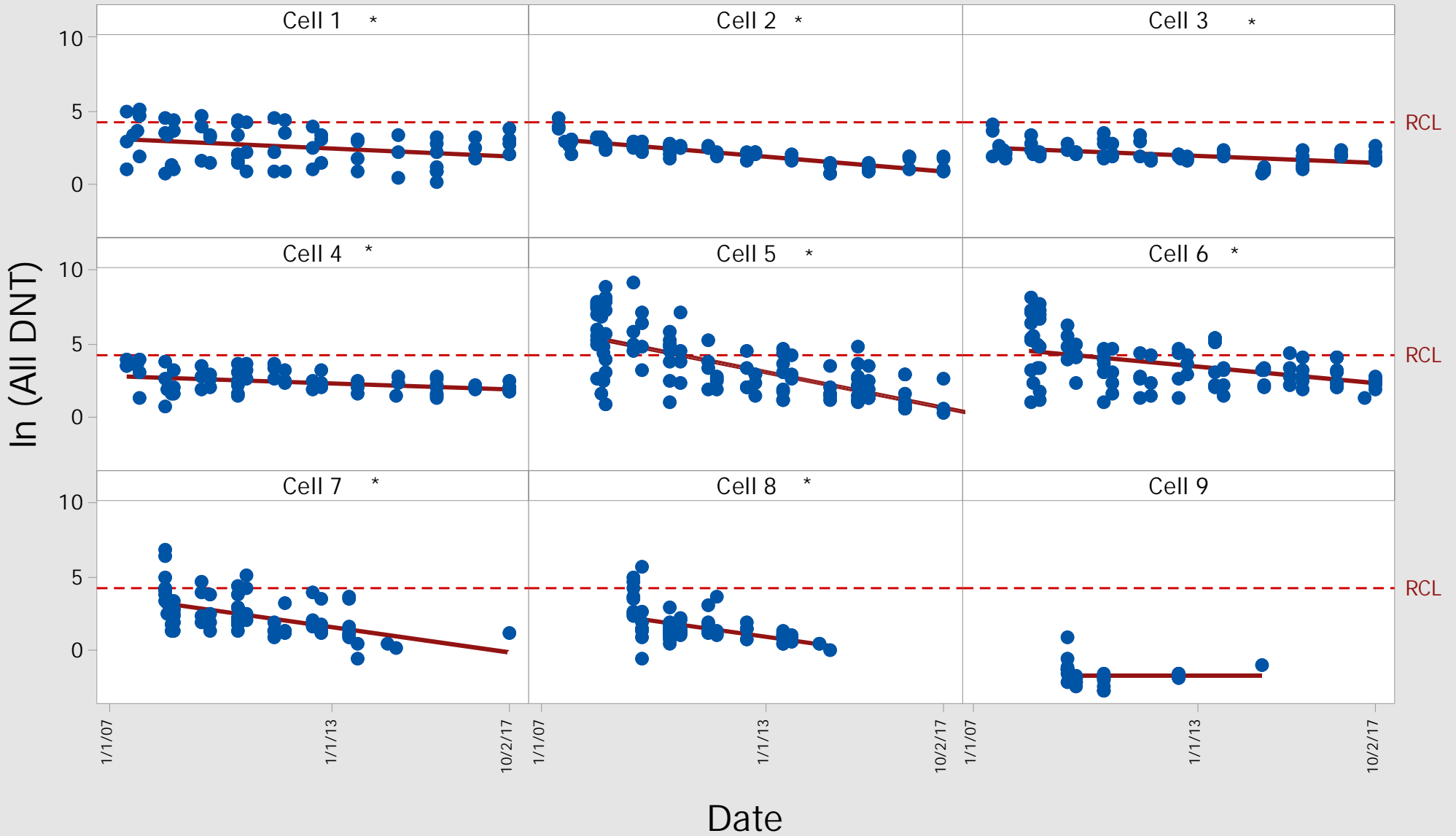
The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In 2,4+2,6 DNT vs Date



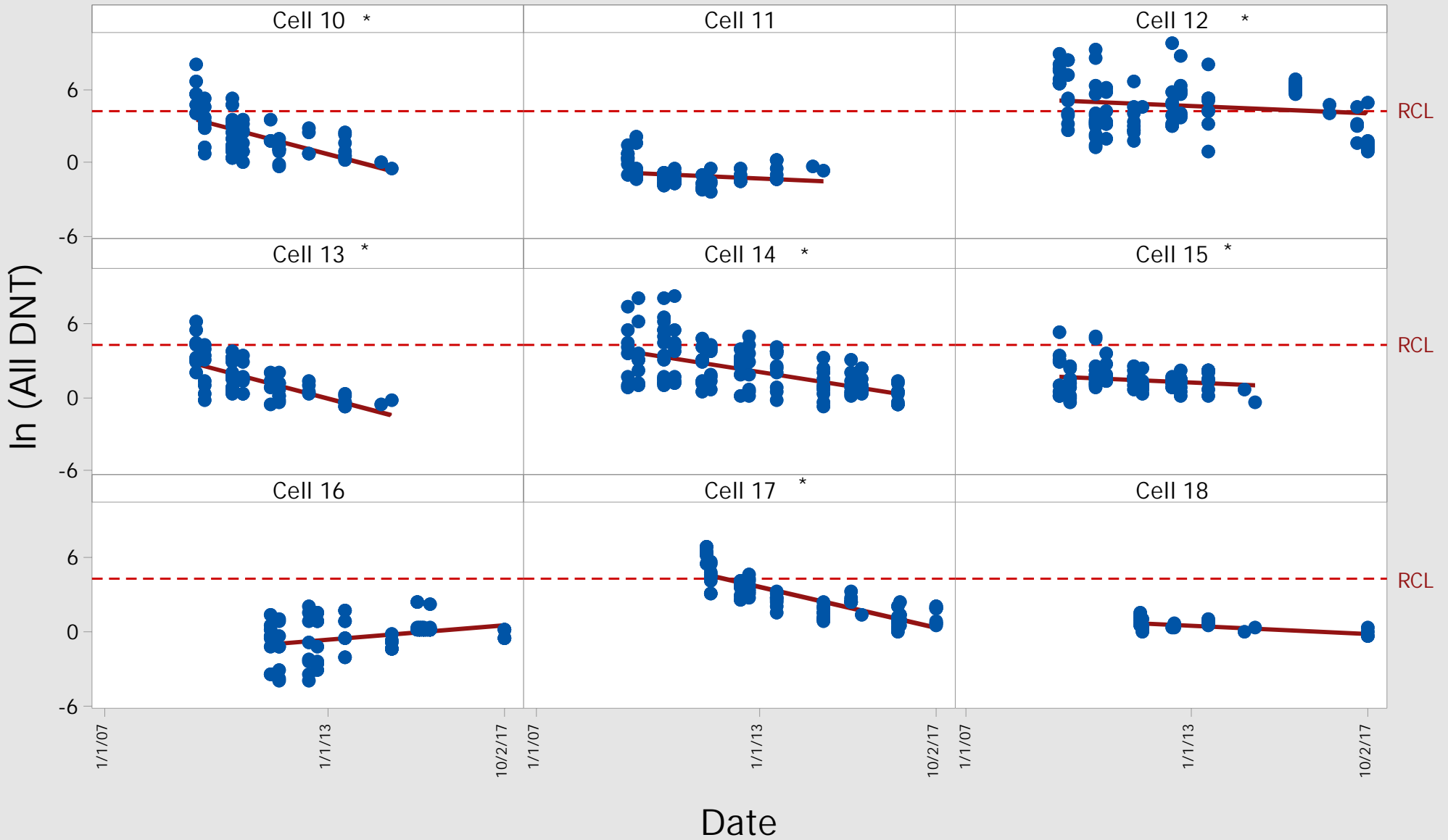
The logarithm of the RCL (7.03 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In (All DNT) vs Date



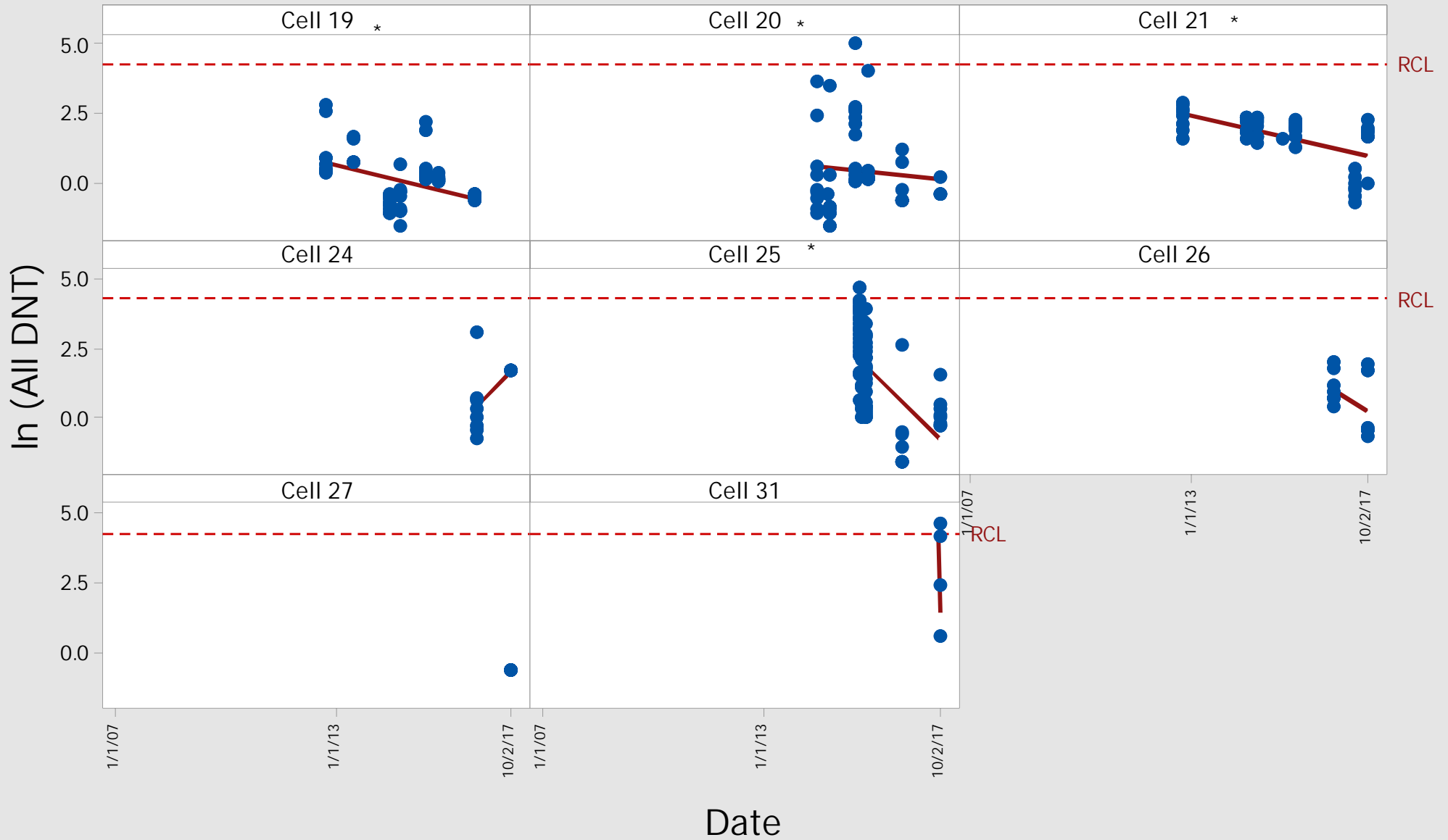
The logarithm of the RCL (70.3 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of ln (All DNT) vs Date



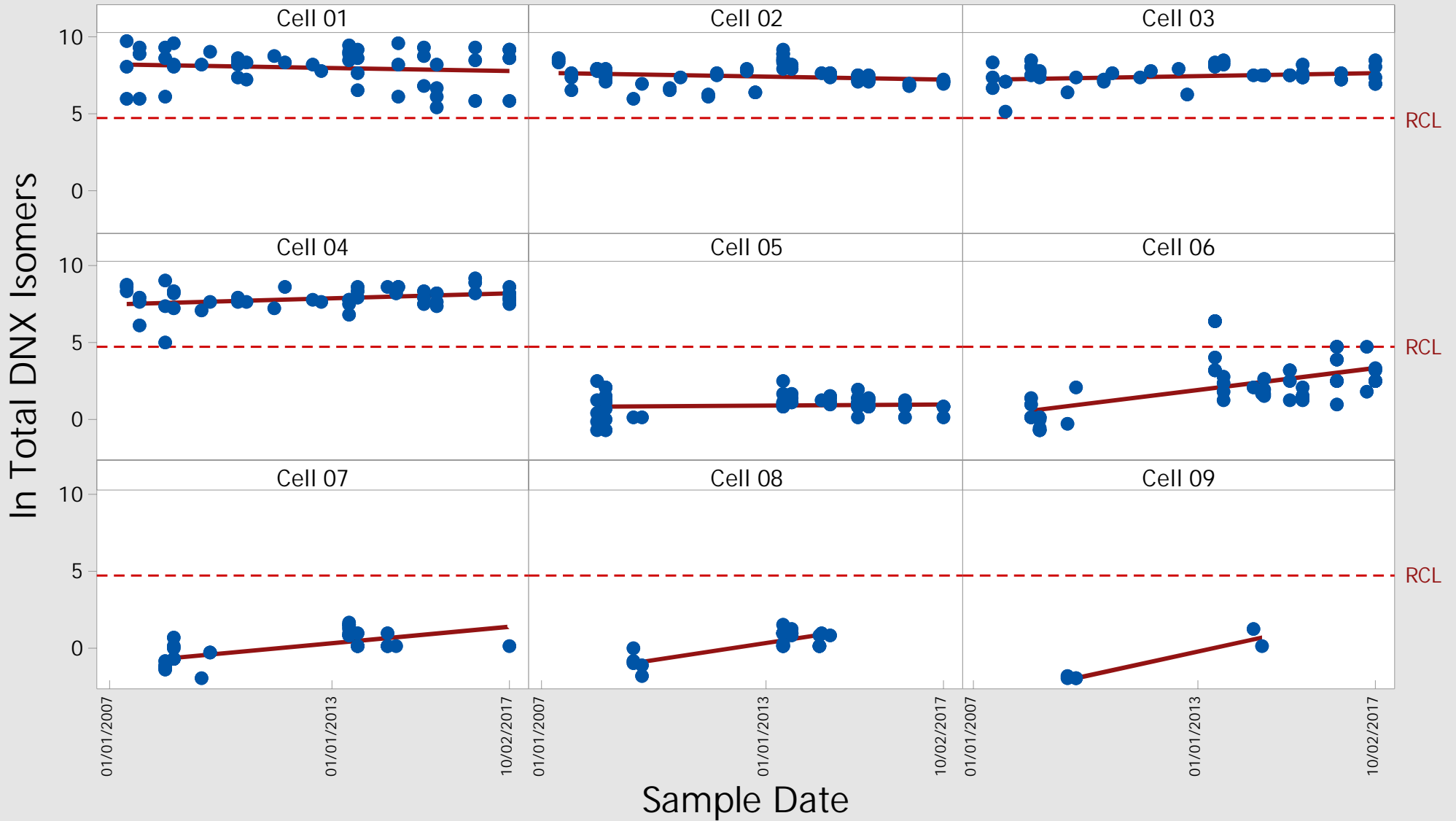
The logarithm of the RCL (70.3 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of ln (All DNT) vs Date



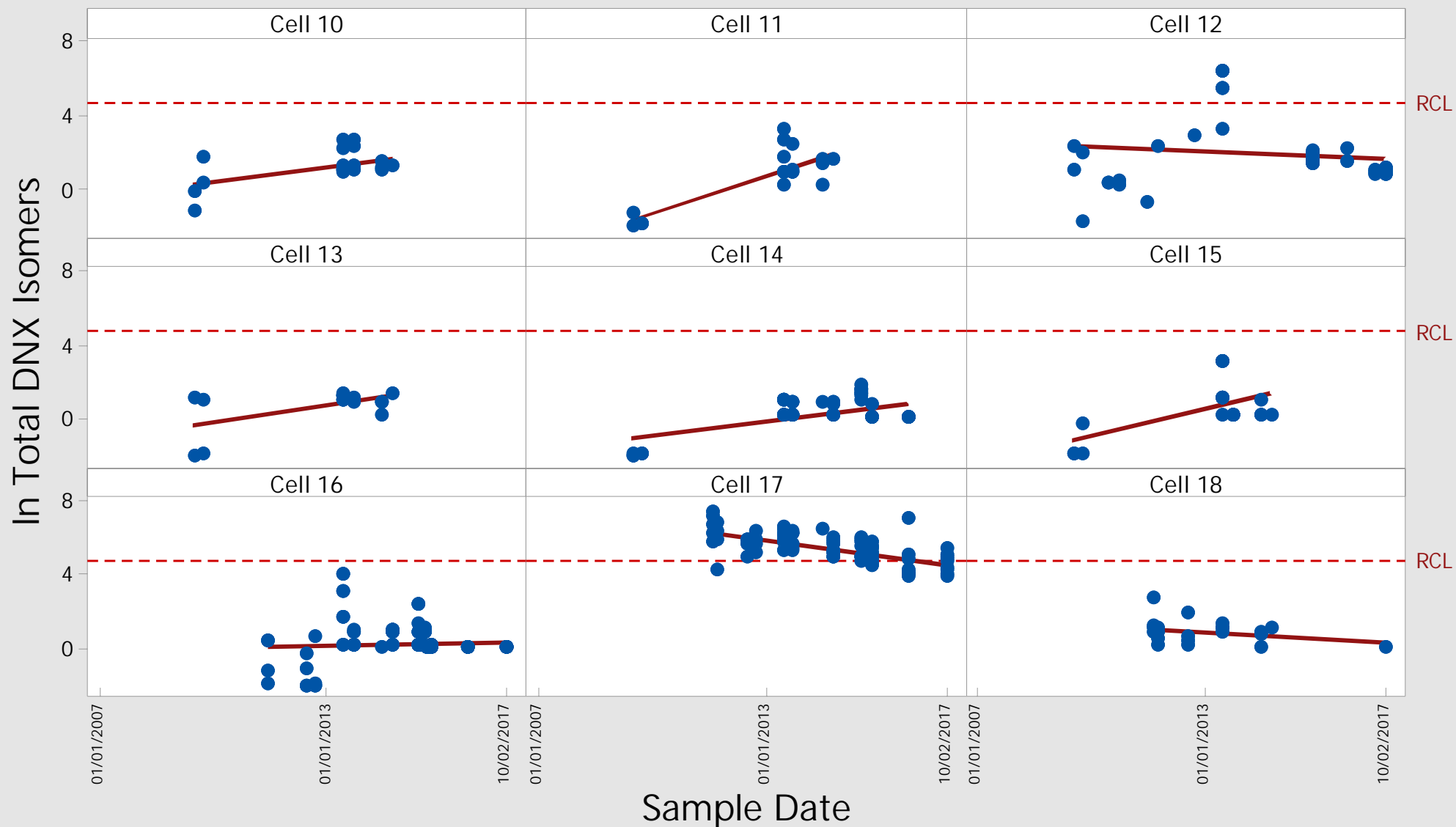
The logarithm of the RCL (70.3 mg/Kg) is shown. \* indicates a significant reduction over time.

# Scatterplot of In Total DNX Isomers vs Sample Date



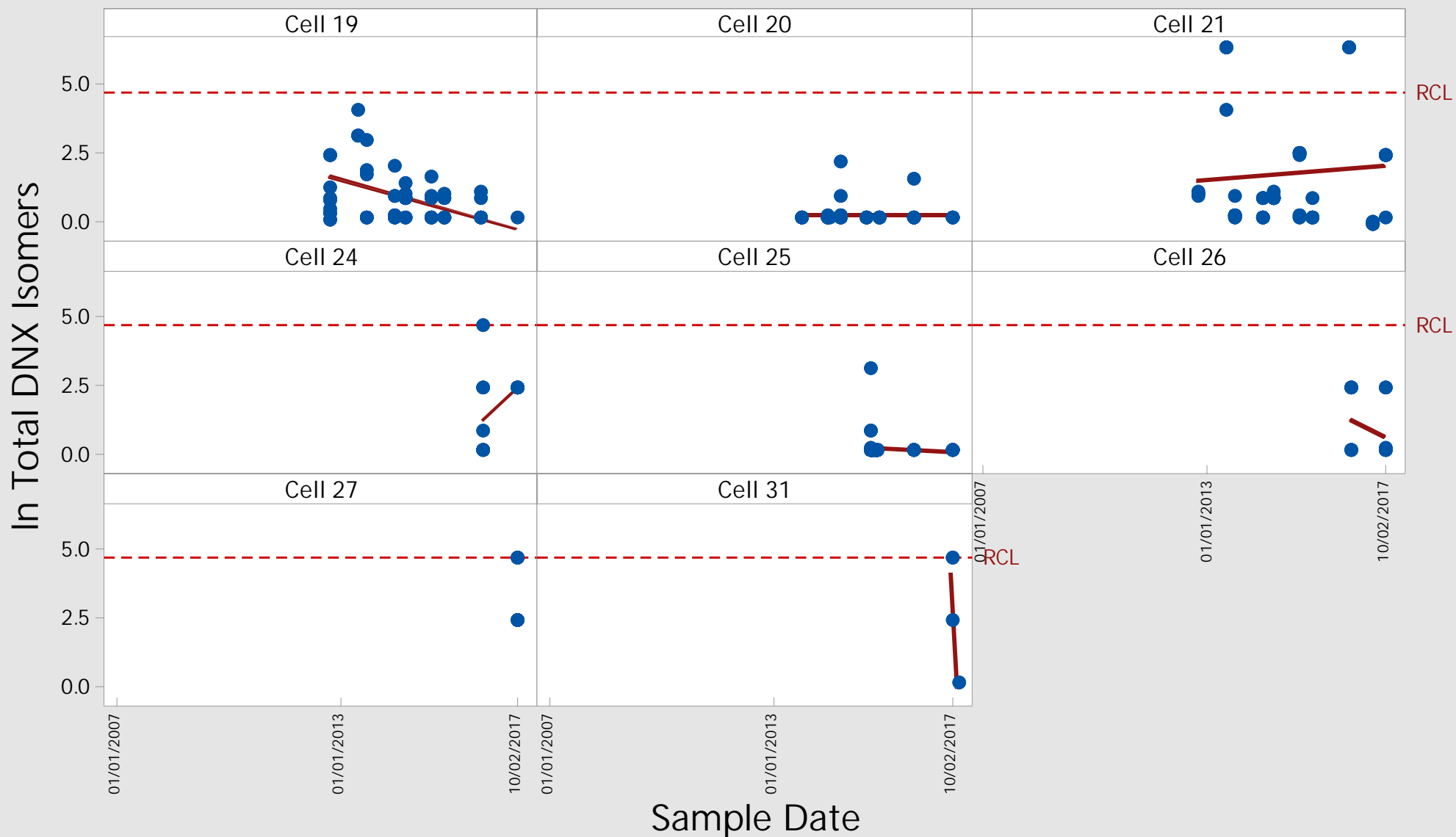
The natural logarithm of the RCL (111 mg/kg) is shown

# Scatterplot of In Total DNX Isomers vs Sample Date



The natural logarithm of the RCL (111 mg/kg) is shown

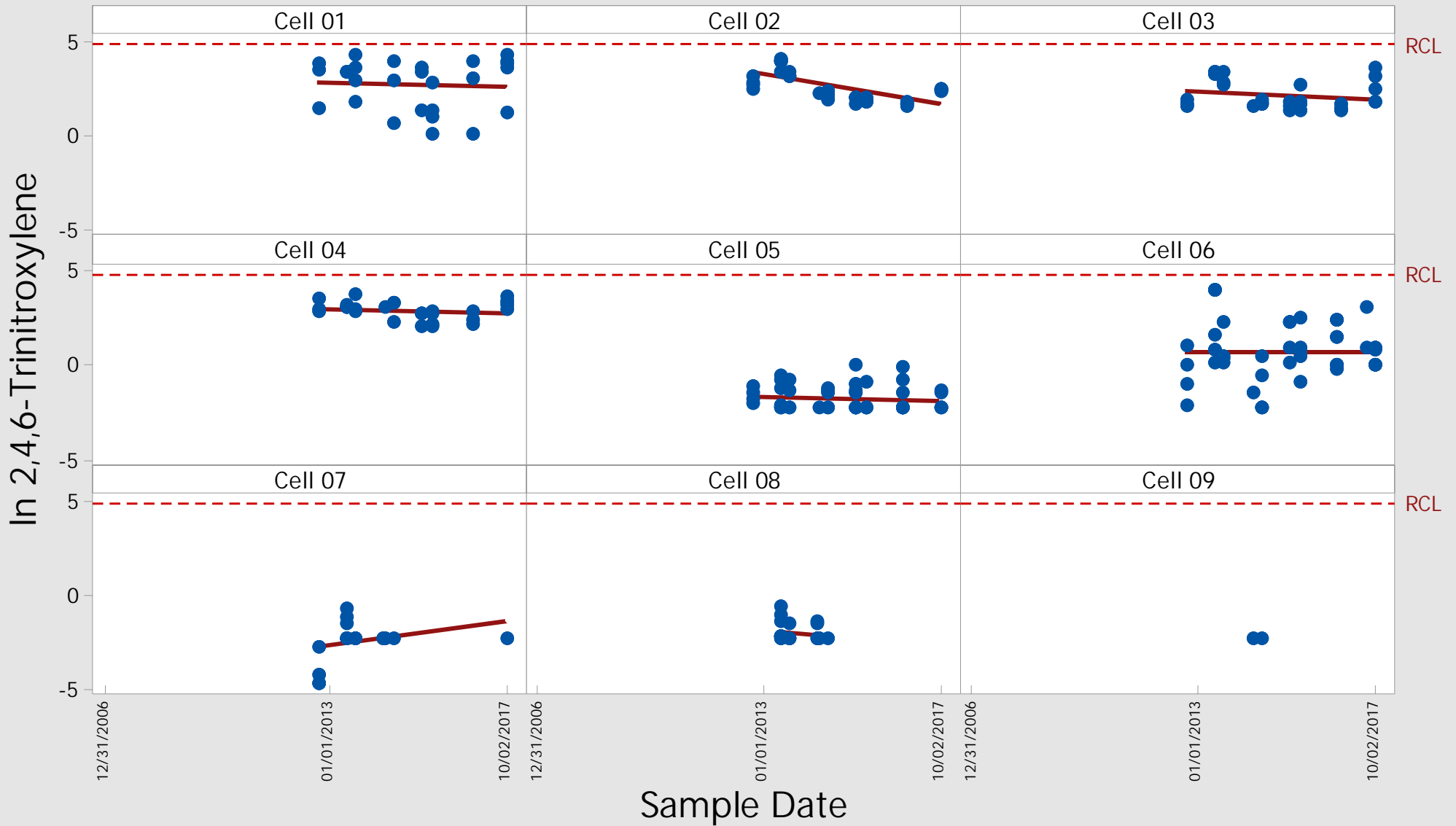
# Scatterplot of In Total DNX Isomers vs Sample Date



The natural logarithm of the RCL (111 mg/kg) is shown

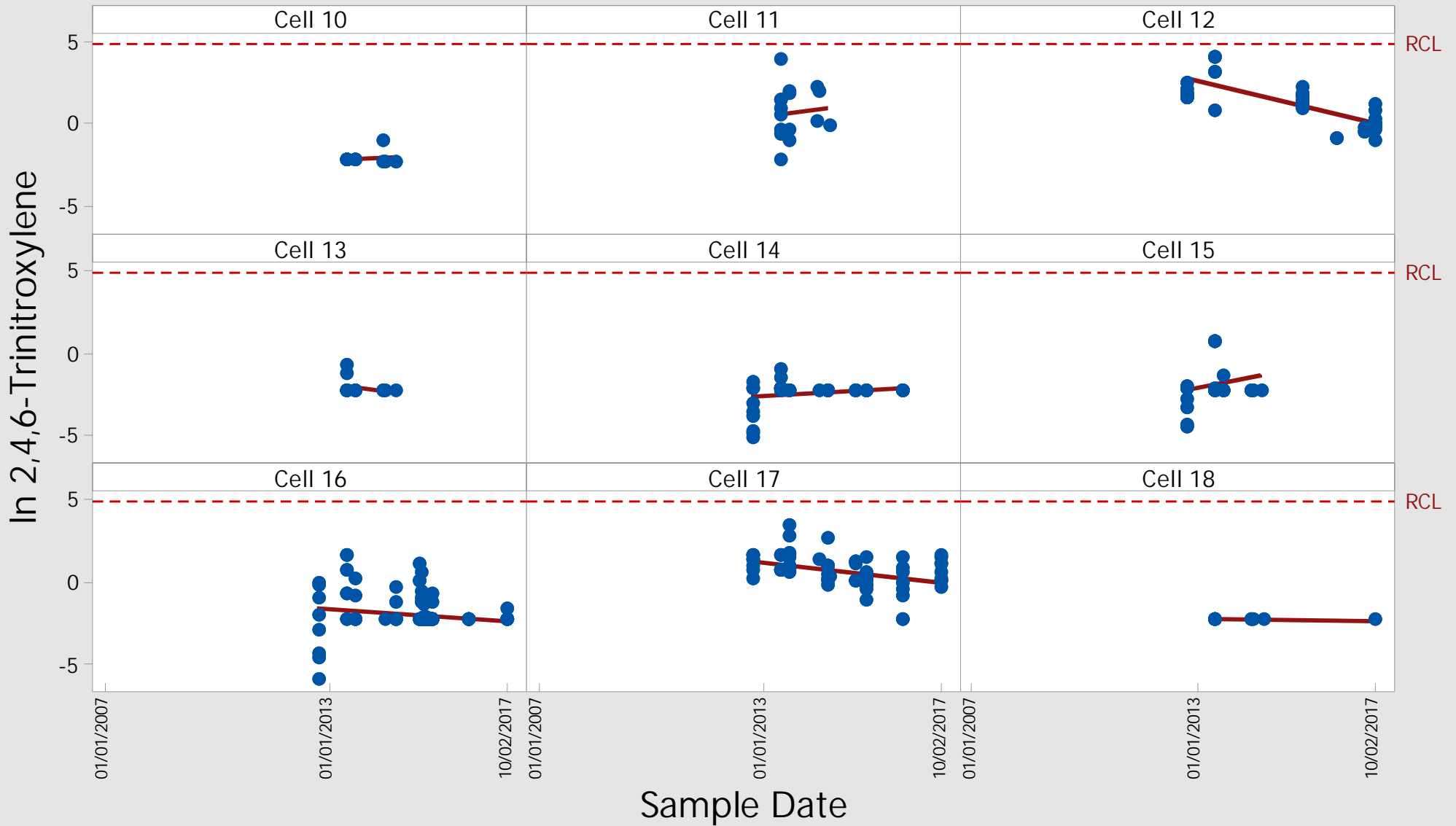


# Scatterplot of In 2,4,6-Trinitroxylyene vs Sample Date



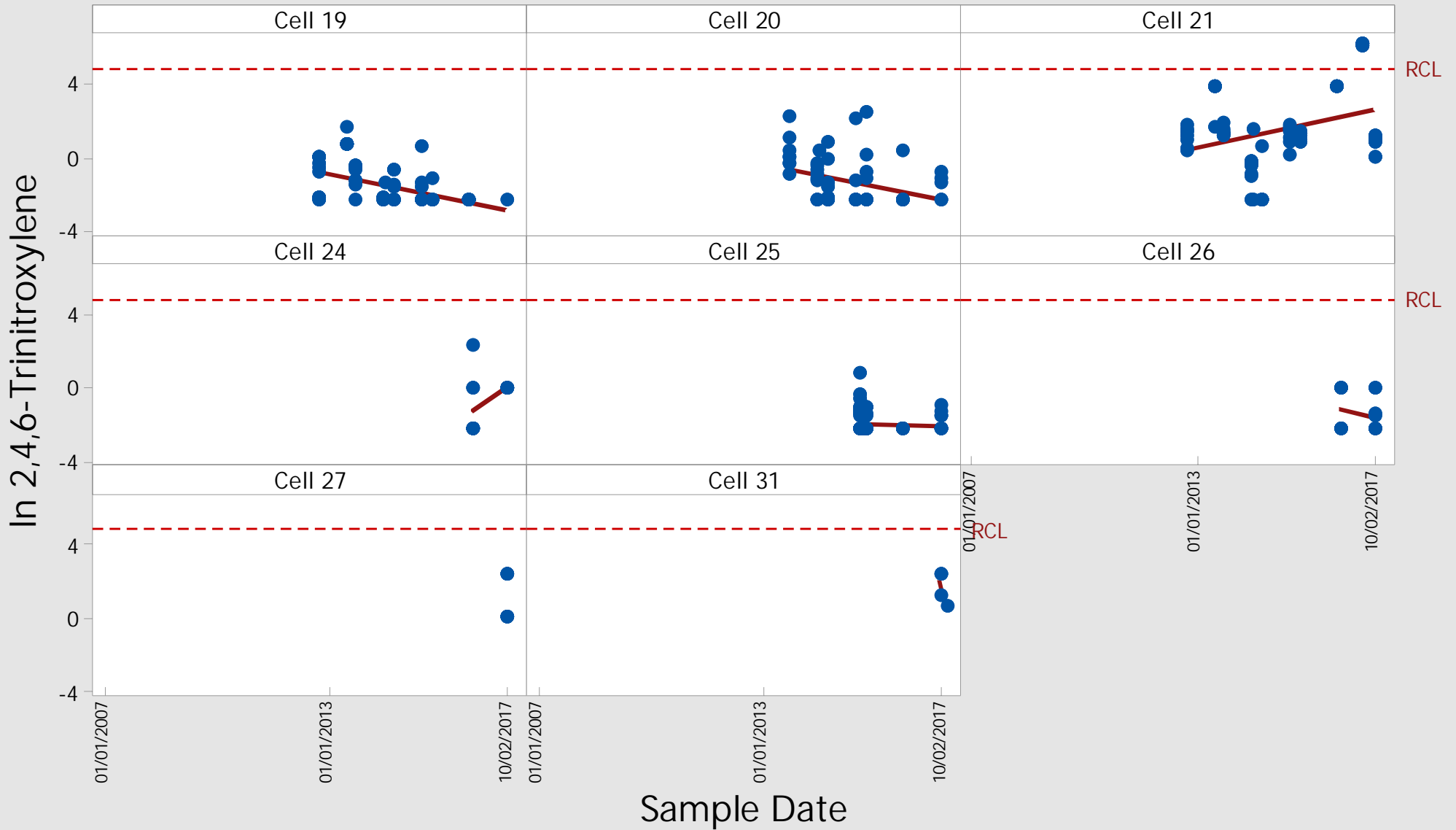
The natural logarithm of the RCL (124 mg/kg) is shown

# Scatterplot of In 2,4,6-Trinitroxylyene vs Sample Date



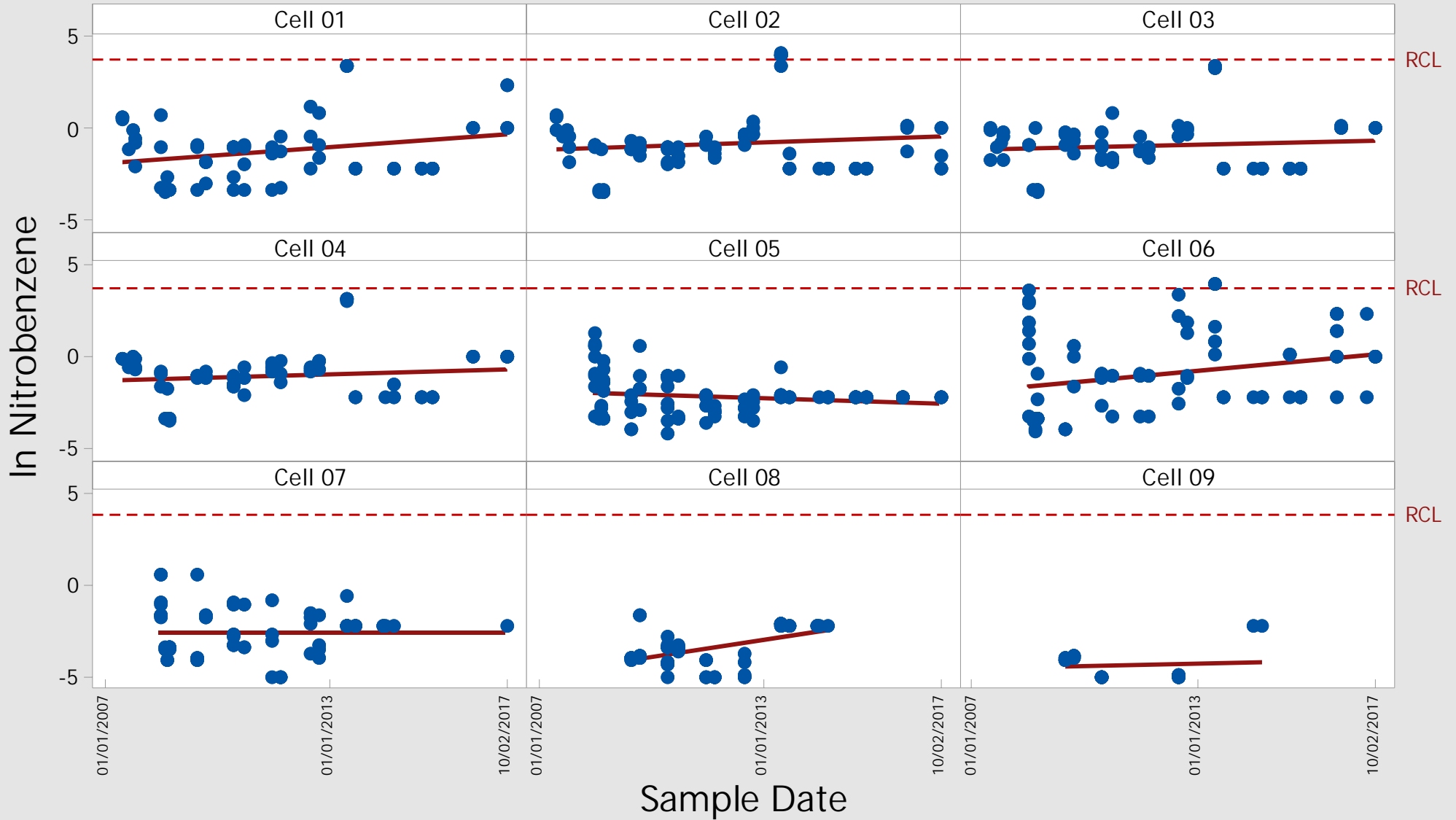
The natural logarithm of the RCL (124 mg/kg) is shown

# Scatterplot of In 2,4,6-Trinitroxylyene vs Sample Date



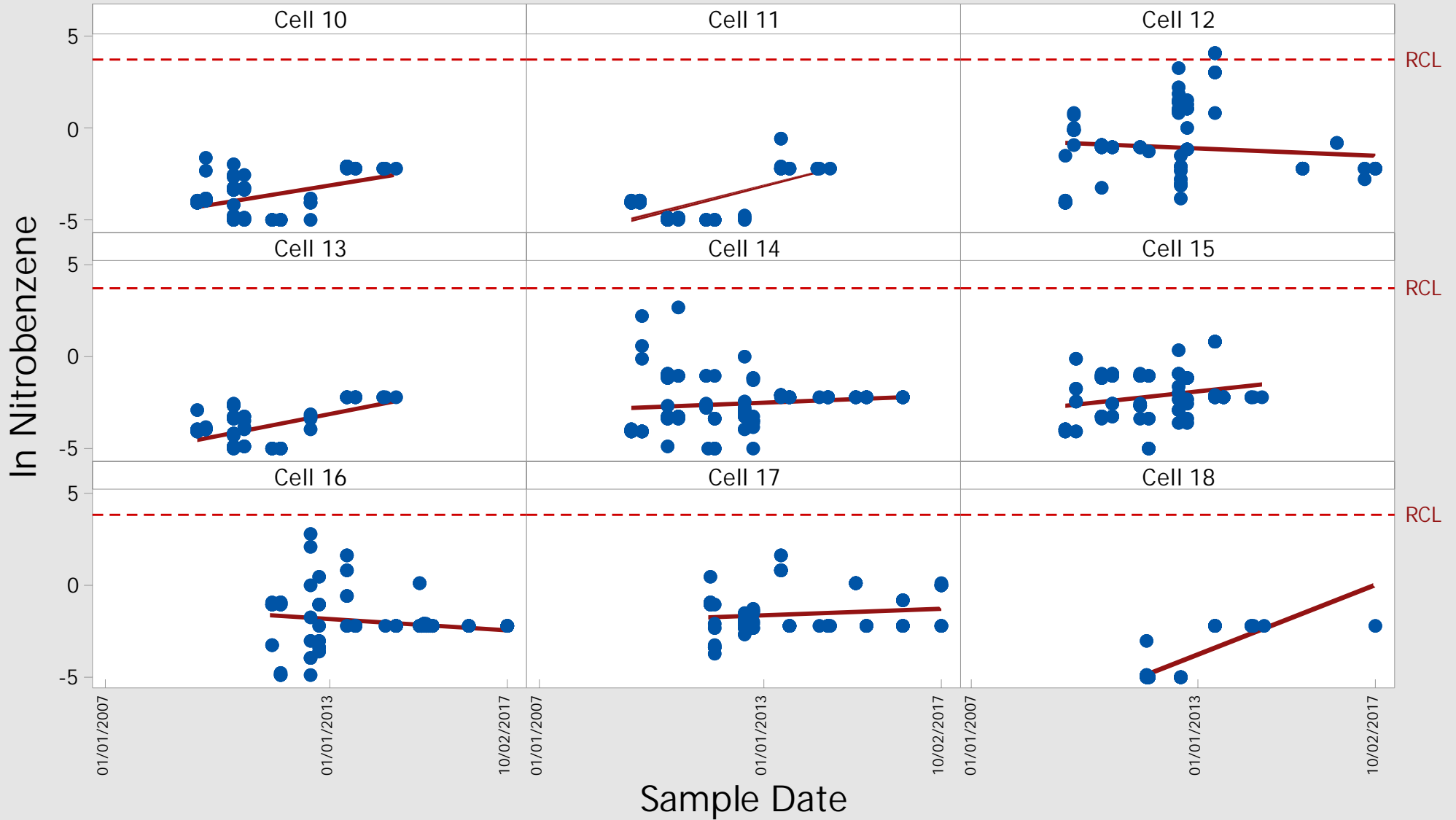
The natural logarithm of the RCL (124 mg/kg) is shown

# Scatterplot of In Nitrobenzene vs Sample Date



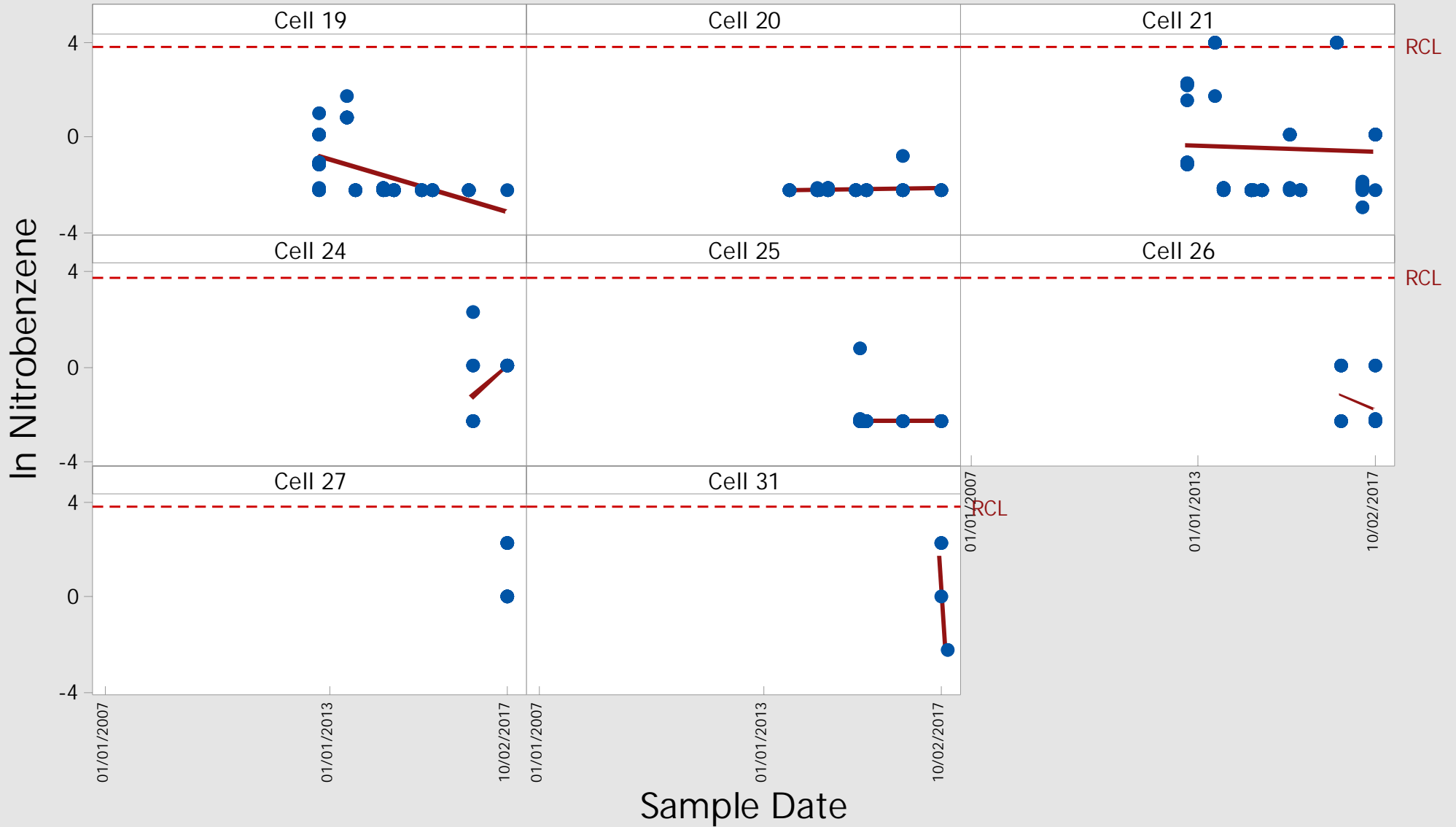
The natural logarithm of the RCL (43.2 mg/kg) is shown

# Scatterplot of In Nitrobenzene vs Sample Date



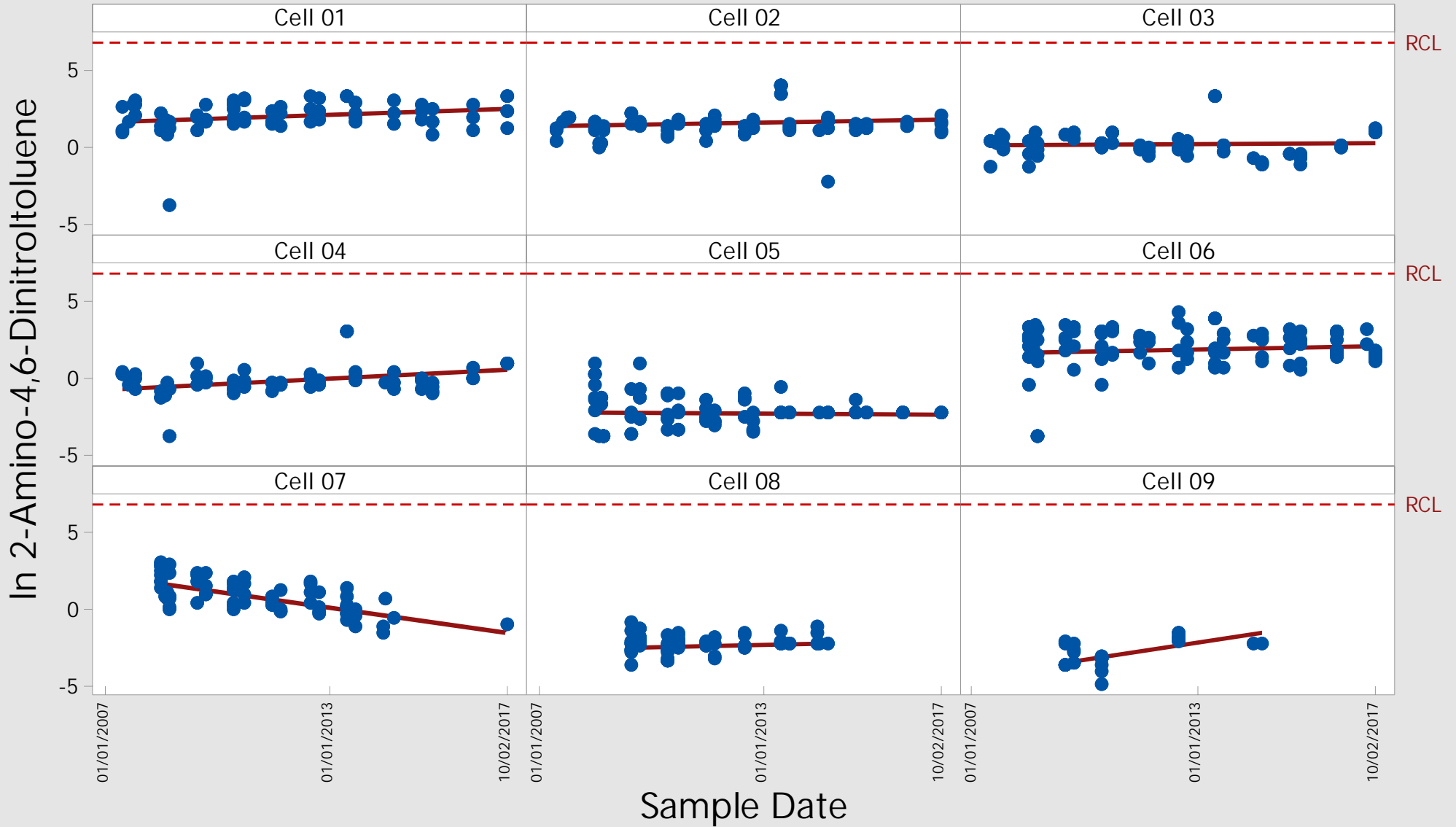
The natural logarithm of the RCL (43.2 mg/kg) is shown

# Scatterplot of In Nitrobenzene vs Sample Date



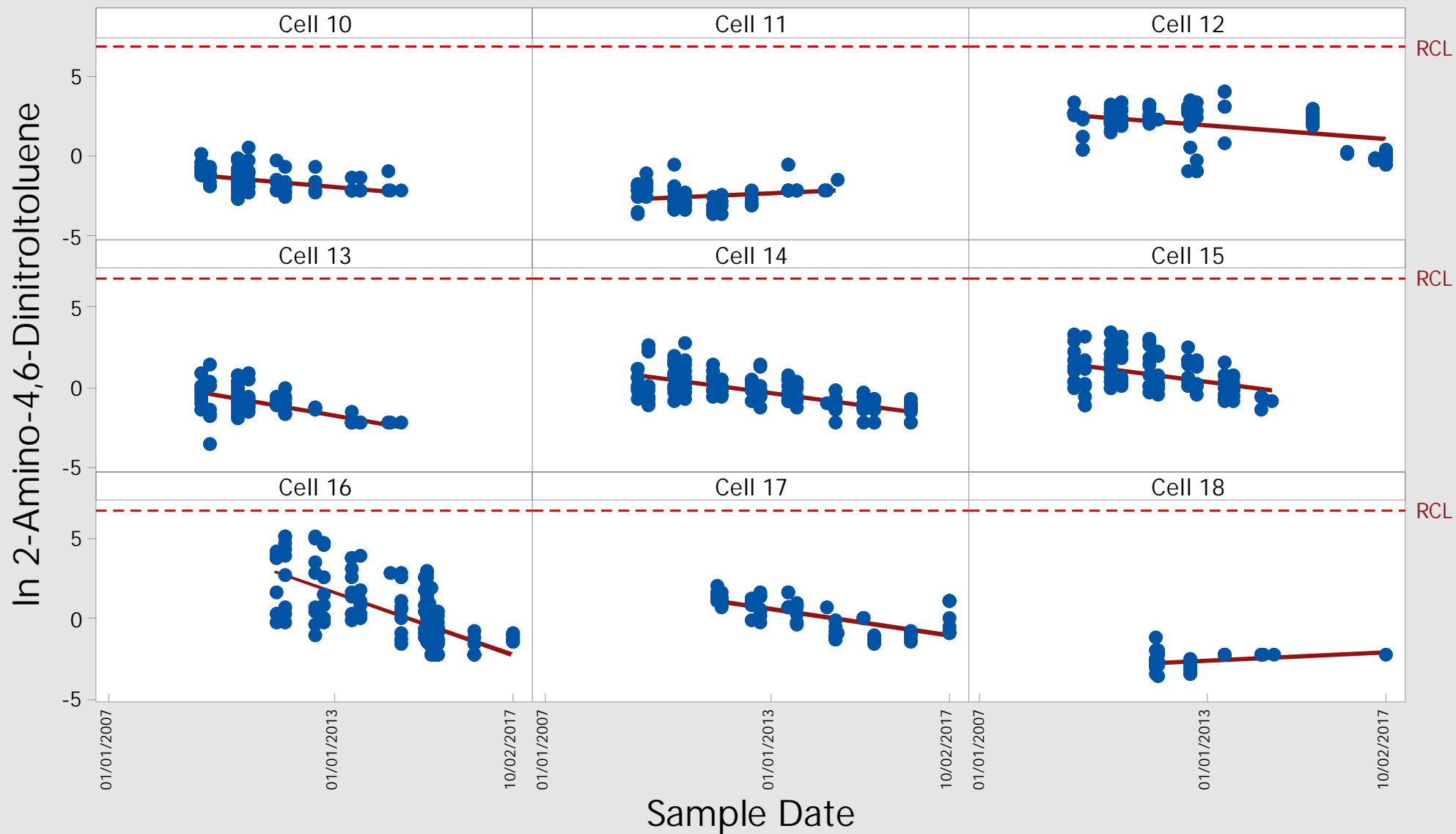
The natural logarithm of the RCL (43.2 mg/kg) is shown

# Scatterplot of In 2-Amino-4,6-DinitroItoluene vs Sample Date



The natural logarithm of the RCL (900 mg/kg) is shown

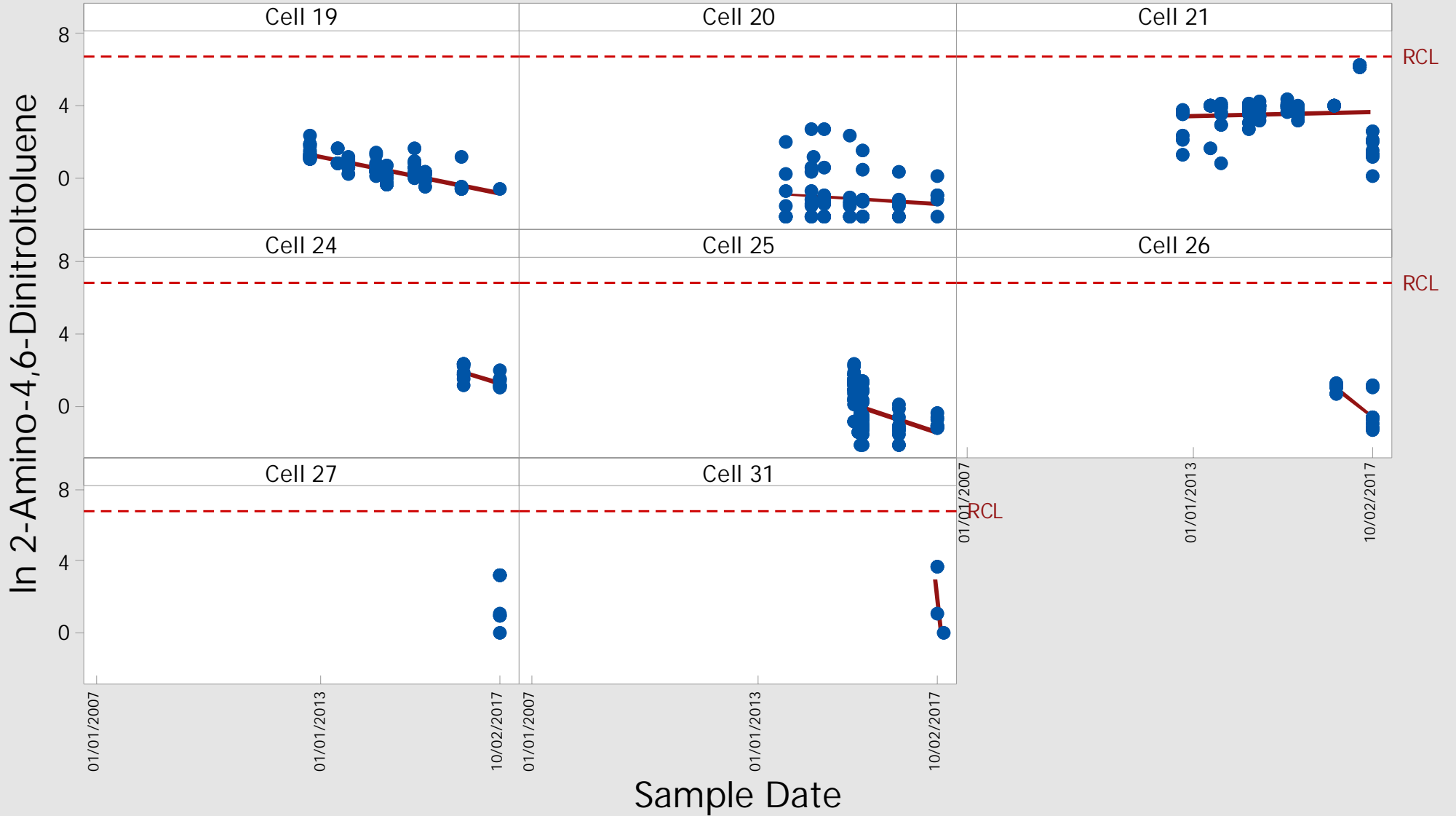
# Scatterplot of In 2-Amino-4,6-DinitroItoluene vs Sample Date



The natural logarithm of the RCL (900 mg/kg) is shown

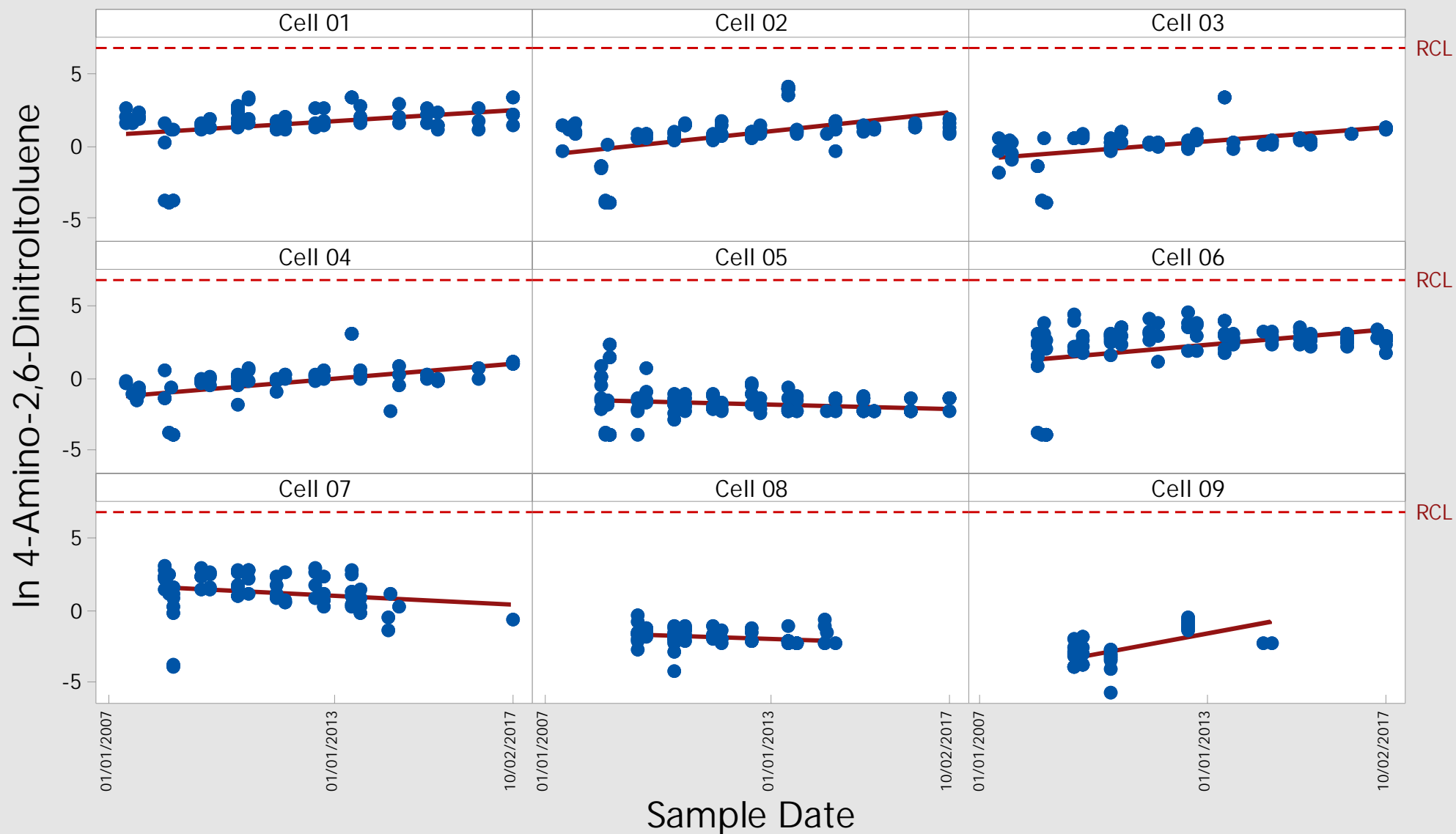


# Scatterplot of In 2-Amino-4,6-Dinitrotoluene vs Sample Date



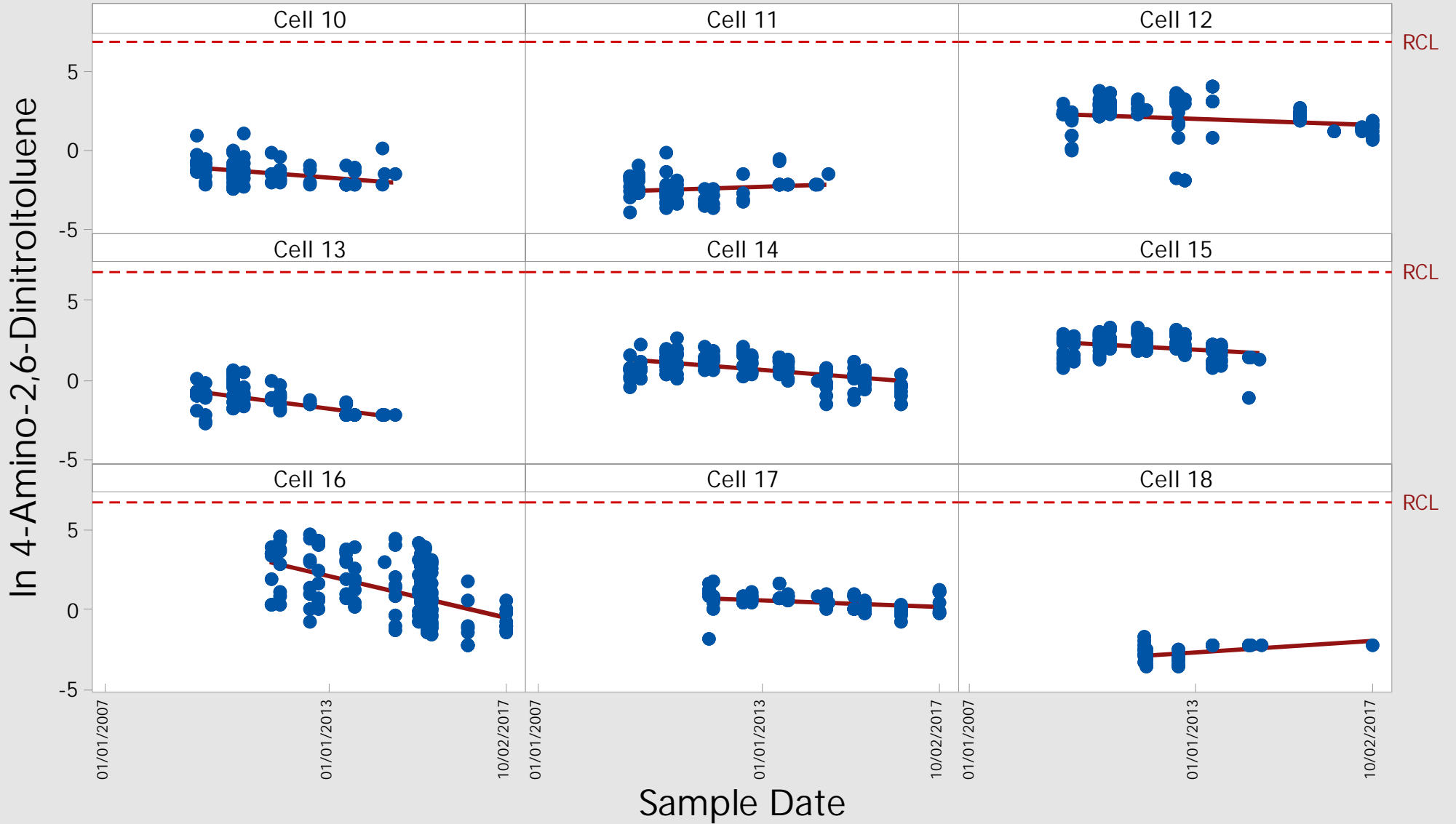
The natural logarithm of the RCL (900 mg/kg) is shown

# Scatterplot of In 4-Amino-2,6-DinitroItoluene vs Sample Date



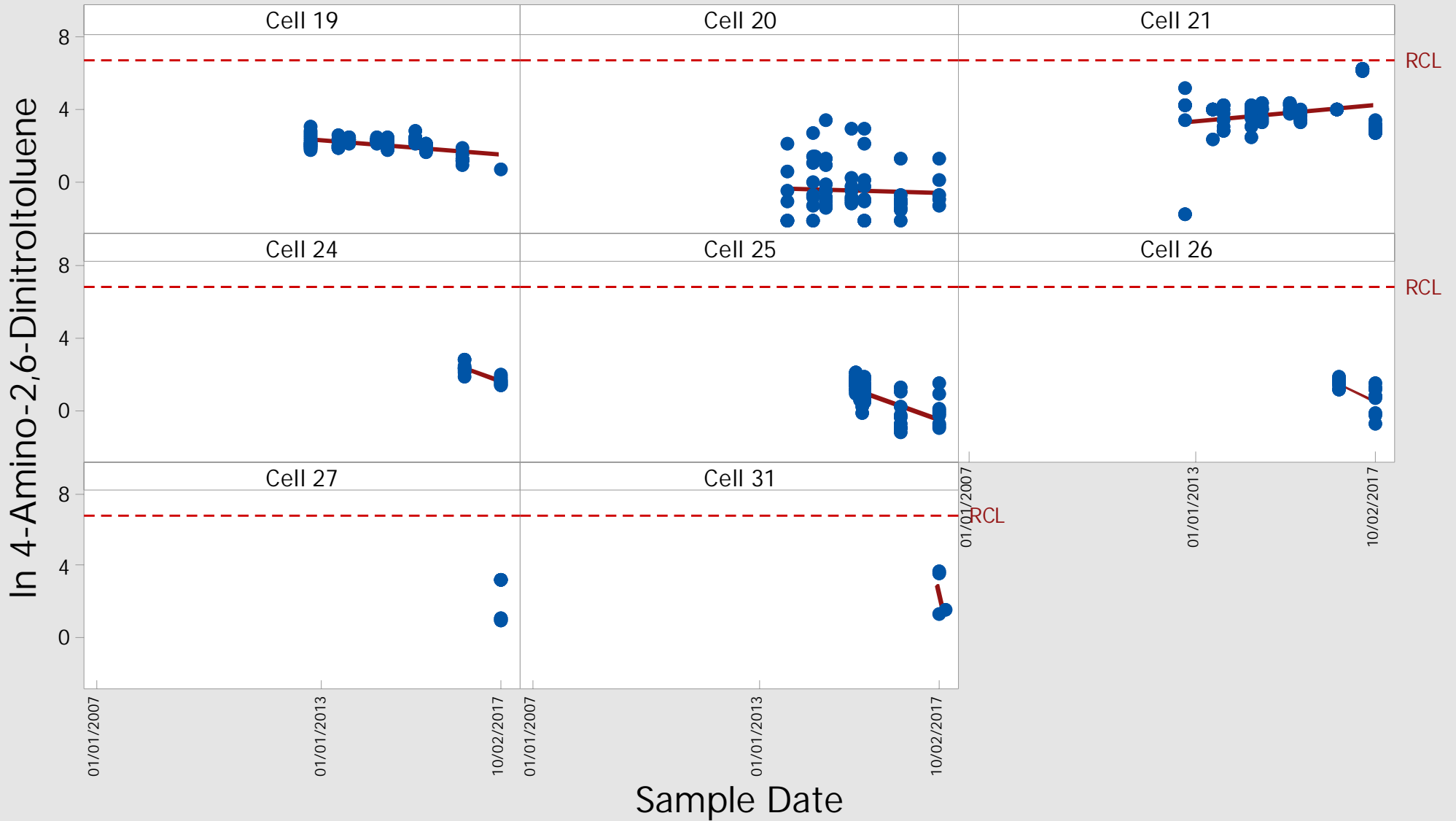
The natural logarithm of the RCL (893 mg/kg) is shown

# Scatterplot of In 4-Amino-2,6-DinitroItoluene vs Sample Date



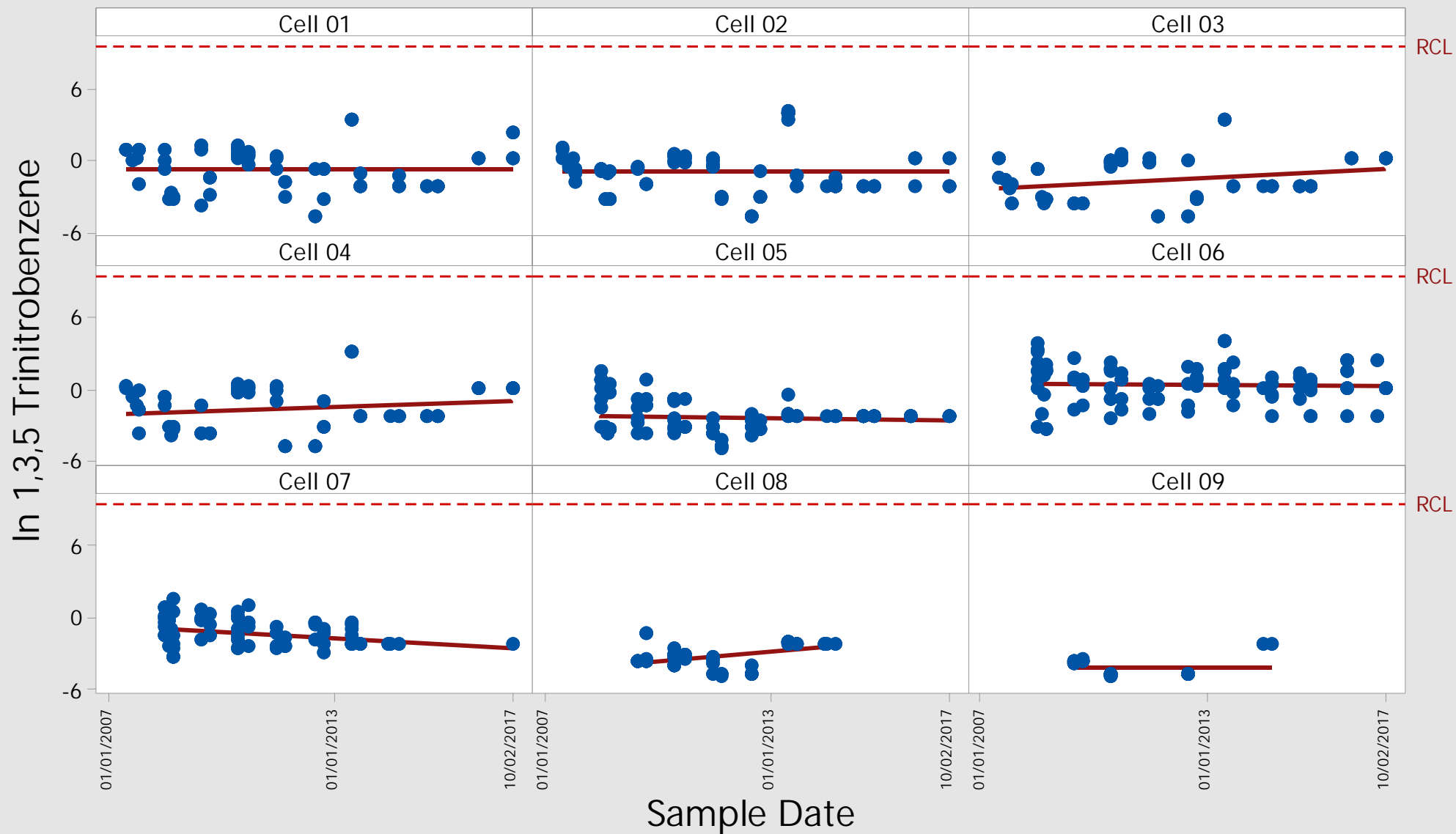
The natural logarithm of the RCL (893 mg/kg) is shown

# Scatterplot of In 4-Amino-2,6-DinitroItoluene vs Sample Date



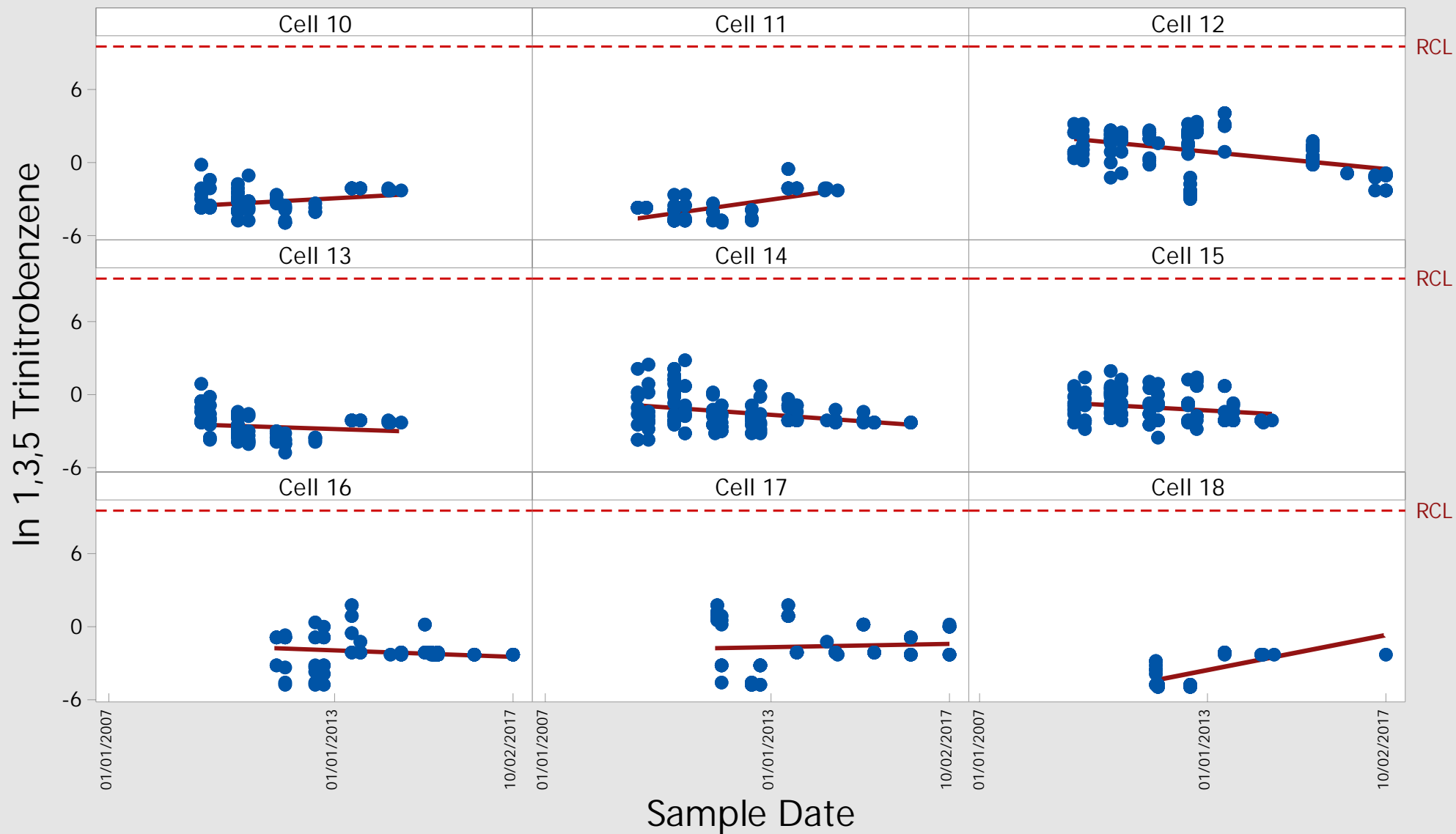
The natural logarithm of the RCL (893 mg/kg) is shown

# Scatterplot of In 1,3,5 Trinitrobenzene vs Sample Date



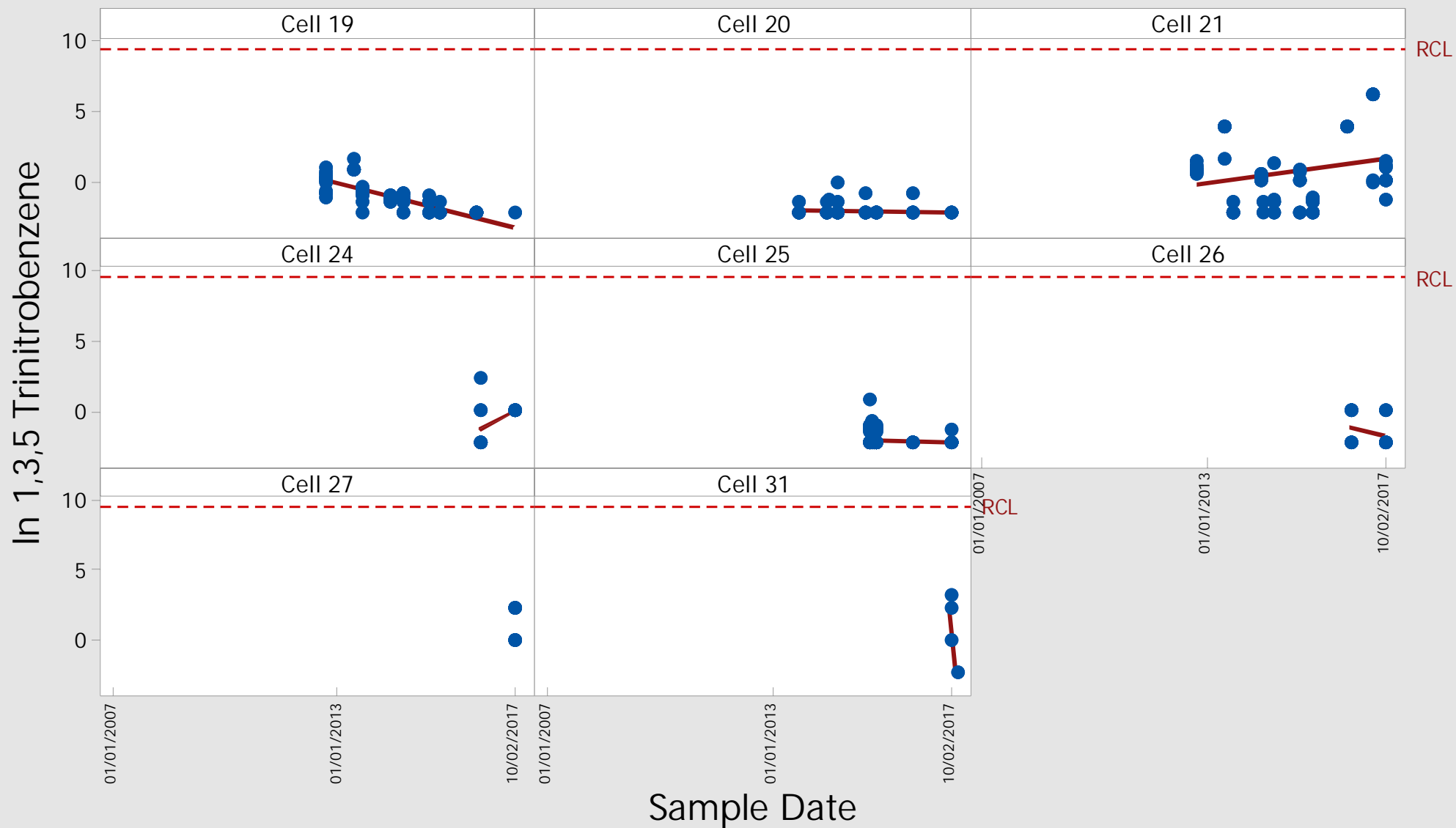
The natural logarithm of the RCL (13100 mg/kg) is shown

# Scatterplot of In 1,3,5 Trinitrobenzene vs Sample Date



The natural logarithm of the RCL (13100 mg/kg) is shown

# Scatterplot of In 1,3,5 Trinitrobenzene vs Sample Date



The natural logarithm of the RCL (13100 mg/kg) is shown

## **APPENDIX D**





2525 Advance Road  
Madison, WI 53718  
608.221.8700 Phone  
608.221.4889 Fax

July 13, 2017

Cary Pooler  
AECOM  
500 West Jefferson St, Ste 1600  
Louisville, KY 40202

RE: DuPont Barksdale Explosives Plant - Barksdale, WI

Enclosed are the analytical results for the samples received by the laboratory on 06/03/2017.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. These results are in compliance with the 2009 NELAC Standards and the appropriate agencies listed below, unless otherwise noted in the case narrative. This analytical report should be reproduced in its entirety.

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

Sincerely,

Pat Letterer For Nick Nigro  
General Manager

**Certification List**

Certification List			Expires
DODELAP	DOD ELAP Accreditation (A2LA)	3269.01	03/31/2018
ILEPA	Illinois Secondary NELAP Accreditation	003174	04/30/2018
KDHE	Kansas Secondary NELAP Accreditation	E-10384	04/30/2018
LELAP	Louisiana Primary NELAP Accreditation	04165	06/30/2018
NCDEQ	North Carolina Dept. of Environmental Quality Accreditation	688	12/31/2017
NJDEP	New Jersey Secondary NELAP Accreditation	WI004	06/30/2018
ODEQ	Oklahoma Department of Environmental Quality Accreditation	2016-083	08/31/2017
TCEQ	Texas Secondary NELAP Accreditation	T104704504-16-7	11/30/2017
WDNR	Wisconsin Certification under NR 149	113289110	08/31/2017



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Madison, WI 53718  
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AECOM  
500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: LBIO-66526 Amendment 11  
Project Manager: Cary Pooler

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BPSB-170601-C21-A1	A172301-01	Soil	06/01/2017	06/03/2017
BPSB-170601-C21-A2	A172301-02	Soil	06/01/2017	06/03/2017
BPSB-170601-C21-A3	A172301-03	Soil	06/01/2017	06/03/2017
BPSB-170601-C21-A4	A172301-04	Soil	06/01/2017	06/03/2017
BPSB-170601-C21-B1	A172301-05	Soil	06/01/2017	06/03/2017
BPSB-170601-C21-B2	A172301-06	Soil	06/01/2017	06/03/2017
BPSB-170601-C21-B3	A172301-07	Soil	06/01/2017	06/03/2017
BPSB-170601-C21-B4	A172301-08	Soil	06/01/2017	06/03/2017

#### Sample Receipt Information:

Eight soil samples were received on 06/03/2017 and were on ice and in acceptable condition.

The samples were logged in and placed in cold storage pending instructions from the client on how to proceed with the prep and analysis of the samples.

On 06/08/2017 the client provided instructions on how to proceed with the prep and analysis of the samples.

Please see the chain of custody (COC) document at the end of this report for additional information.

#### Sample Preparation:

Two of the three sample jars received for each sample were dried, ground, sieved and homogenized following Pace SOP SSS-007, Barksdale Sample Prep. The homogenized samples were then subsampled into two, amber 4oz jars. One jar was used for analysis internally and the other bottle was sent to Test America - Denver for 8321 analysis.

#### Additional Comments:



2525 Advance Road  
 Madison, WI 53718  
 608.221.8700 Phone  
 608.221.4889 Fax

AECOM  
 500 West Jefferson St, Ste 1600  
 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: LBIO-66526 Amendment 11  
 Project Manager: Cary Pooler

**BPSB-170601-C21-A1**

Date Sampled  
 06/01/2017 15:25

**A172301-01 (Soil)**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

2,4-Dinitrotoluene	2200	5.7	100	ug/kg dry	1	06/29/2017	06/29/2017 23:52	EPA 8095	
2,6-Dinitrotoluene	230	7.3	100	ug/kg dry	1	06/29/2017	06/29/2017 23:52	EPA 8095	
2,4,6-Trinitrotoluene	5000000	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 00:36	EPA 8095	D
2-Amino-4,6-dinitrotoluene	7300	4.7	100	ug/kg dry	1	06/29/2017	06/29/2017 23:52	EPA 8095	
4-Amino-2,6-dinitrotoluene	29000	49	1000	ug/kg dry	10	06/29/2017	06/30/2017 00:14	EPA 8095	D
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/29/2017 23:29	EPA 8095	
1,3,5-Trinitrobenzene	1800	52	1000	ug/kg dry	10	06/29/2017	06/30/2017 00:14	EPA 8095	D
1,3-Dinitrobenzene	910	7.8	100	ug/kg dry	1	06/29/2017	06/29/2017 23:52	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/29/2017 23:29	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/29/2017 23:29	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/29/2017 23:29	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/29/2017 23:29	EPA 8095	
3,5-Dinitroaniline	170	6.5	100	ug/kg dry	1	06/29/2017	06/29/2017 23:29	EPA 8095	

Surrogate: 2,2'-Dinitrobiphenyl

90.7 % 52.1-129

06/29/2017 06/29/2017 23:52 EPA 8095

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

% Solids	98.7	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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2525 Advance Road  
 Madison, WI 53718  
 608.221.8700 Phone  
 608.221.4889 Fax

AECOM  
 500 West Jefferson St, Ste 1600  
 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: LBIO-66526 Amendment 11  
 Project Manager: Cary Pooler

**BPSB-170601-C21-A2**

**A172301-02 (Soil)**

**Date Sampled**

**06/01/2017 15:30**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

2,4-Dinitrotoluene	1900	5.7	100	ug/kg dry	1	06/29/2017	06/30/2017 03:51	EPA 8095	
2,6-Dinitrotoluene	210	7.3	100	ug/kg dry	1	06/29/2017	06/30/2017 03:51	EPA 8095	
2,4,6-Trinitrotoluene	4300000	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 04:35	EPA 8095	D
2-Amino-4,6-dinitrotoluene	18000	4.7	100	ug/kg dry	1	06/29/2017	06/30/2017 03:51	EPA 8095	
4-Amino-2,6-dinitrotoluene	19000	4.9	100	ug/kg dry	1	06/29/2017	06/30/2017 03:51	EPA 8095	
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/30/2017 03:13	EPA 8095	
1,3,5-Trinitrobenzene	1200	52	1000	ug/kg dry	10	06/29/2017	06/30/2017 04:13	EPA 8095	D
1,3-Dinitrobenzene	800	7.8	100	ug/kg dry	1	06/29/2017	06/30/2017 03:51	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/30/2017 03:13	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/30/2017 03:13	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/30/2017 03:13	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/30/2017 03:13	EPA 8095	
3,5-Dinitroaniline	720	6.5	100	ug/kg dry	1	06/29/2017	06/30/2017 03:51	EPA 8095	
Surrogate: 2,2'-Dinitrobiphenyl			93.6 %	52.1-129		06/29/2017	06/30/2017 03:51	EPA 8095	

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

% Solids	98.8	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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2525 Advance Road  
 Madison, WI 53718  
 608.221.8700 Phone  
 608.221.4889 Fax

AECOM 500 West Jefferson St, Ste 1600 Louisville KY, 40202	Project: DuPont Barksdale Explosives Plant - Barksdale, WI Project Number: LBIO-66526 Amendment 11 Project Manager: Cary Pooler
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**BPSB-170601-C21-A3**

Date Sampled

**A172301-03 (Soil)**

**06/01/2017 15:35**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

<b>2,4-Dinitrotoluene</b>	<b>3200</b>	5.7	100	ug/kg dry	1	06/29/2017	06/30/2017 04:57	EPA 8095	
<b>2,6-Dinitrotoluene</b>	<b>300</b>	7.3	100	ug/kg dry	1	06/29/2017	06/30/2017 04:57	EPA 8095	
<b>2,4,6-Trinitrotoluene</b>	<b>5900000</b>	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 05:41	EPA 8095	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>25000</b>	47	1000	ug/kg dry	10	06/29/2017	06/30/2017 05:19	EPA 8095	D
<b>4-Amino-2,6-dinitrotoluene</b>	<b>26000</b>	49	1000	ug/kg dry	10	06/29/2017	06/30/2017 05:19	EPA 8095	D
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/30/2017 04:15	EPA 8095	
<b>1,3,5-Trinitrobenzene</b>	<b>1200</b>	52	1000	ug/kg dry	10	06/29/2017	06/30/2017 05:19	EPA 8095	D
<b>1,3-Dinitrobenzene</b>	<b>1400</b>	7.8	100	ug/kg dry	1	06/29/2017	06/30/2017 04:57	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/30/2017 04:15	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/30/2017 04:15	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/30/2017 04:15	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/30/2017 04:15	EPA 8095	
<b>3,5-Dinitroaniline</b>	<b>730</b>	6.5	100	ug/kg dry	1	06/29/2017	06/30/2017 04:57	EPA 8095	
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>			102 %	52.1-129		06/29/2017	06/30/2017 04:57	EPA 8095	

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

<b>% Solids</b>	<b>98.8</b>	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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 Madison, WI 53718  
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AECOM 500 West Jefferson St, Ste 1600 Louisville KY, 40202	Project: DuPont Barksdale Explosives Plant - Barksdale, WI Project Number: LBIO-66526 Amendment 11 Project Manager: Cary Pooler
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**BPSB-170601-C21-A4**

Date Sampled

**A172301-04 (Soil)**

**06/01/2017 15:40**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

<b>2,4-Dinitrotoluene</b>	<b>2700</b>	5.7	100	ug/kg dry	1	06/29/2017	06/30/2017 06:02	EPA 8095	
<b>2,6-Dinitrotoluene</b>	<b>290</b>	7.3	100	ug/kg dry	1	06/29/2017	06/30/2017 06:02	EPA 8095	
<b>2,4,6-Trinitrotoluene</b>	<b>6400000</b>	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 06:46	EPA 8095	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>26000</b>	47	1000	ug/kg dry	10	06/29/2017	06/30/2017 06:24	EPA 8095	D
<b>4-Amino-2,6-dinitrotoluene</b>	<b>27000</b>	49	1000	ug/kg dry	10	06/29/2017	06/30/2017 06:24	EPA 8095	D
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/30/2017 05:17	EPA 8095	
<b>1,3,5-Trinitrobenzene</b>	<b>260</b>	5.2	100	ug/kg dry	1	06/29/2017	06/30/2017 05:17	EPA 8095	
<b>1,3-Dinitrobenzene</b>	<b>1200</b>	7.8	100	ug/kg dry	1	06/29/2017	06/30/2017 06:02	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/30/2017 05:17	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/30/2017 05:17	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/30/2017 05:17	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/30/2017 05:17	EPA 8095	
<b>3,5-Dinitroaniline</b>	<b>660</b>	6.5	100	ug/kg dry	1	06/29/2017	06/30/2017 06:02	EPA 8095	
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>			96.6 %	52.1-129		06/29/2017	06/30/2017 06:02	EPA 8095	

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

<b>% Solids</b>	<b>98.8</b>	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: LBIO-66526 Amendment 11  
 Project Manager: Cary Pooler

**BPSB-170601-C21-B1**

Date Sampled

**A172301-05 (Soil)**

**06/01/2017 15:45**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

2,4-Dinitrotoluene	2800	5.7	100	ug/kg dry	1	06/29/2017	06/30/2017 07:51	EPA 8095	
2,6-Dinitrotoluene	430	7.3	100	ug/kg dry	1	06/29/2017	06/30/2017 07:51	EPA 8095	
2,4,6-Trinitrotoluene	6000000	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 08:35	EPA 8095	D
2-Amino-4,6-dinitrotoluene	30000	47	1000	ug/kg dry	10	06/29/2017	06/30/2017 08:13	EPA 8095	D
4-Amino-2,6-dinitrotoluene	31000	49	1000	ug/kg dry	10	06/29/2017	06/30/2017 08:13	EPA 8095	D
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/30/2017 06:59	EPA 8095	
1,3,5-Trinitrobenzene	1500	52	1000	ug/kg dry	10	06/29/2017	06/30/2017 08:13	EPA 8095	D
1,3-Dinitrobenzene	1300	7.8	100	ug/kg dry	1	06/29/2017	06/30/2017 07:51	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/30/2017 06:59	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/30/2017 06:59	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/30/2017 06:59	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/30/2017 06:59	EPA 8095	
3,5-Dinitroaniline	820	6.5	100	ug/kg dry	1	06/29/2017	06/30/2017 07:51	EPA 8095	
Surrogate: 2,2'-Dinitrobiphenyl			97.1 %	52.1-129		06/29/2017	06/30/2017 07:51	EPA 8095	

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

% Solids	98.7	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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AECOM 500 West Jefferson St, Ste 1600 Louisville KY, 40202	Project: DuPont Barksdale Explosives Plant - Barksdale, WI Project Number: LBIO-66526 Amendment 11 Project Manager: Cary Pooler
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**BPSB-170601-C21-B2**

**A172301-06 (Soil)**

**Date Sampled**

**06/01/2017 15:50**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

<b>2,4-Dinitrotoluene</b>	<b>4000</b>	5.7	100	ug/kg dry	1	06/29/2017	06/30/2017 08:56	EPA 8095	
<b>2,6-Dinitrotoluene</b>	<b>670</b>	7.3	100	ug/kg dry	1	06/29/2017	06/30/2017 08:56	EPA 8095	
<b>2,4,6-Trinitrotoluene</b>	<b>6600000</b>	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 09:40	EPA 8095	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>32000</b>	47	1000	ug/kg dry	10	06/29/2017	06/30/2017 09:18	EPA 8095	D
<b>4-Amino-2,6-dinitrotoluene</b>	<b>30000</b>	49	1000	ug/kg dry	10	06/29/2017	06/30/2017 09:18	EPA 8095	D
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/30/2017 08:00	EPA 8095	
<b>1,3,5-Trinitrobenzene</b>	<b>1800</b>	52	1000	ug/kg dry	10	06/29/2017	06/30/2017 09:18	EPA 8095	D
<b>1,3-Dinitrobenzene</b>	<b>2000</b>	7.8	100	ug/kg dry	1	06/29/2017	06/30/2017 08:56	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/30/2017 08:00	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/30/2017 08:00	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/30/2017 08:00	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/30/2017 08:00	EPA 8095	
<b>3,5-Dinitroaniline</b>	<b>630</b>	6.5	100	ug/kg dry	1	06/29/2017	06/30/2017 08:56	EPA 8095	
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>			99.4 %	52.1-129		06/29/2017	06/30/2017 08:56	EPA 8095	

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

<b>% Solids</b>	<b>98.8</b>	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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AECOM 500 West Jefferson St, Ste 1600 Louisville KY, 40202	Project: DuPont Barksdale Explosives Plant - Barksdale, WI Project Number: LBIO-66526 Amendment 11 Project Manager: Cary Pooler
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**BPSB-170601-C21-B3**

Date Sampled

**A172301-07 (Soil)**

**06/01/2017 15:55**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

2,4-Dinitrotoluene	4300	5.7	100	ug/kg dry	1	06/29/2017	06/30/2017 10:02	EPA 8095	
2,6-Dinitrotoluene	1000	7.3	100	ug/kg dry	1	06/29/2017	06/30/2017 10:02	EPA 8095	
2,4,6-Trinitrotoluene	6300000	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 10:45	EPA 8095	D
2-Amino-4,6-dinitrotoluene	33000	47	1000	ug/kg dry	10	06/29/2017	06/30/2017 10:24	EPA 8095	D
4-Amino-2,6-dinitrotoluene	25000	49	1000	ug/kg dry	10	06/29/2017	06/30/2017 10:24	EPA 8095	D
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/30/2017 09:01	EPA 8095	
1,3,5-Trinitrobenzene	1600	52	1000	ug/kg dry	10	06/29/2017	06/30/2017 10:24	EPA 8095	D
1,3-Dinitrobenzene	2400	7.8	100	ug/kg dry	1	06/29/2017	06/30/2017 10:02	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/30/2017 09:01	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/30/2017 09:01	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/30/2017 09:01	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/30/2017 09:01	EPA 8095	
3,5-Dinitroaniline	580	6.5	100	ug/kg dry	1	06/29/2017	06/30/2017 10:02	EPA 8095	
Surrogate: 2,2'-Dinitrobiphenyl			99.9 %	52.1-129		06/29/2017	06/30/2017 10:02	EPA 8095	

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

% Solids	98.8	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: LBIO-66526 Amendment 11  
 Project Manager: Cary Pooler

**BPSB-170601-C21-B4**

Date Sampled

**A172301-08 (Soil)**

**06/01/2017 16:00**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8095**

**Preparation Batch: A706118**

<b>2,4-Dinitrotoluene</b>	<b>2000</b>	5.7	100	ug/kg dry	1	06/29/2017	06/30/2017 11:51	EPA 8095	
<b>2,6-Dinitrotoluene</b>	<b>580</b>	7.3	100	ug/kg dry	1	06/29/2017	06/30/2017 11:51	EPA 8095	
<b>2,4,6-Trinitrotoluene</b>	<b>3600000</b>	4800	100000	ug/kg dry	1000	06/29/2017	06/30/2017 12:34	EPA 8095	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>48000</b>	47	1000	ug/kg dry	10	06/29/2017	06/30/2017 12:12	EPA 8095	D
<b>4-Amino-2,6-dinitrotoluene</b>	<b>38000</b>	49	1000	ug/kg dry	10	06/29/2017	06/30/2017 12:12	EPA 8095	D
3,4-Dinitrotoluene	ND	7.7	100	ug/kg dry	1	06/29/2017	06/30/2017 10:43	EPA 8095	
<b>1,3,5-Trinitrobenzene</b>	<b>990</b>	52	1000	ug/kg dry	10	06/29/2017	06/30/2017 10:43	EPA 8095	J, D
<b>1,3-Dinitrobenzene</b>	<b>1000</b>	7.8	100	ug/kg dry	1	06/29/2017	06/30/2017 11:51	EPA 8095	
2-Nitrotoluene	ND	6.9	100	ug/kg dry	1	06/29/2017	06/30/2017 10:43	EPA 8095	
3-Nitrotoluene	ND	8.2	100	ug/kg dry	1	06/29/2017	06/30/2017 10:43	EPA 8095	
4-Nitrotoluene	ND	7.4	100	ug/kg dry	1	06/29/2017	06/30/2017 10:43	EPA 8095	
Nitrobenzene	ND	11	100	ug/kg dry	1	06/29/2017	06/30/2017 10:43	EPA 8095	
<b>3,5-Dinitroaniline</b>	<b>690</b>	6.5	100	ug/kg dry	1	06/29/2017	06/30/2017 11:51	EPA 8095	
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>			102 %	52.1-129		06/29/2017	06/30/2017 11:51	EPA 8095	

**Classical Chemistry Parameters**

**Preparation Batch: A706108**

<b>% Solids</b>	<b>98.5</b>	0.00	0.00	% by Weight	1	06/27/2017	06/28/2017 09:58	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: LBIO-66526 Amendment 11  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8095 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A706118 - EPA 3570**

**Blank (A706118-BLK1)**

Prepared: 06/29/2017 Analyzed: 06/29/2017 22:48

2,4-Dinitrotoluene	ND	100	ug/kg wet							
2,4-Dinitrotoluene [2C]	ND	100	ug/kg wet							
2,6-Dinitrotoluene	ND	100	ug/kg wet							
2,6-Dinitrotoluene [2C]	ND	100	ug/kg wet							
2,4,6-Trinitrotoluene	ND	100	ug/kg wet							
2,4,6-Trinitrotoluene [2C]	ND	100	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	100	ug/kg wet							
2-Amino-4,6-dinitrotoluene [2C]	ND	100	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	100	ug/kg wet							
4-Amino-2,6-dinitrotoluene [2C]	ND	100	ug/kg wet							
3,4-Dinitrotoluene	ND	100	ug/kg wet							
3,4-Dinitrotoluene [2C]	ND	100	ug/kg wet							
1,3,5-Trinitrobenzene	ND	100	ug/kg wet							
1,3,5-Trinitrobenzene [2C]	ND	100	ug/kg wet							
1,3-Dinitrobenzene	ND	100	ug/kg wet							
1,3-Dinitrobenzene [2C]	ND	100	ug/kg wet							
2-Nitrotoluene	ND	100	ug/kg wet							
2-Nitrotoluene [2C]	ND	100	ug/kg wet							
3-Nitrotoluene	ND	100	ug/kg wet							
3-Nitrotoluene [2C]	ND	100	ug/kg wet							
4-Nitrotoluene	ND	100	ug/kg wet							
4-Nitrotoluene [2C]	ND	100	ug/kg wet							
Nitrobenzene	ND	100	ug/kg wet							
Nitrobenzene [2C]	ND	100	ug/kg wet							
3,5-Dinitroaniline	ND	100	ug/kg wet							
3,5-Dinitroaniline [2C]	ND	100	ug/kg wet							
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>	4040		ug/kg wet	4000		101	52.1-129			
<i>Surrogate: 2,2'-Dinitrobiphenyl [2C]</i>	4040		ug/kg wet	4000		101	60-140			

**LCS (A706118-BS1)**

Prepared: 06/29/2017 Analyzed: 06/29/2017 23:31

2,4-Dinitrotoluene	4100	100	ug/kg wet	4000		103	87.2-122			
2,4-Dinitrotoluene [2C]	4030	100	ug/kg wet	4000		101	70-130			
2,6-Dinitrotoluene	4160	100	ug/kg wet	4000		104	85.8-119			
2,6-Dinitrotoluene [2C]	3950	100	ug/kg wet	4000		98.8	70-130			
2,4,6-Trinitrotoluene	4860	100	ug/kg wet	4000		121	84.1-125			
2,4,6-Trinitrotoluene [2C]	4860	100	ug/kg wet	4000		122	70-130			
2-Amino-4,6-dinitrotoluene	4020	100	ug/kg wet	4000		100	80.9-124			
2-Amino-4,6-dinitrotoluene [2C]	4120	100	ug/kg wet	4000		103	70-130			
4-Amino-2,6-dinitrotoluene	3990	100	ug/kg wet	4000		99.6	82.4-121			
4-Amino-2,6-dinitrotoluene [2C]	4210	100	ug/kg wet	4000		105	70-130			
3,4-Dinitrotoluene	4020	100	ug/kg wet	4000		101	70-130			
3,4-Dinitrotoluene [2C]	4050	100	ug/kg wet	4000		101	70-130			
1,3,5-Trinitrobenzene	4130	100	ug/kg wet	4000		103	85.3-120			
1,3,5-Trinitrobenzene [2C]	4020	100	ug/kg wet	4000		100	70-130			



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: LBIO-66526 Amendment 11  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8095 - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A706118 - EPA 3570**

**LCS (A706118-BS1)**

Prepared: 06/29/2017 Analyzed: 06/29/2017 23:31

1,3-Dinitrobenzene	4120	100	ug/kg wet	4000		103	88.7-116			
1,3-Dinitrobenzene [2C]	3990	100	ug/kg wet	4000		99.7	70-130			
2-Nitrotoluene	3970	100	ug/kg wet	4000		99.1	82.5-120			
2-Nitrotoluene [2C]	3960	100	ug/kg wet	4000		99.1	70-130			
3-Nitrotoluene	3980	100	ug/kg wet	4000		99.6	80.1-117			
3-Nitrotoluene [2C]	4010	100	ug/kg wet	4000		100	70-130			
4-Nitrotoluene	3990	100	ug/kg wet	4000		99.8	87.5-117			
4-Nitrotoluene [2C]	4070	100	ug/kg wet	4000		102	70-130			
Nitrobenzene	4030	100	ug/kg wet	4000		101	85.9-115			
Nitrobenzene [2C]	3980	100	ug/kg wet	4000		99.4	70-130			
3,5-Dinitroaniline	3910	100	ug/kg wet	4000		97.6	70-130			
3,5-Dinitroaniline [2C]	4050	100	ug/kg wet	4000		101	70-130			
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>	<i>4090</i>		<i>ug/kg wet</i>	<i>4000</i>		<i>102</i>	<i>52.1-129</i>			
<i>Surrogate: 2,2'-Dinitrobiphenyl [2C]</i>	<i>4030</i>		<i>ug/kg wet</i>	<i>4000</i>		<i>101</i>	<i>60-140</i>			

**Matrix Spike (A706118-MS1)**

Source: A172301-01

Prepared: 06/29/2017 Analyzed: 06/30/2017 00:58

2,4-Dinitrotoluene	6080	100	ug/kg dry	4053	2210	95.5	15.3-188			
2,4-Dinitrotoluene [2C]	5820	100	ug/kg dry	4053	2100	91.8	70-130			
2,6-Dinitrotoluene	4220	100	ug/kg dry	4053	228	98.4	37-151			
2,6-Dinitrotoluene [2C]	4210	100	ug/kg dry	4053	356	95.2	70-130			
2,4,6-Trinitrotoluene	4830000	100000	ug/kg dry	4053	4980000	NR	13.8-132			M1, D
2,4,6-Trinitrotoluene [2C]	4690000	100000	ug/kg dry	4053	4980000	NR	70-130			M1, D
2-Amino-4,6-dinitrotoluene	11300	100	ug/kg dry	4053	7330	97.5	51.1-125			
2-Amino-4,6-dinitrotoluene [2C]	12400	100	ug/kg dry	4053	9000	83.5	70-130			
4-Amino-2,6-dinitrotoluene	32800	1000	ug/kg dry	4053	28600	105	49.8-131			D
4-Amino-2,6-dinitrotoluene [2C]	35500	1000	ug/kg dry	4053	31300	103	70-130			D
3,4-Dinitrotoluene	3080	100	ug/kg dry	4053	ND	76.0	70-130			
3,4-Dinitrotoluene [2C]	3660	100	ug/kg dry	4053	ND	90.3	70-130			
1,3,5-Trinitrobenzene	5880	1000	ug/kg dry	4053	1770	101	16.7-134			D
1,3,5-Trinitrobenzene [2C]	5280	100	ug/kg dry	4053	1390	95.8	70-130			
1,3-Dinitrobenzene	4900	100	ug/kg dry	4053	908	98.6	78.9-114			
1,3-Dinitrobenzene [2C]	4680	100	ug/kg dry	4053	833	94.8	70-130			
2-Nitrotoluene	3990	100	ug/kg dry	4053	ND	98.5	25.2-175			
2-Nitrotoluene [2C]	3970	100	ug/kg dry	4053	ND	98.0	70-130			
3-Nitrotoluene	4020	100	ug/kg dry	4053	ND	99.1	71.1-122			
3-Nitrotoluene [2C]	4000	100	ug/kg dry	4053	ND	98.6	70-130			
4-Nitrotoluene	3960	100	ug/kg dry	4053	ND	97.8	28.9-177			
4-Nitrotoluene [2C]	3980	100	ug/kg dry	4053	ND	98.2	70-130			
Nitrobenzene	3960	100	ug/kg dry	4053	ND	97.8	81.2-116			
Nitrobenzene [2C]	3940	100	ug/kg dry	4053	ND	97.2	70-130			
3,5-Dinitroaniline	3840	100	ug/kg dry	4053	369	85.7	70-130			
3,5-Dinitroaniline [2C]	3850	100	ug/kg dry	4053	174	90.6	70-130			
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>	<i>3800</i>		<i>ug/kg dry</i>	<i>4053</i>		<i>93.6</i>	<i>52.1-129</i>			
<i>Surrogate: 2,2'-Dinitrobiphenyl [2C]</i>	<i>3690</i>		<i>ug/kg dry</i>	<i>4053</i>		<i>91.0</i>	<i>60-140</i>			



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 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: LBIO-66526 Amendment 11  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8095 - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A706118 - EPA 3570**

Matrix Spike Dup (A706118-MSD1)	Source: A172301-01	Prepared: 06/29/2017	Analyzed: 06/30/2017 02:03						
2,4-Dinitrotoluene	6330	100 ug/kg dry	4053	2210	102	15.3-188	4.02	20	
2,4-Dinitrotoluene [2C]	5950	100 ug/kg dry	4053	2100	95.0	70-130	2.19	20	
2,6-Dinitrotoluene	4330	100 ug/kg dry	4053	228	101	37-151	2.61	20	
2,6-Dinitrotoluene [2C]	4400	100 ug/kg dry	4053	356	99.7	70-130	4.26	20	
2,4,6-Trinitrotoluene	4660000	100000 ug/kg dry	4053	4980000	NR	13.8-132	3.66	20	M1, D
2,4,6-Trinitrotoluene [2C]	4770000	100000 ug/kg dry	4053	4980000	NR	70-130	1.56	20	M1, D
2-Amino-4,6-dinitrotoluene	11500	100 ug/kg dry	4053	7330	102	51.1-125	1.75	20	
2-Amino-4,6-dinitrotoluene [2C]	12200	100 ug/kg dry	4053	9000	78.9	70-130	1.50	20	
4-Amino-2,6-dinitrotoluene	31200	1000 ug/kg dry	4053	28600	64.8	49.8-131	5.08	20	D
4-Amino-2,6-dinitrotoluene [2C]	33900	1000 ug/kg dry	4053	31300	64.8	70-130	4.51	20	M, D
3,4-Dinitrotoluene	3130	100 ug/kg dry	4053	ND	77.2	70-130	1.53	20	
3,4-Dinitrotoluene [2C]	3850	100 ug/kg dry	4053	ND	95.1	70-130	5.18	20	
1,3,5-Trinitrobenzene	5890	1000 ug/kg dry	4053	1770	102	16.7-134	0.240	20	D
1,3,5-Trinitrobenzene [2C]	5680	100 ug/kg dry	4053	1390	106	70-130	7.30	20	
1,3-Dinitrobenzene	4890	100 ug/kg dry	4053	908	98.3	78.9-114	0.237	20	
1,3-Dinitrobenzene [2C]	4650	100 ug/kg dry	4053	833	94.2	70-130	0.528	20	
2-Nitrotoluene	4020	100 ug/kg dry	4053	ND	99.3	25.2-175	0.800	20	
2-Nitrotoluene [2C]	4000	100 ug/kg dry	4053	ND	98.6	70-130	0.664	20	
3-Nitrotoluene	4080	100 ug/kg dry	4053	ND	101	71.1-122	1.62	20	
3-Nitrotoluene [2C]	4050	100 ug/kg dry	4053	ND	100	70-130	1.34	20	
4-Nitrotoluene	4010	100 ug/kg dry	4053	ND	98.9	28.9-177	1.15	20	
4-Nitrotoluene [2C]	4060	100 ug/kg dry	4053	ND	100	70-130	1.92	20	
Nitrobenzene	4040	100 ug/kg dry	4053	ND	99.7	81.2-116	1.93	20	
Nitrobenzene [2C]	3990	100 ug/kg dry	4053	ND	98.5	70-130	1.31	20	
3,5-Dinitroaniline	4160	100 ug/kg dry	4053	369	93.5	70-130	7.93	20	
3,5-Dinitroaniline [2C]	3940	100 ug/kg dry	4053	174	92.8	70-130	2.29	20	
Surrogate: 2,2'-Dinitrobiphenyl	3910	ug/kg dry	4053		96.6	52.1-129			
Surrogate: 2,2'-Dinitrobiphenyl [2C]	3820	ug/kg dry	4053		94.3	60-140			



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AECOM 500 West Jefferson St, Ste 1600 Louisville KY, 40202	Project: DuPont Barksdale Explosives Plant - Barksdale, WI Project Number: LBIO-66526 Amendment 11 Project Manager: Cary Pooler
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**Classical Chemistry Parameters - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A706108 - % Solids**

<b>Duplicate (A706108-DUP1)</b>	<b>Source: A172514-06</b>	Prepared: 06/27/2017 Analyzed: 06/28/2017 09:58								
% Solids	81.3	0.00	% by Weight		81.2			0.0276	20	



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Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: LBIO-66526 Amendment 11  
Project Manager: Cary Pooler

### Notes and Definitions

- M1 Spike recoveries were not evaluated because of elevated levels of the spiked analyte in the parent sample.
- M The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory control limits.
- J Analyte was detected but is below the reporting limit. The concentration is estimated.
- D Data reported from a dilution
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. If the word 'dry' does not appear after the units, results are reported on an as-is basis.
- RPD Relative Percent Difference

**Pace Analytical - ECCS Division**  
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# CHAIN OF CUSTODY

No. 7153

Page: 1 of 1

Project Number: 60525839		PO Number:	
Project Name: BARKSDALE - C21		Project Location (City, State): BARKSDALE, WI	
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		Report To: SHARON NORDBLIND	
If Rush, Report Due Date:		Company: THE CHEMOURS COMPANY FC, LLC	
Sampled By (Print): ERIC SCHMIDT		Address 1: 06 AECOM SQUARE BUILDING, SUITE 300	
Matrix		Address 2: 4051 OAKLEIGH RD	
Total # of Containers		E-mail Address: Sharon.Nordblind@chemours.com	
Collection Date		Invoice To:	
Time		Company:	
		Address 1:	
		Address 2:	
Sample Description		Comments	
BPSB-170601-C21-A1		01 1113	
BPSB-170601-C21-A2		02	
BPSB-170601-C21-A3		03	
BPSB-170601-C21-A4		04	
BPSB-170601-C21-B1		05	
BPSB-170601-C21-B2		06	
BPSB-170601-C21-B3		07	
BPSB-170601-C21-B4		08	
Relinquished By: [Signature]		Received By: [Signature]	
Date: 6/12/17		Date: 6/13/17	
Time: 13:00		Time: 11:13	
Relinquished By:		Received By:	
Date:		Date:	
Time:		Time:	
Custody Seal: <input type="checkbox"/> NA <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Thermometer #/ Exp. Date: 160142274 / 1/2/18	
Shipped Via: FEDEX		Temp Blank: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Receipt Temp: 0.9 °C		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N	





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December 15, 2017

Cary Pooler  
AECOM  
500 West Jefferson St, Ste 1600  
Louisville, KY 40202

RE: DuPont Barksdale Explosives Plant - Barksdale, WI

Enclosed are the analytical results for the samples received by the laboratory on 10/05/2017.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. These results are in compliance with the 2009 NELAC Standards and the appropriate agencies listed below, unless otherwise noted in the case narrative. This analytical report should be reproduced in its entirety.

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

Sincerely,

Jessica Esser  
Project Manager

**Certification List**

Certification List			Expires
ADEQ	Arkansas Department of Environmental Quality	17-065-0	09/26/2018
DODELAP	DOD ELAP Accreditation (A2LA)	3269.01	03/31/2018
ILEPA	Illinois Secondary NELAP Accreditation	003174	04/30/2018
KDHE	Kansas Secondary NELAP Accreditation	E-10384	04/30/2018
LELAP	Louisiana Primary NELAP Accreditation	04165	06/30/2018
NCDEQ	North Carolina Dept. of Environmental Quality Accreditation	688	12/31/2017
NJDEP	New Jersey Secondary NELAP Accreditation	WI004	06/30/2018
ODEQ	Oklahoma Department of Environmental Quality Accreditation	2017-154	08/31/2018
TCEQ	Texas Secondary NELAP Accreditation	T104704504-16-7	11/30/2018
WDNR	Wisconsin Certification under NR 149	113289110	08/31/2018



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AECOM  
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 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BPSB-170712-C28-BERM	A174119-01	Soil	07/12/2017	10/05/2017
BPSB-170712-C28-BOTTOM	A174119-02	Soil	07/12/2017	10/05/2017
BPSB-170712-C28-BASIN	A174119-03	Soil	07/12/2017	10/05/2017
BPSB-171002-C05-A3	A174119-04	Soil	10/02/2017	10/05/2017
BPSB-171002-C05-A6	A174119-05	Soil	10/02/2017	10/05/2017
BPSB-171002-C05-B2	A174119-06	Soil	10/02/2017	10/05/2017
BPSB-171002-C05-B4	A174119-07	Soil	10/02/2017	10/05/2017
BPSB-171002-C05-COMP	A174119-08	Soil	10/02/2017	10/05/2017
BPSB-171002-C18-COMP	A174119-09	Soil	10/02/2017	10/05/2017
BPSB-171002-C19-COMP	A174119-10	Soil	10/02/2017	10/05/2017
BPSB-171002-C20-COMP	A174119-11	Soil	10/02/2017	10/05/2017
BPSB-171002-C20-A1	A174119-12	Soil	10/02/2017	10/05/2017
BPSB-171002-C20-B4	A174119-13	Soil	10/02/2017	10/05/2017
BPSB-171002-C20-A3	A174119-14	Soil	10/02/2017	10/05/2017
BPSB-171002-C20-B2	A174119-15	Soil	10/02/2017	10/05/2017
BPSB-171002-C07-COMP	A174119-16	Soil	10/02/2017	10/05/2017
BPSB-171004-C01-A2	A174119-17	Soil	10/04/2017	10/05/2017
BPSB-171004-C01-A4	A174119-18	Soil	10/04/2017	10/05/2017
BPSB-171004-C01-B3	A174119-19	Soil	10/04/2017	10/05/2017
BPSB-171004-C01-B6	A174119-20	Soil	10/04/2017	10/05/2017
BPSB-171004-C01-COMP	A174119-21	Soil	10/04/2017	10/05/2017
BPSB-171004-C02-A3	A174119-22	Soil	10/04/2017	10/05/2017
BPSB-171004-C02-A4	A174119-23	Soil	10/04/2017	10/05/2017
BPSB-171004-C02-A5	A174119-24	Soil	10/04/2017	10/05/2017
BPSB-171004-C02-B2	A174119-25	Soil	10/04/2017	10/05/2017
BPSB-171004-C02-COMP	A174119-26	Soil	10/04/2017	10/05/2017
BPSB-171004-C03-A4	A174119-27	Soil	10/04/2017	10/05/2017
BPSB-171004-C03-A5	A174119-28	Soil	10/04/2017	10/05/2017
BPSB-171004-C03-A6	A174119-29	Soil	10/04/2017	10/05/2017
BPSB-171004-C03-B2	A174119-30	Soil	10/04/2017	10/05/2017



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BPSB-171004-C03-COMP	A174119-31	Soil	10/04/2017	10/05/2017
BPSB-171004-C04-A2	A174119-32	Soil	10/04/2017	10/05/2017
BPSB-171004-C04-A4	A174119-33	Soil	10/04/2017	10/05/2017
BPSB-171004-C04-B1	A174119-34	Soil	10/04/2017	10/05/2017
BPSB-171004-C04-B3	A174119-35	Soil	10/04/2017	10/05/2017
BPSB-171004-C04-COMP	A174119-36	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-A1	A174119-37	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-A2	A174119-38	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-A3	A174119-39	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-A4	A174119-40	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-B1	A174119-41	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-B2	A174119-42	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-B3	A174119-43	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-B4	A174119-44	Soil	10/04/2017	10/05/2017
BPSB-171004-C17-COMP	A174119-45	Soil	10/04/2017	10/05/2017

**CASE NARRATIVE**

**Sample Receipt Information:**

45 samples were received on 10/05/2017. Samples were received on ice. Samples were received in acceptable condition.

Please see the chain of custody (COC) document at the end of this report for additional information.



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-170712-C28-BERM**

Date Sampled

A174119-01 (Soil)

07/12/2017 16:35

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
2,4,6-Trinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:11	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 62.5 % 48.3-152 12/05/2017 12/05/2017 14:11 EPA 8270D

Surrogate: Nitrobenzene-d5 115 % 72-126 12/05/2017 12/05/2017 14:11 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	98.6	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-170712-C28-BOTTOM**

**A174119-02 (Soil)**

**Date Sampled**  
07/12/2017 16:40

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
2,4,6-Trinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 14:37	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 55.8 % 48.3-152 12/05/2017 12/05/2017 14:37 EPA 8270D

Surrogate: Nitrobenzene-d5 115 % 72-126 12/05/2017 12/05/2017 14:37 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	98.1	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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2525 Advance Road  
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AECOM  
 500 West Jefferson St, Ste 1600  
 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-170712-C28-BASIN**  
**A174119-03 (Soil)**

Date Sampled  
 07/12/2017 16:45

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
2,4,6-Trinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:03	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl

56.7 % 48.3-152

12/05/2017 12/05/2017 15:03

EPA 8270D

Surrogate: Nitrobenzene-d5

114 % 72-126

12/05/2017 12/05/2017 15:03

EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	98.0	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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 500 West Jefferson St, Ste 1600  
 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171002-C05-A3**

Date Sampled  
 10/02/2017 15:56

**A174119-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>200</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>330</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>240</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>210</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:29	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		52.1 %		48.3-152	12/05/2017	12/05/2017 15:29	EPA 8270D	
Surrogate: Nitrobenzene-d5		83.7 %		72-126	12/05/2017	12/05/2017 15:29	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

<b>% Solids</b>	<b>97.9</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C05-A6**

**A174119-05 (Soil)**

Date Sampled  
10/02/2017 15:54

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>1800</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>11000</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 15:55	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		54.6 %	48.3-152		12/05/2017	12/05/2017 15:55	EPA 8270D	
Surrogate: Nitrobenzene-d5		74.6 %	72-126		12/05/2017	12/05/2017 15:55	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

<b>% Solids</b>	<b>98.1</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C05-B2**

Date Sampled  
10/02/2017 16:02

A174119-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>280</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>290</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>240</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>620</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>360</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>430</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>210</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>260</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>240</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 17:40	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		62.1 %		48.3-152	12/05/2017	12/05/2017 17:40	EPA 8270D	
Surrogate: Nitrobenzene-d5		69.6 %		72-126	12/05/2017	12/05/2017 17:40	EPA 8270D	S

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	97.6	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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AECOM  
500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C05-B4**

**A174119-07 (Soil)**

**Date Sampled**  
**10/02/2017 15:58**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>210</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>760</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
<b>2,5-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>390</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:06	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		56.9 %		48.3-152	12/05/2017	12/05/2017 18:06	EPA 8270D	
Surrogate: Nitrobenzene-d5		69.5 %		72-126	12/05/2017	12/05/2017 18:06	EPA 8270D	S

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C05-COMP**  
**A174119-08 (Soil)**

Date Sampled  
10/02/2017 16:01

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>290</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>690</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>2,5-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>350</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>280</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>260</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:32	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		69.4 %	48.3-152		12/05/2017	12/05/2017 18:32	EPA 8270D	
Surrogate: Nitrobenzene-d5		98.8 %	72-126		12/05/2017	12/05/2017 18:32	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711085**

<b>% Moisture</b>	<b>19.7</b>	0.00	% by Weight	1	11/28/2017	11/30/2017 16:23	SM 2540B	
<b>% Solids</b>	<b>98.0</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C18-COMP**  
**A174119-09 (Soil)**

Date Sampled  
10/02/2017 13:45

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
2,4,6-Trinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>300</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>240</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 18:58	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl

88.6 % 48.3-152

12/05/2017 12/05/2017 18:58

EPA 8270D

Surrogate: Nitrobenzene-d5

125 % 72-126

12/05/2017 12/05/2017 18:58

EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711085**

<b>% Moisture</b>	<b>22.9</b>	0.00	% by Weight	1	11/28/2017	11/30/2017 16:23	SM 2540B	
<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	



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Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C19-COMP**  
**A174119-10 (Soil)**

Date Sampled  
10/02/2017 11:25

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1400</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>470</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>1800</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:24	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		139 %	48.3-152		12/05/2017	12/05/2017 19:24	EPA 8270D	
Surrogate: Nitrobenzene-d5		122 %	72-126		12/05/2017	12/05/2017 19:24	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711085**

<b>% Moisture</b>	<b>16.4</b>	0.00	% by Weight	1	11/28/2017	11/30/2017 16:23	SM 2540B	
<b>% Solids</b>	<b>98.6</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C20-COMP**

**A174119-11 (Soil)**

Date Sampled  
**10/02/2017 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>16000</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>350</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>1000</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>330</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 19:50	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		116 %	48.3-152		12/05/2017	12/05/2017 19:50	EPA 8270D	
Surrogate: Nitrobenzene-d5		129 %	72-126		12/05/2017	12/05/2017 19:50	EPA 8270D	S

**Classical Chemistry Parameters**

**Preparation Batch: A711085**

<b>% Moisture</b>	<b>14.3</b>	0.00	% by Weight	1	11/28/2017	11/30/2017 16:23	SM 2540B	
<b>% Solids</b>	<b>98.7</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C20-A1**

**A174119-12 (Soil)**

**Date Sampled**  
**10/02/2017 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>270</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>260</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>330</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>240</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:16	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		110 %	48.3-152		12/05/2017	12/05/2017 20:16	EPA 8270D	
Surrogate: Nitrobenzene-d5		132 %	72-126		12/05/2017	12/05/2017 20:16	EPA 8270D	S

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C20-B4**

**A174119-13 (Soil)**

Date Sampled  
**10/02/2017 11:17**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>400</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>950</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3500</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>440</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 20:42	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		113 %	48.3-152		12/05/2017	12/05/2017 20:42	EPA 8270D	
Surrogate: Nitrobenzene-d5		122 %	72-126		12/05/2017	12/05/2017 20:42	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

<b>% Solids</b>	<b>98.4</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171002-C20-A3**

Date Sampled  
 10/02/2017 11:16

**A174119-14 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>670</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>500</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
<b>2,5-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>350</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>440</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:09	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		127 %		48.3-152	12/05/2017	12/05/2017 21:09	EPA 8270D	
Surrogate: Nitrobenzene-d5		120 %		72-126	12/05/2017	12/05/2017 21:09	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C20-B2**

**A174119-15 (Soil)**

Date Sampled  
**10/02/2017 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/05/2017 21:35	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		100 %		48.3-152	12/05/2017	12/05/2017 21:35	EPA 8270D	
Surrogate: Nitrobenzene-d5		122 %		72-126	12/05/2017	12/05/2017 21:35	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

<b>% Solids</b>	<b>98.6</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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2525 Advance Road  
Madison, WI 53718  
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AECOM  
500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171002-C07-COMP**  
**A174119-16 (Soil)**

Date Sampled  
10/02/2017 15:15

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>360</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1300</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>1000</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>2,5-Dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>840</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>380</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>450</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>520</b>	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/05/2017	12/06/2017 13:41	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		103 %	48.3-152		12/05/2017	12/06/2017 13:41	EPA 8270D	
Surrogate: Nitrobenzene-d5		123 %	72-126		12/05/2017	12/06/2017 13:41	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711085**

<b>% Moisture</b>	<b>20.7</b>	0.00	% by Weight	1	11/28/2017	11/30/2017 16:23	SM 2540B	
<b>% Solids</b>	<b>98.0</b>	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C01-A2**

Date Sampled  
10/04/2017 16:07

A174119-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	29000	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	22000	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	6000	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	9200	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	48000	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	44000	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	4400	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	16000	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	3300	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	120000	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
2,4,6-Trinitrotoluene	4400	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
2,4-Dinitrotoluene	2100	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
2-Amino-4,6-dinitrotoluene	3300	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
4-Amino-2,6-dinitrotoluene	3800	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	3300	2000	ug/kg dry	10	12/05/2017	12/06/2017 14:59	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		167 %	48.3-152		12/05/2017	12/06/2017 14:59	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		118 %	72-126		12/05/2017	12/06/2017 14:59	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	98.1	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C01-A4**

Date Sampled  
10/04/2017 16:09

A174119-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	390000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	440000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	110000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	130000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	1100000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	610000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	99000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	300000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	40000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	1700000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
2,4,6-Trinitrotoluene	100000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
2,4-Dinitrotoluene	20000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
2,6-Dinitrotoluene	21000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	27000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
4-Amino-2,6-dinitrotoluene	26000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	48000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:25	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		%	48.3-152		12/05/2017	12/06/2017 15:25	EPA 8270D	DO
Surrogate: Nitrobenzene-d5		%	72-126		12/05/2017	12/06/2017 15:25	EPA 8270D	DO

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	98.2	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C01-B3**

Date Sampled  
10/04/2017 16:05

A174119-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	360000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	420000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	98000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	120000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	1100000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	560000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	97000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	290000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	40000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	1700000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
2,4,6-Trinitrotoluene	120000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
2,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
2,6-Dinitrotoluene	21000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	27000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
4-Amino-2,6-dinitrotoluene	26000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	44000	20000	ug/kg dry	100	12/05/2017	12/06/2017 15:51	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl % 48.3-152 12/05/2017 12/06/2017 15:51 EPA 8270D DO

Surrogate: Nitrobenzene-d5 % 72-126 12/05/2017 12/06/2017 15:51 EPA 8270D DO

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	98.3	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C01-B6**

Date Sampled  
10/04/2017 16:11

A174119-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712003**

1,2-Dimethyl-3,4-Dinitrobenzene	690000	20000	ug/kg dry	100	12/05/2017	12/07/2017 16:37	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	810000	20000	ug/kg dry	100	12/05/2017	12/07/2017 16:37	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	99000	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	120000	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	2000000	20000	ug/kg dry	100	12/05/2017	12/07/2017 16:37	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	3900	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	1100000	20000	ug/kg dry	100	12/05/2017	12/07/2017 16:37	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	85000	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	560000	20000	ug/kg dry	100	12/05/2017	12/07/2017 16:37	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	32000	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	3800000	200000	ug/kg dry	1000	12/05/2017	12/11/2017 11:58	EPA 8270D	D
2,3-Dinitrotoluene	2600	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
2,4,6-Trinitrotoluene	140000	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
2,4-Dinitrotoluene	6300	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
2,6-Dinitrotoluene	6900	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	9500	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
4-Amino-2,6-dinitrotoluene	8200	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	38000	2000	ug/kg dry	10	12/05/2017	12/06/2017 16:17	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		192 %	48.3-152		12/05/2017	12/06/2017 16:17	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		115 %	72-126		12/05/2017	12/06/2017 16:17	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711095**

% Solids	98.3	0.00	% by Weight	1	11/30/2017	12/07/2017 11:28	SM 2540B	
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AECOM  
500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C01-COMP**

**A174119-21 (Soil)**

Date Sampled  
**10/04/2017 16:13**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	710000	20000	ug/kg dry	100	12/06/2017	12/07/2017 21:26	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	760000	20000	ug/kg dry	100	12/06/2017	12/07/2017 21:26	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	190000	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	230000	20000	ug/kg dry	100	12/06/2017	12/07/2017 21:26	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	1900000	20000	ug/kg dry	100	12/06/2017	12/07/2017 21:26	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	6300	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	1100000	20000	ug/kg dry	100	12/06/2017	12/07/2017 21:26	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	180000	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	510000	20000	ug/kg dry	100	12/06/2017	12/07/2017 21:26	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	59000	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	3000000	200000	ug/kg dry	1000	12/06/2017	12/11/2017 12:24	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
2,4,6-Trinitrotoluene	180000	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
2,4-Dinitrotoluene	6600	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
2,6-Dinitrotoluene	11000	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	10000	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
4-Amino-2,6-dinitrotoluene	8400	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	75000	2000	ug/kg dry	10	12/06/2017	12/06/2017 16:43	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		171 %	48.3-152	12/06/2017	12/06/2017 16:43	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		86.6 %	72-126	12/06/2017	12/06/2017 16:43	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711094**

% Moisture	19.2	0.00	% by Weight	1	11/29/2017	11/30/2017 16:22	SM 2540B
% Solids	98.9	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B





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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171004-C02-A3**

Date Sampled  
 10/04/2017 16:15

A174119-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	100000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	95000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	18000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	33000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	160000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	140000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	14000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	49000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	8400	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	380000	20000	ug/kg dry	100	12/06/2017	12/07/2017 21:52	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
2,4,6-Trinitrotoluene	27000	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
2,4-Dinitrotoluene	2200	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
2,6-Dinitrotoluene	2200	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	4600	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
4-Amino-2,6-dinitrotoluene	4300	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	9900	2000	ug/kg dry	10	12/06/2017	12/06/2017 17:10	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		167 %	48.3-152		12/06/2017	12/06/2017 17:10	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		95.1 %	72-126		12/06/2017	12/06/2017 17:10	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.5	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171004-C02-A4**

Date Sampled  
 10/04/2017 16:17

A174119-23 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	100000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	91000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	19000	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	39000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	140000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	600	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
1,3-Dinitrobenzene	290	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	130000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	15000	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	47000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	7700	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	390000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
2,3-Dinitrotoluene	410	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
2,4,6-Trinitrotoluene	48000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:18	EPA 8270D	D
2,4-Dinitrotoluene	1000	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
2,6-Dinitrotoluene	1000	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
2-Amino-4,6-dinitrotoluene	4000	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
4-Amino-2,6-dinitrotoluene	3500	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	10000	200	ug/kg dry	1	12/06/2017	12/06/2017 17:36	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl

99.0 % 48.3-152

12/06/2017 12/06/2017 17:36

EPA 8270D

Surrogate: Nitrobenzene-d5

94.9 % 72-126

12/06/2017 12/06/2017 17:36

EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.6	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C02-A5**

Date Sampled  
10/04/2017 16:19

A174119-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	120000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	110000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	23000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	40000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	200000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	180000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	17000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	62000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	9500	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	450000	20000	ug/kg dry	100	12/06/2017	12/07/2017 22:44	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
2,4,6-Trinitrotoluene	82000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
2,4-Dinitrotoluene	2300	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
2,6-Dinitrotoluene	2300	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	7200	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
4-Amino-2,6-dinitrotoluene	6400	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	12000	2000	ug/kg dry	10	12/06/2017	12/06/2017 18:54	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		169 %	48.3-152		12/06/2017	12/06/2017 18:54	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		90.6 %	72-126		12/06/2017	12/06/2017 18:54	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.6	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C02-B2**

Date Sampled  
10/04/2017 16:21

A174119-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
1,2-Dimethyl-3,4-Dinitrobenzene	100000	4100	ug/kg dry	20	12/06/2017	12/11/2017 12:50	EPA 8270D	M1, D
1,2-Dimethyl-3,5-Dinitrobenzene	100000	4100	ug/kg dry	20	12/06/2017	12/11/2017 12:50	EPA 8270D	M1, D
1,2-Dimethyl-3,6-Dinitrobenzene	20000	4100	ug/kg dry	20	12/06/2017	12/11/2017 12:50	EPA 8270D	M1, D
1,2-Dimethyl-4,5-Dinitrobenzene	32000	4100	ug/kg dry	20	12/06/2017	12/11/2017 12:50	EPA 8270D	M1, D
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	190000	4100	ug/kg dry	20	12/06/2017	12/11/2017 12:50	EPA 8270D	M1, D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	M
1,3-Dinitrobenzene	270	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	140000	4100	ug/kg dry	20	12/06/2017	12/11/2017 12:50	EPA 8270D	M1, D
1,4-Dimethyl-2,5-Dinitrobenzene	18000	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	M, X
1,4-Dimethyl-2,6-Dinitrobenzene	54000	4100	ug/kg dry	20	12/06/2017	12/11/2017 12:50	EPA 8270D	M1, D
1,5-Dimethyl-2,3-Dinitrobenzene	8100	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	410000	20000	ug/kg dry	100	12/06/2017	12/11/2017 21:06	EPA 8270D	M1, D
2,3-Dinitrotoluene	410	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
2,4,6-Trinitrotoluene	20000	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	M1
2,4-Dinitrotoluene	960	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	M
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
2,6-Dinitrotoluene	850	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
2-Amino-4,6-dinitrotoluene	2500	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	M
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
4-Amino-2,6-dinitrotoluene	2100	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
Nitrobenzene	210	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	11000	200	ug/kg dry	1	12/06/2017	12/06/2017 19:20	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 99.7 % 48.3-152 12/06/2017 12/06/2017 19:20 EPA 8270D  
Surrogate: Nitrobenzene-d5 93.1 % 72-126 12/06/2017 12/06/2017 19:20 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
% Solids	98.2	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C02-COMP**

**A174119-26 (Soil)**

Date Sampled  
**10/04/2017 16:23**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	110000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	110000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	23000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	36000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	180000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	670	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
1,3-Dinitrobenzene	270	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	150000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	17000	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	56000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	8000	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	420000	20000	ug/kg dry	100	12/06/2017	12/11/2017 23:17	EPA 8270D	D
2,3-Dinitrotoluene	390	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
2,4,6-Trinitrotoluene	20000	4100	ug/kg dry	20	12/06/2017	12/11/2017 13:16	EPA 8270D	D
2,4-Dinitrotoluene	920	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
2,6-Dinitrotoluene	1000	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
2-Amino-4,6-dinitrotoluene	2700	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
4-Amino-2,6-dinitrotoluene	2500	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	11000	200	ug/kg dry	1	12/06/2017	12/06/2017 19:46	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl

92.2 % 48.3-152

12/06/2017 12/06/2017 19:46

EPA 8270D

Surrogate: Nitrobenzene-d5

93.9 % 72-126

12/06/2017 12/06/2017 19:46

EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711094**

% Moisture	20.4	0.00	% by Weight	1	11/29/2017	11/30/2017 16:22	SM 2540B	
% Solids	98.5	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C03-A4**

Date Sampled  
10/04/2017 16:16

A174119-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
1,2-Dimethyl-3,4-Dinitrobenzene	99000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	20000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	14000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	24000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	140000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	150000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	7000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	46000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	8100	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	390000	20000	ug/kg dry	100	12/06/2017	12/11/2017 20:40	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
2,4,6-Trinitrotoluene	2800	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
2,4-Dinitrotoluene	2500	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
2,5-Dinitrotoluene	2200	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
2-Amino-4,6-dinitrotoluene	2600	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
4-Amino-2,6-dinitrotoluene	2900	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	6000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:12	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		167 %	48.3-152		12/06/2017	12/06/2017 20:12	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		97.6 %	72-126		12/06/2017	12/06/2017 20:12	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
% Solids	98.7	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C03-A5**

**A174119-28 (Soil)**

Date Sampled  
**10/04/2017 16:18**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	360000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:08	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	260000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:08	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	84000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	110000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	1000000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:08	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	3800	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
1,3-Dinitrobenzene	2500	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
1,4-Dimethyl-2,3-Dinitrobenzene	630000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:08	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	62000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	270000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:08	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	32000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	1700000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:08	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
2,4,6-Trinitrotoluene	6700	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
2,4-Dinitrotoluene	6900	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
2,6-Dinitrotoluene	4500	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	3000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
4-Amino-2,6-dinitrotoluene	3200	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	34000	2000	ug/kg dry	10	12/06/2017	12/06/2017 20:38	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		171 %	48.3-152		12/06/2017	12/06/2017 20:38	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		91.0 %	72-126		12/06/2017	12/06/2017 20:38	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.8	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C03-A6**

Date Sampled  
10/04/2017 16:20

A174119-29 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	210000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:35	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	190000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	54000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	70000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	540000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:35	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	2900	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	380000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:35	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	39000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	180000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	20000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	1100000	20000	ug/kg dry	100	12/06/2017	12/11/2017 14:35	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
2,4,6-Trinitrotoluene	5600	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
2,4-Dinitrotoluene	4300	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
2,6-Dinitrotoluene	2900	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	3200	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
4-Amino-2,6-dinitrotoluene	3100	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	22000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:04	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		171 %	48.3-152		12/06/2017	12/06/2017 21:04	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		93.5 %	72-126		12/06/2017	12/06/2017 21:04	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.5	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C03-B2**

Date Sampled  
10/04/2017 16:24

A174119-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	140000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	87000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	29000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	39000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	260000	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:01	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	190000	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:01	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	20000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	86000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	11000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	640000	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:01	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
2,4,6-Trinitrotoluene	4000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
2,4-Dinitrotoluene	3200	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
2,6-Dinitrotoluene	2200	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	2800	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
4-Amino-2,6-dinitrotoluene	3100	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	11000	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:30	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		166 %	48.3-152		12/06/2017	12/06/2017 21:30	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		91.1 %	72-126		12/06/2017	12/06/2017 21:30	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.7	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C03-COMP**

**A174119-31 (Soil)**

**Date Sampled**  
**10/04/2017 16:22**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>97000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>23000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>1,2-Dimethyl-3,6-Dinitrobenzene</b>	<b>15000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>1,2-Dimethyl-4,5-Dinitrobenzene</b>	<b>25000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>150000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>140000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>1,4-Dimethyl-2,5-Dinitrobenzene</b>	<b>8200</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>45000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>1,5-Dimethyl-2,3-Dinitrobenzene</b>	<b>7900</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>370000</b>	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:27	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>3700</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2300</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2600</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>6000</b>	2000	ug/kg dry	10	12/06/2017	12/06/2017 21:56	EPA 8270D	D

Surrogate: 2,2'-Dinitrophenyl 159 % 48.3-152 12/06/2017 12/06/2017 21:56 EPA 8270D D, S

Surrogate: Nitrobenzene-d5 86.7 % 72-126 12/06/2017 12/06/2017 21:56 EPA 8270D D

**Classical Chemistry Parameters**

**Preparation Batch: A711094**

<b>% Moisture</b>	<b>18.2</b>	0.00	% by Weight	1	11/29/2017	11/30/2017 16:22	SM 2540B	
<b>% Solids</b>	<b>98.5</b>	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C04-A2**

Date Sampled  
10/04/2017 16:12

A174119-32 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	220000	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:53	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	140000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	51000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	78000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	390000	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:53	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	310000	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:53	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	41000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	140000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	20000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	870000	20000	ug/kg dry	100	12/06/2017	12/11/2017 15:53	EPA 8270D	D
2,3-Dinitrotoluene	2100	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
2,4,6-Trinitrotoluene	6300	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
2,4-Dinitrotoluene	2900	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
2,6-Dinitrotoluene	2100	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	2700	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
4-Amino-2,6-dinitrotoluene	2900	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	22000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:22	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		170 %	48.3-152		12/06/2017	12/06/2017 22:22	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		91.6 %	72-126		12/06/2017	12/06/2017 22:22	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.5	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C04-A4**

Date Sampled  
10/04/2017 16:14

A174119-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	460000	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:11	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	440000	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:11	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	120000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	150000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	1100000	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:11	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	4300	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
1,3-Dinitrobenzene	2500	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
1,4-Dimethyl-2,3-Dinitrobenzene	680000	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:11	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	100000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	320000	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:11	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	43000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	1800000	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:11	EPA 8270D	D
2,3-Dinitrotoluene	3500	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
2,4,6-Trinitrotoluene	11000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
2,4-Dinitrotoluene	5800	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
2,6-Dinitrotoluene	4900	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	2800	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
4-Amino-2,6-dinitrotoluene	2900	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	38000	2000	ug/kg dry	10	12/06/2017	12/06/2017 22:49	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		170 %	48.3-152		12/06/2017	12/06/2017 22:49	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		88.8 %	72-126		12/06/2017	12/06/2017 22:49	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.8	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C04-B1**

**A174119-34 (Soil)**

Date Sampled  
**10/04/2017 16:06**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>190000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>100000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
<b>1,2-Dimethyl-3,6-Dinitrobenzene</b>	<b>40000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
<b>1,2-Dimethyl-4,5-Dinitrobenzene</b>	<b>63000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>300000</b>	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:37	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>260000</b>	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:37	EPA 8270D	D
<b>1,4-Dimethyl-2,5-Dinitrobenzene</b>	<b>31000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>120000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
<b>1,5-Dimethyl-2,3-Dinitrobenzene</b>	<b>16000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>660000</b>	20000	ug/kg dry	100	12/06/2017	12/11/2017 17:37	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>6100</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2800</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2600</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2800</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>18000</b>	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:27	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		164 %		48.3-152	12/06/2017	12/07/2017 14:27	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		84.9 %		72-126	12/06/2017	12/07/2017 14:27	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

<b>% Solids</b>	<b>98.7</b>	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C04-B3**

Date Sampled  
10/04/2017 16:08

A174119-35 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	290000	20000	ug/kg dry	100	12/06/2017	12/11/2017 18:03	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	260000	20000	ug/kg dry	100	12/06/2017	12/11/2017 18:03	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	71000	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	100000	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	680000	20000	ug/kg dry	100	12/06/2017	12/11/2017 18:03	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	3100	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	430000	20000	ug/kg dry	100	12/06/2017	12/11/2017 18:03	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	61000	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	180000	20000	ug/kg dry	100	12/06/2017	12/11/2017 18:03	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	26000	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	1100000	20000	ug/kg dry	100	12/06/2017	12/11/2017 18:03	EPA 8270D	D
2,3-Dinitrotoluene	2400	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
2,4,6-Trinitrotoluene	9700	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
2,4-Dinitrotoluene	4100	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
2,6-Dinitrotoluene	2700	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	2800	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
4-Amino-2,6-dinitrotoluene	2800	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	28000	2000	ug/kg dry	10	12/06/2017	12/07/2017 14:53	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		171 %	48.3-152		12/06/2017	12/07/2017 14:53	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		87.2 %	72-126		12/06/2017	12/07/2017 14:53	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.7	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171004-C04-COMP**

**A174119-36 (Soil)**

**Date Sampled**  
**10/04/2017 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	240000	20000	ug/kg dry	100	12/06/2017	12/12/2017 09:10	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	190000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	61000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	89000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	520000	20000	ug/kg dry	100	12/06/2017	12/12/2017 09:10	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	2700	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	360000	20000	ug/kg dry	100	12/06/2017	12/12/2017 09:10	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	51000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	180000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	23000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	990000	20000	ug/kg dry	100	12/06/2017	12/12/2017 09:10	EPA 8270D	D
2,3-Dinitrotoluene	2200	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
2,4,6-Trinitrotoluene	6100	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
2,4-Dinitrotoluene	4000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
2,6-Dinitrotoluene	2700	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	2600	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
4-Amino-2,6-dinitrotoluene	2700	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	25000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:19	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		168 %	48.3-152		12/06/2017	12/07/2017 15:19	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		90.9 %	72-126		12/06/2017	12/07/2017 15:19	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711094**

% Moisture	20.5	0.00	% by Weight	1	11/29/2017	11/30/2017 16:22	SM 2540B	
% Solids	98.7	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171004-C17-A1**

Date Sampled  
 10/04/2017 17:10

**A174119-37 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	7700	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	4800	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	1400	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	1400	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	20000	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	20000	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	540	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	6800	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	660	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	48000	2000	ug/kg dry	10	12/06/2017	12/07/2017 15:45	EPA 8270D	D
2,3-Dinitrotoluene	230	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
2,4,6-Trinitrotoluene	420	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
2,4-Dinitrotoluene	780	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
2,6-Dinitrotoluene	400	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
2-Amino-4,6-dinitrotoluene	430	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
3,4-Dinitrotoluene	370	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
4-Amino-2,6-dinitrotoluene	790	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	700	200	ug/kg dry	1	12/06/2017	12/12/2017 11:50	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl		86.8 %	48.3-152		12/06/2017	12/12/2017 11:50	EPA 8270D	
Surrogate: Nitrobenzene-d5		87.4 %	72-126		12/06/2017	12/12/2017 11:50	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	97.9	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C17-A2**

Date Sampled  
10/04/2017 17:12

**A174119-38 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	3800	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	1400	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	610	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	550	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	10000	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,3-Dinitrobenzene	280	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	12000	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	280	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	3500	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	360	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	20000	2000	ug/kg dry	10	12/06/2017	12/07/2017 17:03	EPA 8270D	D
2,3-Dinitrotoluene	260	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
2,4,6-Trinitrotoluene	560	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
2,4-Dinitrotoluene	860	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
2,6-Dinitrotoluene	480	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
2-Amino-4,6-dinitrotoluene	470	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
3,4-Dinitrotoluene	400	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
4-Amino-2,6-dinitrotoluene	890	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	4800	200	ug/kg dry	1	12/06/2017	12/12/2017 12:16	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl

88.3 % 48.3-152

12/06/2017 12/12/2017 12:16

EPA 8270D

Surrogate: Nitrobenzene-d5

89.9 % 72-126

12/06/2017 12/12/2017 12:16

EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.0	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C17-A3**

Date Sampled  
10/04/2017 17:14

A174119-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
1,2-Dimethyl-3,4-Dinitrobenzene	4300	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	1900	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	640	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	590	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	11000	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	11000	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	280	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	3400	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	370	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	20000	2000	ug/kg dry	10	12/06/2017	12/07/2017 17:30	EPA 8270D	D
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
2,4,6-Trinitrotoluene	670	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
2,4-Dinitrotoluene	640	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
2,6-Dinitrotoluene	300	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
2-Amino-4,6-dinitrotoluene	420	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
3,4-Dinitrotoluene	350	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
4-Amino-2,6-dinitrotoluene	800	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	1100	200	ug/kg dry	1	12/06/2017	12/12/2017 10:58	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl		89.1 %	48.3-152		12/06/2017	12/12/2017 10:58	EPA 8270D	
Surrogate: Nitrobenzene-d5		82.7 %	72-126		12/06/2017	12/12/2017 10:58	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
% Solids	98.8	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	



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Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C17-A4**

Date Sampled  
10/04/2017 17:16

A174119-40 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712012**

1,2-Dimethyl-3,4-Dinitrobenzene	6200	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	2800	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	840	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	1200	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	15000	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,3-Dinitrobenzene	270	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	16000	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	420	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	4800	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	490	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	30000	2000	ug/kg dry	10	12/06/2017	12/07/2017 17:56	EPA 8270D	D
2,3-Dinitrotoluene	250	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
2,4,6-Trinitrotoluene	1300	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
2,4-Dinitrotoluene	870	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
2,6-Dinitrotoluene	440	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
2-Amino-4,6-dinitrotoluene	640	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
3,4-Dinitrotoluene	400	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
4-Amino-2,6-dinitrotoluene	1500	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	1800	200	ug/kg dry	1	12/06/2017	12/12/2017 11:24	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl

82.6 % 48.3-152

12/06/2017

12/12/2017 11:24

EPA 8270D

Surrogate: Nitrobenzene-d5

81.1 % 72-126

12/06/2017

12/12/2017 11:24

EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A711096**

% Solids	98.2	0.00	% by Weight	1	11/30/2017	12/08/2017 13:21	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C17-B1**

**A174119-41 (Soil)**

Date Sampled  
**10/04/2017 17:11**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712013**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>10000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	D
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>3500</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	D
<b>1,2-Dimethyl-3,6-Dinitrobenzene</b>	<b>2800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	D
<b>1,2-Dimethyl-4,5-Dinitrobenzene</b>	<b>3200</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>22000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M1, D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
<b>1,3-Dinitrobenzene</b>	<b>2600</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M, D
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>23000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M1, D
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>8400</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>43000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M1, D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	
2,4,6-Trinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
<b>2,4-Dinitrotoluene</b>	<b>2800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M, D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2300</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M, D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3100</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M, D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3300</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
Nitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	M
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 19:51	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl		174 %	48.3-152		12/07/2017	12/07/2017 19:51	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		116 %	72-126		12/07/2017	12/07/2017 19:51	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712014**

<b>% Solids</b>	<b>97.6</b>	0.00	% by Weight	1	12/07/2017	12/08/2017 13:31	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C17-B2**

Date Sampled

A174119-42 (Soil)

10/04/2017 17:13

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712013**

1,2-Dimethyl-3,4-Dinitrobenzene	13000	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	4000	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,2-Dimethyl-3,6-Dinitrobenzene	3400	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,2-Dimethyl-4,5-Dinitrobenzene	4200	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	25000	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
1,3-Dinitrobenzene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	26000	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	2100	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,4-Dimethyl-2,6-Dinitrobenzene	9700	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	2700	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
1,5-Dimethyl-2,4-Dinitrobenzene	52000	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
2,3-Dinitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
2,4,6-Trinitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
2,4-Dinitrotoluene	3100	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
2,5-Dinitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
2,6-Dinitrotoluene	2400	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	3200	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
2-Nitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
3,4-Dinitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
3,5-Dinitroaniline	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
3,5-Dinitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
3-Nitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
4-Amino-2,6-dinitrotoluene	3400	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	D
4-Nitrotoluene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
Nitrobenzene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2100	ug/kg dry	10	12/07/2017	12/07/2017 22:26	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 182 % 48.3-152 12/07/2017 12/07/2017 22:26 EPA 8270D D, S

Surrogate: Nitrobenzene-d5 122 % 72-126 12/07/2017 12/07/2017 22:26 EPA 8270D D

**Classical Chemistry Parameters**

**Preparation Batch: A712014**

% Solids	97.5	0.00	% by Weight	1	12/07/2017	12/08/2017 13:31	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171004-C17-B3**

Date Sampled  
 10/04/2017 17:15

**A174119-43 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712013**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>14000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>4000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
<b>1,2-Dimethyl-3,6-Dinitrobenzene</b>	<b>3900</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
<b>1,2-Dimethyl-4,5-Dinitrobenzene</b>	<b>4500</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>32000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>29000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
<b>1,4-Dimethyl-2,5-Dinitrobenzene</b>	<b>2400</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>12000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
<b>1,5-Dimethyl-2,3-Dinitrobenzene</b>	<b>2800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>53000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
2,4,6-Trinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>3000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2400</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
2-Amino-4,6-dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3300</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 22:52	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl 177 % 48.3-152 12/07/2017 12/07/2017 22:52 EPA 8270D D, S

Surrogate: Nitrobenzene-d5 119 % 72-126 12/07/2017 12/07/2017 22:52 EPA 8270D D

**Classical Chemistry Parameters**

**Preparation Batch: A712014**

<b>% Solids</b>	<b>98.2</b>	0.00	% by Weight	1	12/07/2017	12/08/2017 13:31	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**BPSB-171004-C17-B4**

Date Sampled

A174119-44 (Soil)

10/04/2017 17:17

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712013**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>20000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>8400</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
<b>1,2-Dimethyl-3,6-Dinitrobenzene</b>	<b>5400</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
<b>1,2-Dimethyl-4,5-Dinitrobenzene</b>	<b>6500</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>47000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>38000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
<b>1,4-Dimethyl-2,5-Dinitrobenzene</b>	<b>3800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>16000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>67000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
2,4,6-Trinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>2800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2300</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3200</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:18	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl 174 % 48.3-152 12/07/2017 12/07/2017 23:18 EPA 8270D D, S

Surrogate: Nitrobenzene-d5 117 % 72-126 12/07/2017 12/07/2017 23:18 EPA 8270D D

**Classical Chemistry Parameters**

**Preparation Batch: A712014**

<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	12/07/2017	12/08/2017 13:31	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**BPSB-171004-C17-COMP**

**A174119-45 (Soil)**

**Date Sampled**  
**10/04/2017 17:18**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712013**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>5500</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>3200</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
<b>1,2-Dimethyl-3,6-Dinitrobenzene</b>	<b>2100</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
<b>1,2-Dimethyl-4,5-Dinitrobenzene</b>	<b>2600</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>11000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>12000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>4600</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
<b>1,5-Dimethyl-2,3-Dinitrobenzene</b>	<b>2300</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>24000</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
2,4,6-Trinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>2800</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2200</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3100</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3200</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>4400</b>	2000	ug/kg dry	10	12/07/2017	12/07/2017 23:43	EPA 8270D	D

Surrogate: 2,2'-Dinitrobiphenyl		180 %	48.3-152		12/07/2017	12/07/2017 23:43	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		119 %	72-126		12/07/2017	12/07/2017 23:43	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A711100**

<b>% Moisture</b>	<b>21.1</b>	0.00	% by Weight	1	11/30/2017	12/01/2017 09:50	SM 2540B	
<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	12/07/2017	12/08/2017 13:31	SM 2540B	





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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712003 - EPA 3570**

**Blank (A712003-BLK1)**

Prepared: 12/05/2017 Analyzed: 12/05/2017 12:01

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
2,3-Dinitrotoluene	ND	200	ug/kg wet							
2,4,6-Trinitrotoluene	ND	200	ug/kg wet							
2,4-Dinitrotoluene	ND	200	ug/kg wet							
2,5-Dinitrotoluene	ND	200	ug/kg wet							
2,6-Dinitrotoluene	ND	200	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg wet							
2-Nitrotoluene	ND	200	ug/kg wet							
3,4-Dinitrotoluene	ND	200	ug/kg wet							
3,5-Dinitroaniline	ND	200	ug/kg wet							
3,5-Dinitrotoluene	ND	200	ug/kg wet							
3-Nitrotoluene	ND	200	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg wet							
4-Nitrotoluene	ND	200	ug/kg wet							
Nitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg wet							
Surrogate: 2,2'-Dinitrobiphenyl	1860		ug/kg wet	2000		93.1	48.3-152			
Surrogate: Nitrobenzene-d5	2850		ug/kg wet	2000		143	72-126			S

**LCS (A712003-BS1)**

Prepared: 12/05/2017 Analyzed: 12/05/2017 12:27

1,2-Dimethyl-3,4-Dinitrobenzene	1900	200	ug/kg wet	2038		93.2	81.4-119			
1,2-Dimethyl-3,5-Dinitrobenzene	1800	200	ug/kg wet	2000		90.1	80.1-121			
1,2-Dimethyl-3,6-Dinitrobenzene	1930	200	ug/kg wet	2000		96.5	81.8-116			
1,2-Dimethyl-4,5-Dinitrobenzene	1760	200	ug/kg wet	2002		88.0	79.2-122			
1,3,5-Trinitrobenzene	1520	200	ug/kg wet	2000		76.2	60.4-167			
1,3-Dimethyl-2,4-Dinitrobenzene	1720	200	ug/kg wet	2000		85.8	79.6-118			
1,3-Dimethyl-2,5-Dinitrobenzene	1840	200	ug/kg wet	2000		91.9	82.7-116			
1,3-Dinitrobenzene	1720	200	ug/kg wet	2000		85.8	69.8-129			
1,4-Dimethyl-2,3-Dinitrobenzene	1860	200	ug/kg wet	2082		89.4	68.8-126			
1,4-Dimethyl-2,5-Dinitrobenzene	1810	200	ug/kg wet	2096		86.4	81.7-118			
1,4-Dimethyl-2,6-Dinitrobenzene	1780	200	ug/kg wet	2065		86.3	81.5-117			
1,5-Dimethyl-2,3-Dinitrobenzene	1800	200	ug/kg wet	2000		89.9	80.6-119			



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Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712003 - EPA 3570**

**LCS (A712003-BS1)**

Prepared: 12/05/2017 Analyzed: 12/05/2017 12:27

1,5-Dimethyl-2,4-Dinitrobenzene	1810	200	ug/kg wet	2058		88.1	79.4-120			
2,4,6-Trinitrotoluene	1810	200	ug/kg wet	2000		90.7	74.1-139			
2,4-Dinitrotoluene	1770	200	ug/kg wet	2000		88.5	67.8-133			
2,6-Dinitrotoluene	1960	200	ug/kg wet	2000		98.2	79.5-120			
2-Amino-4,6-dinitrotoluene	1820	200	ug/kg wet	2000		90.9	60.5-138			
2-Nitrotoluene	1940	200	ug/kg wet	2000		97.0	77.7-117			
3,4-Dinitrotoluene	1870	200	ug/kg wet	2000		93.3	81.2-120			
3,5-Dinitroaniline	1780	200	ug/kg wet	2000		89.2	53.2-145			
3-Nitrotoluene	1940	200	ug/kg wet	2000		97.0	82.5-114			
4-Amino-2,6-dinitrotoluene	1750	200	ug/kg wet	2000		87.3	64.1-133			
4-Nitrotoluene	1870	200	ug/kg wet	2000		93.4	83.6-112			
Nitrobenzene	2010	200	ug/kg wet	2000		100	83.4-112			
Surrogate: 2,2'-Dinitrobiphenyl	2860		ug/kg wet	2000		143	48.3-152			
Surrogate: Nitrobenzene-d5	2860		ug/kg wet	2000		143	72-126			S

**Matrix Spike (A712003-MS1)**

Source: A174119-01

Prepared: 12/05/2017 Analyzed: 12/07/2017 16:11

1,2-Dimethyl-3,4-Dinitrobenzene	1490	200	ug/kg dry	2066	ND	72.2	64.4-124			
1,2-Dimethyl-3,5-Dinitrobenzene	1550	200	ug/kg dry	2028	ND	76.4	67.8-131			
1,2-Dimethyl-3,6-Dinitrobenzene	1600	200	ug/kg dry	2028	ND	79.1	72.5-119			
1,2-Dimethyl-4,5-Dinitrobenzene	1370	200	ug/kg dry	2030	ND	67.3	62.8-131			
1,3,5-Trinitrobenzene	1100	200	ug/kg dry	2028	ND	54.2	39.2-186			
1,3-Dimethyl-2,4-Dinitrobenzene	1580	200	ug/kg dry	2028	ND	78.0	70.2-124			
1,3-Dimethyl-2,5-Dinitrobenzene	1620	200	ug/kg dry	2028	ND	80.0	75.8-121			
1,3-Dinitrobenzene	1510	200	ug/kg dry	2028	ND	74.4	58.7-132			
1,4-Dimethyl-2,3-Dinitrobenzene	1500	200	ug/kg dry	2111	ND	71.3	65.6-120			
1,4-Dimethyl-2,5-Dinitrobenzene	1600	200	ug/kg dry	2125	ND	75.1	69.3-127			
1,4-Dimethyl-2,6-Dinitrobenzene	1560	200	ug/kg dry	2094	ND	74.4	72.8-122			
1,5-Dimethyl-2,3-Dinitrobenzene	1460	200	ug/kg dry	2028	ND	72.2	63.4-128			
1,5-Dimethyl-2,4-Dinitrobenzene	1640	200	ug/kg dry	2087	ND	78.8	63.6-130			
2,4,6-Trinitrotoluene	1370	200	ug/kg dry	2028	ND	67.7	26.1-194			
2,4-Dinitrotoluene	1500	200	ug/kg dry	2028	ND	74.1	66.7-135			
2,6-Dinitrotoluene	1640	200	ug/kg dry	2028	ND	80.9	66.1-127			
2-Amino-4,6-dinitrotoluene	1190	200	ug/kg dry	2028	ND	58.4	39-140			
2-Nitrotoluene	1800	200	ug/kg dry	2028	ND	88.6	72-121			
3,4-Dinitrotoluene	1410	200	ug/kg dry	2028	ND	69.7	64.3-124			
3,5-Dinitroaniline	1180	200	ug/kg dry	2028	ND	58.1	33.5-149			
3-Nitrotoluene	1850	200	ug/kg dry	2028	ND	91.4	78.3-118			
4-Amino-2,6-dinitrotoluene	1230	200	ug/kg dry	2028	ND	60.5	26.4-153			
4-Nitrotoluene	1770	200	ug/kg dry	2028	ND	87.2	78.6-116			
Nitrobenzene	1790	200	ug/kg dry	2028	ND	88.2	75.8-113			
Surrogate: 2,2'-Dinitrobiphenyl	1880		ug/kg dry	2028		92.5	48.3-152			
Surrogate: Nitrobenzene-d5	2550		ug/kg dry	2028		126	72-126			



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712003 - EPA 3570**

**Matrix Spike Dup (A712003-MSD1)**

Source: A174119-01

Prepared: 12/05/2017 Analyzed: 12/06/2017 14:33

1,2-Dimethyl-3,4-Dinitrobenzene	1550	200	ug/kg dry	2066	ND	74.8	64.4-124	3.57	20	
1,2-Dimethyl-3,5-Dinitrobenzene	1580	200	ug/kg dry	2028	ND	77.8	67.8-131	1.85	20	
1,2-Dimethyl-3,6-Dinitrobenzene	1600	200	ug/kg dry	2028	ND	79.0	72.5-119	0.0759	20	
1,2-Dimethyl-4,5-Dinitrobenzene	1410	200	ug/kg dry	2030	ND	69.5	62.8-131	3.33	20	
1,3,5-Trinitrobenzene	1030	200	ug/kg dry	2028	ND	50.9	39.2-186	6.23	20	
1,3-Dimethyl-2,4-Dinitrobenzene	1550	200	ug/kg dry	2028	ND	76.2	70.2-124	2.26	20	
1,3-Dimethyl-2,5-Dinitrobenzene	1630	200	ug/kg dry	2028	ND	80.5	75.8-121	0.637	20	
1,3-Dinitrobenzene	1360	200	ug/kg dry	2028	ND	67.2	58.7-132	10.2	20	
1,4-Dimethyl-2,3-Dinitrobenzene	1530	200	ug/kg dry	2111	ND	72.5	65.6-120	1.66	20	
1,4-Dimethyl-2,5-Dinitrobenzene	1590	200	ug/kg dry	2125	ND	74.8	69.3-127	0.322	20	
1,4-Dimethyl-2,6-Dinitrobenzene	1560	200	ug/kg dry	2094	ND	74.4	72.8-122	0.0561	20	
1,5-Dimethyl-2,3-Dinitrobenzene	1520	200	ug/kg dry	2028	ND	74.8	63.4-128	3.43	20	
1,5-Dimethyl-2,4-Dinitrobenzene	1580	200	ug/kg dry	2087	ND	75.5	63.6-130	4.27	20	
2,4,6-Trinitrotoluene	1320	200	ug/kg dry	2028	ND	65.2	26.1-194	3.63	20	
2,4-Dinitrotoluene	1410	200	ug/kg dry	2028	ND	69.7	66.7-135	6.15	20	
2,6-Dinitrotoluene	1560	200	ug/kg dry	2028	ND	76.8	66.1-127	5.27	20	
2-Amino-4,6-dinitrotoluene	1190	200	ug/kg dry	2028	ND	58.7	39-140	0.458	20	
2-Nitrotoluene	1740	200	ug/kg dry	2028	ND	85.6	72-121	3.34	20	
3,4-Dinitrotoluene	1360	200	ug/kg dry	2028	ND	67.2	64.3-124	3.65	20	
3,5-Dinitroaniline	1170	200	ug/kg dry	2028	ND	57.8	33.5-149	0.532	20	
3-Nitrotoluene	1780	200	ug/kg dry	2028	ND	87.6	78.3-118	4.17	20	
4-Amino-2,6-dinitrotoluene	1170	200	ug/kg dry	2028	ND	57.6	26.4-153	4.91	20	
4-Nitrotoluene	1740	200	ug/kg dry	2028	ND	85.8	78.6-116	1.64	20	
Nitrobenzene	1750	200	ug/kg dry	2028	ND	86.3	75.8-113	2.13	20	
Surrogate: 2,2'-Dinitrobiphenyl	1920		ug/kg dry	2028		94.7	48.3-152			
Surrogate: Nitrobenzene-d5	2520		ug/kg dry	2028		124	72-126			



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712012 - EPA 3570**

**Blank (A712012-BLK1)**

Prepared: 12/06/2017 Analyzed: 12/07/2017 18:22

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
2,3-Dinitrotoluene	ND	200	ug/kg wet							
2,4,6-Trinitrotoluene	ND	200	ug/kg wet							
2,4-Dinitrotoluene	ND	200	ug/kg wet							
2,5-Dinitrotoluene	ND	200	ug/kg wet							
2,6-Dinitrotoluene	ND	200	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg wet							
2-Nitrotoluene	ND	200	ug/kg wet							
3,4-Dinitrotoluene	ND	200	ug/kg wet							
3,5-Dinitroaniline	ND	200	ug/kg wet							
3,5-Dinitrotoluene	ND	200	ug/kg wet							
3-Nitrotoluene	ND	200	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg wet							
4-Nitrotoluene	ND	200	ug/kg wet							
Nitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg wet							
Surrogate: 2,2'-Dinitrobiphenyl	1410		ug/kg wet	2000		70.3	48.3-152			
Surrogate: Nitrobenzene-d5	1790		ug/kg wet	2000		89.4	72-126			

**LCS (A712012-BS1)**

Prepared: 12/06/2017 Analyzed: 12/07/2017 19:41

1,2-Dimethyl-3,4-Dinitrobenzene	2060	200	ug/kg wet	2038		101	81.4-119			
1,2-Dimethyl-3,5-Dinitrobenzene	2040	200	ug/kg wet	2000		102	80.1-121			
1,2-Dimethyl-3,6-Dinitrobenzene	2110	200	ug/kg wet	2000		105	81.8-116			
1,2-Dimethyl-4,5-Dinitrobenzene	1840	200	ug/kg wet	2002		91.7	79.2-122			
1,3,5-Trinitrobenzene	1840	200	ug/kg wet	2000		92.2	60.4-167			
1,3-Dimethyl-2,4-Dinitrobenzene	2040	200	ug/kg wet	2000		102	79.6-118			
1,3-Dimethyl-2,5-Dinitrobenzene	2050	200	ug/kg wet	2000		102	82.7-116			
1,3-Dinitrobenzene	2190	200	ug/kg wet	2000		110	69.8-129			
1,4-Dimethyl-2,3-Dinitrobenzene	2000	200	ug/kg wet	2082		96.1	68.8-126			
1,4-Dimethyl-2,5-Dinitrobenzene	2040	200	ug/kg wet	2096		97.2	81.7-118			
1,4-Dimethyl-2,6-Dinitrobenzene	2010	200	ug/kg wet	2065		97.4	81.5-117			
1,5-Dimethyl-2,3-Dinitrobenzene	1960	200	ug/kg wet	2000		98.1	80.6-119			



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 Project Number: 60506979  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712012 - EPA 3570**

**LCS (A712012-BS1)**

Prepared: 12/06/2017 Analyzed: 12/07/2017 19:41

1,5-Dimethyl-2,4-Dinitrobenzene	2070	200	ug/kg wet	2058		100	79.4-120			
2,4,6-Trinitrotoluene	2050	200	ug/kg wet	2000		103	74.1-139			
2,4-Dinitrotoluene	2020	200	ug/kg wet	2000		101	67.8-133			
2,6-Dinitrotoluene	2170	200	ug/kg wet	2000		109	79.5-120			
2-Amino-4,6-dinitrotoluene	1970	200	ug/kg wet	2000		98.5	60.5-138			
2-Nitrotoluene	1950	200	ug/kg wet	2000		97.7	77.7-117			
3,4-Dinitrotoluene	1970	200	ug/kg wet	2000		98.4	81.2-120			
3,5-Dinitroaniline	2010	200	ug/kg wet	2000		101	53.2-145			
3-Nitrotoluene	2040	200	ug/kg wet	2000		102	82.5-114			
4-Amino-2,6-dinitrotoluene	1940	200	ug/kg wet	2000		96.9	64.1-133			
4-Nitrotoluene	2010	200	ug/kg wet	2000		100	83.6-112			
Nitrobenzene	1990	200	ug/kg wet	2000		99.4	83.4-112			
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>	<i>1970</i>		<i>ug/kg wet</i>	<i>2000</i>		<i>98.3</i>	<i>48.3-152</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>1910</i>		<i>ug/kg wet</i>	<i>2000</i>		<i>95.4</i>	<i>72-126</i>			

**Matrix Spike (A712012-MS1)**

Source: A174119-25

Prepared: 12/06/2017 Analyzed: 12/07/2017 20:07

1,2-Dimethyl-3,4-Dinitrobenzene	76600	200	ug/kg dry	2076	104000	NR	64.4-124			M1
1,2-Dimethyl-3,5-Dinitrobenzene	70300	200	ug/kg dry	2038	103000	NR	67.8-131			M1
1,2-Dimethyl-3,6-Dinitrobenzene	23500	200	ug/kg dry	2038	20500	150	72.5-119			M1
1,2-Dimethyl-4,5-Dinitrobenzene	30400	200	ug/kg dry	2040	32300	NR	62.8-131			M1
1,3,5-Trinitrobenzene	2600	200	ug/kg dry	2038	ND	128	39.2-186			
1,3-Dimethyl-2,4-Dinitrobenzene	117000	200	ug/kg dry	2038	187000	NR	70.2-124			M1
1,3-Dimethyl-2,5-Dinitrobenzene	2710	200	ug/kg dry	2038	ND	133	75.8-121			M
1,3-Dinitrobenzene	2610	200	ug/kg dry	2038	275	114	58.7-132			
1,4-Dimethyl-2,3-Dinitrobenzene	39300	200	ug/kg dry	2121	138000	NR	65.6-120			M1
1,4-Dimethyl-2,5-Dinitrobenzene	19300	200	ug/kg dry	2135	17800	68.3	69.3-127			M
1,4-Dimethyl-2,6-Dinitrobenzene	53000	200	ug/kg dry	2104	53800	NR	72.8-122			M1
1,5-Dimethyl-2,3-Dinitrobenzene	9890	200	ug/kg dry	2038	8130	86.1	63.4-128			
1,5-Dimethyl-2,4-Dinitrobenzene	187000	200	ug/kg dry	2097	414000	NR	63.6-130			M1
2,4,6-Trinitrotoluene	21100	200	ug/kg dry	2038	19700	66.5	26.1-194			M1
2,4-Dinitrotoluene	3730	200	ug/kg dry	2038	963	136	66.7-135			M
2,6-Dinitrotoluene	3070	200	ug/kg dry	2038	848	109	66.1-127			
2-Amino-4,6-dinitrotoluene	4550	200	ug/kg dry	2038	2540	98.5	39-140			
2-Nitrotoluene	2090	200	ug/kg dry	2038	ND	102	72-121			
3,4-Dinitrotoluene	278	200	ug/kg dry	2038	ND	13.7	64.3-124			M
3,5-Dinitroaniline	2340	200	ug/kg dry	2038	ND	115	33.5-149			
3-Nitrotoluene	2120	200	ug/kg dry	2038	ND	104	78.3-118			
4-Amino-2,6-dinitrotoluene	4340	200	ug/kg dry	2038	2110	109	26.4-153			
4-Nitrotoluene	2200	200	ug/kg dry	2038	ND	108	78.6-116			
Nitrobenzene	2220	200	ug/kg dry	2038	215	98.3	75.8-113			
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>	<i>1980</i>		<i>ug/kg dry</i>	<i>2038</i>		<i>97.2</i>	<i>48.3-152</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>1850</i>		<i>ug/kg dry</i>	<i>2038</i>		<i>91.0</i>	<i>72-126</i>			



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**Explosive Compounds by EPA Method 8270 - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712012 - EPA 3570**

**Matrix Spike Dup (A712012-MSD1)**

Source: A174119-25

Prepared: 12/06/2017 Analyzed: 12/07/2017 20:33

1,2-Dimethyl-3,4-Dinitrobenzene	75000	200	ug/kg dry	2076	104000	NR	64.4-124	NR	20	M1
1,2-Dimethyl-3,5-Dinitrobenzene	69400	200	ug/kg dry	2038	103000	NR	67.8-131	NR	20	M1
1,2-Dimethyl-3,6-Dinitrobenzene	23300	200	ug/kg dry	2038	20500	139	72.5-119	7.50	20	M1
1,2-Dimethyl-4,5-Dinitrobenzene	29300	200	ug/kg dry	2040	32300	NR	62.8-131	NR	20	M1
1,3,5-Trinitrobenzene	2680	200	ug/kg dry	2038	ND	132	39.2-186	3.08	20	
1,3-Dimethyl-2,4-Dinitrobenzene	115000	200	ug/kg dry	2038	187000	NR	70.2-124	NR	20	M1
1,3-Dimethyl-2,5-Dinitrobenzene	2760	200	ug/kg dry	2038	ND	136	75.8-121	2.08	20	M
1,3-Dinitrobenzene	2740	200	ug/kg dry	2038	275	121	58.7-132	5.73	20	
1,4-Dimethyl-2,3-Dinitrobenzene	38200	200	ug/kg dry	2121	138000	NR	65.6-120	NR	20	M1
1,4-Dimethyl-2,5-Dinitrobenzene	18900	200	ug/kg dry	2135	17800	47.9	69.3-127	35.1	20	X, M
1,4-Dimethyl-2,6-Dinitrobenzene	52100	200	ug/kg dry	2104	53800	NR	72.8-122	NR	20	M1
1,5-Dimethyl-2,3-Dinitrobenzene	9950	200	ug/kg dry	2038	8130	89.4	63.4-128	3.74	20	
1,5-Dimethyl-2,4-Dinitrobenzene	187000	200	ug/kg dry	2097	414000	NR	63.6-130	NR	20	M1
2,4,6-Trinitrotoluene	21600	200	ug/kg dry	2038	19700	90.0	26.1-194	29.9	20	M1
2,4-Dinitrotoluene	3650	200	ug/kg dry	2038	963	132	66.7-135	2.85	20	
2,6-Dinitrotoluene	3090	200	ug/kg dry	2038	848	110	66.1-127	0.829	20	
2-Amino-4,6-dinitrotoluene	4570	200	ug/kg dry	2038	2540	99.3	39-140	0.816	20	
2-Nitrotoluene	2100	200	ug/kg dry	2038	ND	103	72-121	0.737	20	
3,4-Dinitrotoluene	282	200	ug/kg dry	2038	ND	13.8	64.3-124	1.17	20	M
3,5-Dinitroaniline	2330	200	ug/kg dry	2038	ND	114	33.5-149	0.426	20	
3-Nitrotoluene	2150	200	ug/kg dry	2038	ND	106	78.3-118	1.78	20	
4-Amino-2,6-dinitrotoluene	4380	200	ug/kg dry	2038	2110	111	26.4-153	1.87	20	
4-Nitrotoluene	2210	200	ug/kg dry	2038	ND	108	78.6-116	0.0499	20	
Nitrobenzene	2250	200	ug/kg dry	2038	215	99.9	75.8-113	1.61	20	
Surrogate: 2,2'-Dinitrobiphenyl	2020		ug/kg dry	2038		98.9	48.3-152			
Surrogate: Nitrobenzene-d5	1910		ug/kg dry	2038		93.6	72-126			



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 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712013 - EPA 3570**

**Blank (A712013-BLK1)**

Prepared: 12/07/2017 Analyzed: 12/07/2017 17:17

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
2,3-Dinitrotoluene	ND	200	ug/kg wet							
2,4,6-Trinitrotoluene	ND	200	ug/kg wet							
2,4-Dinitrotoluene	ND	200	ug/kg wet							
2,5-Dinitrotoluene	ND	200	ug/kg wet							
2,6-Dinitrotoluene	ND	200	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg wet							
2-Nitrotoluene	ND	200	ug/kg wet							
3,4-Dinitrotoluene	ND	200	ug/kg wet							
3,5-Dinitroaniline	ND	200	ug/kg wet							
3,5-Dinitrotoluene	ND	200	ug/kg wet							
3-Nitrotoluene	ND	200	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg wet							
4-Nitrotoluene	ND	200	ug/kg wet							
Nitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg wet							
Surrogate: 2,2'-Dinitrobiphenyl	1330		ug/kg wet	2000		66.7	48.3-152			
Surrogate: Nitrobenzene-d5	1940		ug/kg wet	2000		97.2	72-126			

**LCS (A712013-BS1)**

Prepared: 12/07/2017 Analyzed: 12/07/2017 20:17

1,2-Dimethyl-3,4-Dinitrobenzene	1920	200	ug/kg wet	2038		94.1	81.4-119			
1,2-Dimethyl-3,5-Dinitrobenzene	1910	200	ug/kg wet	2000		95.6	80.1-121			
1,2-Dimethyl-3,6-Dinitrobenzene	1950	200	ug/kg wet	2000		97.5	81.8-116			
1,2-Dimethyl-4,5-Dinitrobenzene	2010	200	ug/kg wet	2002		100	79.2-122			
1,3,5-Trinitrobenzene	1860	200	ug/kg wet	2000		93.2	60.4-167			
1,3-Dimethyl-2,4-Dinitrobenzene	1830	200	ug/kg wet	2000		91.5	79.6-118			
1,3-Dimethyl-2,5-Dinitrobenzene	1980	200	ug/kg wet	2000		98.8	82.7-116			
1,3-Dinitrobenzene	1890	200	ug/kg wet	2000		94.4	69.8-129			
1,4-Dimethyl-2,3-Dinitrobenzene	1780	200	ug/kg wet	2082		85.4	68.8-126			
1,4-Dimethyl-2,5-Dinitrobenzene	1960	200	ug/kg wet	2096		93.6	81.7-118			
1,4-Dimethyl-2,6-Dinitrobenzene	1900	200	ug/kg wet	2065		91.8	81.5-117			
1,5-Dimethyl-2,3-Dinitrobenzene	1880	200	ug/kg wet	2000		93.8	80.6-119			



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Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712013 - EPA 3570**

**LCS (A712013-BS1)**

Prepared: 12/07/2017 Analyzed: 12/07/2017 20:17

1,5-Dimethyl-2,4-Dinitrobenzene	1900	200	ug/kg wet	2058		92.2	79.4-120			
2,4,6-Trinitrotoluene	2110	200	ug/kg wet	2000		106	74.1-139			
2,4-Dinitrotoluene	1800	200	ug/kg wet	2000		89.8	67.8-133			
2,6-Dinitrotoluene	1950	200	ug/kg wet	2000		97.7	79.5-120			
2-Amino-4,6-dinitrotoluene	1800	200	ug/kg wet	2000		90.0	60.5-138			
2-Nitrotoluene	2080	200	ug/kg wet	2000		104	77.7-117			
3,4-Dinitrotoluene	1870	200	ug/kg wet	2000		93.7	81.2-120			
3,5-Dinitroaniline	1880	200	ug/kg wet	2000		93.9	53.2-145			
3-Nitrotoluene	2080	200	ug/kg wet	2000		104	82.5-114			
4-Amino-2,6-dinitrotoluene	1710	200	ug/kg wet	2000		85.4	64.1-133			
4-Nitrotoluene	2020	200	ug/kg wet	2000		101	83.6-112			
Nitrobenzene	2020	200	ug/kg wet	2000		101	83.4-112			
Surrogate: 2,2'-Dinitrobiphenyl	1750		ug/kg wet	2000		87.6	48.3-152			
Surrogate: Nitrobenzene-d5	1940		ug/kg wet	2000		96.9	72-126			

**Matrix Spike (A712013-MS1)**

Source: A174119-41

Prepared: 12/07/2017 Analyzed: 12/07/2017 20:43

1,2-Dimethyl-3,4-Dinitrobenzene	12400	2000	ug/kg dry	2087	10500	92.1	64.4-124			
1,2-Dimethyl-3,5-Dinitrobenzene	5220	2000	ug/kg dry	2048	3540	81.9	67.8-131			
1,2-Dimethyl-3,6-Dinitrobenzene	4460	2000	ug/kg dry	2048	2800	81.4	72.5-119			
1,2-Dimethyl-4,5-Dinitrobenzene	4810	2000	ug/kg dry	2050	3250	76.3	62.8-131			
1,3,5-Trinitrobenzene	3870	2000	ug/kg dry	2048	ND	189	39.2-186			M
1,3-Dimethyl-2,4-Dinitrobenzene	24300	2000	ug/kg dry	2048	22500	87.8	70.2-124			
1,3-Dimethyl-2,5-Dinitrobenzene	2960	2000	ug/kg dry	2048	ND	144	75.8-121			M
1,3-Dinitrobenzene	3580	2000	ug/kg dry	2048	2620	46.8	58.7-132			M
1,4-Dimethyl-2,3-Dinitrobenzene	24600	2000	ug/kg dry	2132	23300	59.1	65.6-120			M1
1,4-Dimethyl-2,5-Dinitrobenzene	3440	2000	ug/kg dry	2147	ND	160	69.3-127			M
1,4-Dimethyl-2,6-Dinitrobenzene	10200	2000	ug/kg dry	2115	8360	86.2	72.8-122			
1,5-Dimethyl-2,3-Dinitrobenzene	3920	2000	ug/kg dry	2048	ND	191	63.4-128			M
1,5-Dimethyl-2,4-Dinitrobenzene	44300	2000	ug/kg dry	2108	43000	63.5	63.6-130			M1
2,4,6-Trinitrotoluene	3990	2000	ug/kg dry	2048	ND	195	26.1-194			M
2,4-Dinitrotoluene	3990	2000	ug/kg dry	2048	2810	57.5	66.7-135			M
2,6-Dinitrotoluene	3490	2000	ug/kg dry	2048	2250	60.5	66.1-127			M
2-Amino-4,6-dinitrotoluene	3850	2000	ug/kg dry	2048	3070	38.4	39-140			M
2-Nitrotoluene	2610	2000	ug/kg dry	2048	ND	127	72-121			M
3,4-Dinitrotoluene	3690	2000	ug/kg dry	2048	ND	180	64.3-124			M
3,5-Dinitroaniline	3880	2000	ug/kg dry	2048	ND	189	33.5-149			M
3-Nitrotoluene	2590	2000	ug/kg dry	2048	ND	126	78.3-118			M
4-Amino-2,6-dinitrotoluene	4210	2000	ug/kg dry	2048	3280	45.1	26.4-153			
4-Nitrotoluene	2570	2000	ug/kg dry	2048	ND	126	78.6-116			M
Nitrobenzene	2570	2000	ug/kg dry	2048	ND	126	75.8-113			M
Surrogate: 2,2'-Dinitrobiphenyl	3640		ug/kg dry	2048		178	48.3-152			D, S
Surrogate: Nitrobenzene-d5	2440		ug/kg dry	2048		119	72-126			





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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712013 - EPA 3570**

**Matrix Spike Dup (A712013-MSD1)**

Source: A174119-41

Prepared: 12/07/2017 Analyzed: 12/07/2017 21:09

1,2-Dimethyl-3,4-Dinitrobenzene	12800	2000	ug/kg dry	2087	10500	112	64.4-124	19.4	20	
1,2-Dimethyl-3,5-Dinitrobenzene	5330	2000	ug/kg dry	2048	3540	87.0	67.8-131	6.10	20	
1,2-Dimethyl-3,6-Dinitrobenzene	4690	2000	ug/kg dry	2048	2800	92.4	72.5-119	12.6	20	
1,2-Dimethyl-4,5-Dinitrobenzene	4970	2000	ug/kg dry	2050	3250	83.9	62.8-131	9.40	20	
1,3,5-Trinitrobenzene	3870	2000	ug/kg dry	2048	ND	189	39.2-186	0.0953	20	M
1,3-Dimethyl-2,4-Dinitrobenzene	25600	2000	ug/kg dry	2048	22500	152	70.2-124	53.7	20	M1
1,3-Dimethyl-2,5-Dinitrobenzene	3040	2000	ug/kg dry	2048	ND	148	75.8-121	2.57	20	M
1,3-Dinitrobenzene	3650	2000	ug/kg dry	2048	2620	50.5	58.7-132	7.71	20	M
1,4-Dimethyl-2,3-Dinitrobenzene	25900	2000	ug/kg dry	2132	23300	122	65.6-120	69.3	20	M1
1,4-Dimethyl-2,5-Dinitrobenzene	3540	2000	ug/kg dry	2147	ND	165	69.3-127	2.99	20	M
1,4-Dimethyl-2,6-Dinitrobenzene	10500	2000	ug/kg dry	2115	8360	101	72.8-122	15.5	20	
1,5-Dimethyl-2,3-Dinitrobenzene	4010	2000	ug/kg dry	2048	ND	196	63.4-128	2.41	20	M
1,5-Dimethyl-2,4-Dinitrobenzene	46200	2000	ug/kg dry	2108	43000	152	63.6-130	82.0	20	M1
2,4,6-Trinitrotoluene	4060	2000	ug/kg dry	2048	ND	198	26.1-194	1.80	20	M
2,4-Dinitrotoluene	4100	2000	ug/kg dry	2048	2810	62.9	66.7-135	8.90	20	M
2,6-Dinitrotoluene	3560	2000	ug/kg dry	2048	2250	63.7	66.1-127	5.12	20	M
2-Amino-4,6-dinitrotoluene	3920	2000	ug/kg dry	2048	3070	41.9	39-140	8.79	20	
2-Nitrotoluene	2650	2000	ug/kg dry	2048	ND	129	72-121	1.44	20	M
3,4-Dinitrotoluene	3790	2000	ug/kg dry	2048	ND	185	64.3-124	2.51	20	M
3,5-Dinitroaniline	3940	2000	ug/kg dry	2048	ND	192	33.5-149	1.59	20	M
3-Nitrotoluene	2680	2000	ug/kg dry	2048	ND	131	78.3-118	3.55	20	M
4-Amino-2,6-dinitrotoluene	4310	2000	ug/kg dry	2048	3280	50.1	26.4-153	10.4	20	
4-Nitrotoluene	2630	2000	ug/kg dry	2048	ND	128	78.6-116	2.23	20	M
Nitrobenzene	2590	2000	ug/kg dry	2048	ND	126	75.8-113	0.556	20	M
Surrogate: 2,2'-Dinitrobiphenyl	3720		ug/kg dry	2048		182	48.3-152			D, S
Surrogate: Nitrobenzene-d5	2420		ug/kg dry	2048		118	72-126			



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60506979  
 Project Manager: Cary Pooler

**Classical Chemistry Parameters - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A711085 - % Solids**

<b>Duplicate (A711085-DUP1)</b>		<b>Source: A174119-16</b>		Prepared: 11/28/2017 Analyzed: 11/30/2017 16:23						
% Moisture	19.5	0.00	% by Weight		20.7			6.17	20	

**Batch A711094 - % Solids**

<b>Duplicate (A711094-DUP1)</b>		<b>Source: A174119-36</b>		Prepared: 11/29/2017 Analyzed: 11/30/2017 16:22						
% Moisture	20.6	0.00	% by Weight		20.5			0.222	20	

**Batch A711095 - % Solids**

<b>Duplicate (A711095-DUP1)</b>		<b>Source: A174119-20</b>		Prepared: 11/30/2017 Analyzed: 12/07/2017 11:28						
% Solids	98.3	0.00	% by Weight		98.3			0.0192	20	

**Batch A711096 - % Solids**

<b>Duplicate (A711096-DUP1)</b>		<b>Source: A174119-40</b>		Prepared: 11/30/2017 Analyzed: 12/08/2017 13:21						
% Solids	98.3	0.00	% by Weight		98.2			0.0515	20	

**Batch A711100 - % Solids**

<b>Duplicate (A711100-DUP1)</b>		<b>Source: A174119-45</b>		Prepared: 11/30/2017 Analyzed: 12/01/2017 09:50						
% Moisture	22.5	0.00	% by Weight		21.1			6.27	20	

**Batch A712014 - % Solids**

<b>Duplicate (A712014-DUP1)</b>		<b>Source: A174119-41</b>		Prepared: 12/07/2017 Analyzed: 12/08/2017 13:31						
% Solids	97.6	0.00	% by Weight		97.6			0.0242	20	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60506979  
Project Manager: Cary Pooler

### Notes and Definitions

- X Precision for the matrix spike duplicate, laboratory control sample duplicate or lab duplicate was outside of control limits.
- S Surrogate recovery was outside of laboratory control limits due to an apparent matrix effect.
- M1 Spike recoveries were not evaluated because of elevated levels of the spiked analyte in the parent sample.
- M The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory control limits.
- DO Diluted out.
- D Data reported from a dilution
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. If the word 'dry' does not appear after the units, results are reported on an as-is basis.
- RPD Relative Percent Difference



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# CHAIN OF CUSTODY

No. 7195

Page:                      of:

Project Number: <b>7911</b> PO Number:				Lab Work Order #: <b>A174119</b>				Report To:																																																																																																																																																																																																																																																																							
Project Name: <b>Phase II Bio Pilot</b>				Preservation Codes				Company:																																																																																																																																																																																																																																																																							
Project Location (City, State): <b>Barkdale, WI</b>				Analyses Requested				Address 1:																																																																																																																																																																																																																																																																							
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush				Matrix Total # of Containers <b>N/A</b>				Address 2:																																																																																																																																																																																																																																																																							
If Rush, Report Due Date:								E-mail Address:																																																																																																																																																																																																																																																																							
Sampled By (Print): <b>Nick Sharkey</b>				<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sample Description</th> <th colspan="2">Collection</th> <th rowspan="2">Matrix</th> <th rowspan="2">Total # of Containers</th> <th rowspan="2">N/A</th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2">Comments</th> <th>Lab ID</th> <th>Lab Receipt Time</th> </tr> <tr> <th>Date</th> <th>Time</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>BPSB-170712-C28-Berm</td> <td>7/12/17</td> <td>1635</td> <td>S</td> <td>1</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>01</td> <td></td> </tr> <tr> <td>BPSB-170712-C28-Bottom</td> <td>↓</td> <td>1640</td> <td>S</td> <td>1</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>02</td> <td></td> </tr> <tr> <td>BPSB-170712-C28-Basin</td> <td>↓</td> <td>1645</td> <td>S</td> <td>1</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>03</td> <td></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				Sample Description	Collection		Matrix	Total # of Containers	N/A													Comments	Lab ID	Lab Receipt Time	Date	Time			BPSB-170712-C28-Berm	7/12/17	1635	S	1	X														01		BPSB-170712-C28-Bottom	↓	1640	S	1	X														02		BPSB-170712-C28-Basin	↓	1645	S	1	X														03																																																																																																																																																																																	
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<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other				<b>Other Comments:</b> placed in freezer directly after sampling (B)				Relinquished By: <i>[Signature]</i> Date: <b>7/15/17</b> Time: <b>1030</b>		Received By: <i>[Signature]</i> Date: <b>10/5/17</b> Time: <b>1030</b>																																																																																																																																																																																																																																																																					
Relinquished By: <i>[Signature]</i> Date: <b>10/5/17</b> Time: <b>1700</b>				Relinquished By: <i>[Signature]</i> Date: <b>10/5/17</b> Time: <b>1700</b>				Received By: <i>[Signature]</i> Date: <b>10-05-17</b> Time: <b>1700</b>		Received By: <i>[Signature]</i> Date: <b>10-05-17</b> Time: <b>1700</b>																																																																																																																																																																																																																																																																					
Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact				Shipped Via: <b>Walk in</b>		Receipt Temp: <b>on ice</b>		Thermometer #/ Exp. Date:		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N																																																																																																																																																																																																																																																																					



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# CHAIN OF CUSTODY

No. 7176

Page: of:

Project Number: <b>7911</b> PO Number:					Lab Work Order #: <b>A174119</b>					Report To:																																																																																																																											
Project Name: <b>Phase II Bio Pilot</b>					Preservation Codes					Company:																																																																																																																											
Project Location (City, State): <b>Barkside, WI</b>					Analyses Requested					Address 1:																																																																																																																											
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush					<table border="1"> <tr> <th>Matrix</th> <th>Total # of Containers</th> <th>NNOC's</th> <th>pH</th> <th>% moisture</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Matrix	Total # of Containers	NNOC's	pH	% moisture						Address 2:																																																																																																																	
Matrix	Total # of Containers	NNOC's	pH	% moisture																																																																																																																																	
If Rush, Report Due Date:					<table border="1"> <tr> <th>Sample Description</th> <th>Collection Date</th> <th>Collection Time</th> <th>Matrix</th> <th>Total # of Containers</th> <th>NNOC's</th> <th>pH</th> <th>% moisture</th> <th>Comments</th> <th>Lab ID</th> <th>Lab Receipt Time</th> </tr> <tr> <td>BPSB-171002-C05-A3</td> <td>10/2/17</td> <td>1556</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>04</td> <td></td> </tr> <tr> <td>BPSB-171002-C05-A6</td> <td></td> <td>1554</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>05</td> <td></td> </tr> <tr> <td>BPSB-171002-C05-B2</td> <td></td> <td>1602</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>06</td> <td></td> </tr> <tr> <td>BPSB-171002-C05-B4</td> <td></td> <td>1558</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>07</td> <td></td> </tr> <tr> <td>BPSB-171002-C05-comp</td> <td></td> <td>1601</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>08</td> <td></td> </tr> <tr> <td>BPSB-171002-C06-comp</td> <td></td> <td>1535</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>—</td> <td></td> </tr> <tr> <td>BPSB-171002-C06-A2</td> <td></td> <td>1525</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>—</td> <td></td> </tr> <tr> <td>BPSB-171002-C06-A3</td> <td></td> <td>1527</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>—</td> <td></td> </tr> <tr> <td>BPSB-171002-C06-A5</td> <td></td> <td>1529</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>—</td> <td></td> </tr> <tr> <td>BPSB-171002-C06-A6</td> <td></td> <td>1531</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>—</td> <td></td> </tr> </table>					Sample Description	Collection Date	Collection Time	Matrix	Total # of Containers	NNOC's	pH	% moisture	Comments	Lab ID	Lab Receipt Time	BPSB-171002-C05-A3	10/2/17	1556	S	1	X	X	X		04		BPSB-171002-C05-A6		1554	S	1	X	X	X		05		BPSB-171002-C05-B2		1602	S	1	X	X	X		06		BPSB-171002-C05-B4		1558	S	1	X	X	X		07		BPSB-171002-C05-comp		1601	S	1	X	X	X		08		BPSB-171002-C06-comp		1535	S	1	X	X	X		—		BPSB-171002-C06-A2		1525	S	1	X	X	X		—		BPSB-171002-C06-A3		1527	S	1	X	X	X		—		BPSB-171002-C06-A5		1529	S	1	X	X	X		—		BPSB-171002-C06-A6		1531	S	1	X	X	X		—		E-mail Address:		
Sample Description	Collection Date	Collection Time	Matrix	Total # of Containers						NNOC's	pH	% moisture	Comments	Lab ID	Lab Receipt Time																																																																																																																						
BPSB-171002-C05-A3	10/2/17	1556	S	1	X	X	X		04																																																																																																																												
BPSB-171002-C05-A6		1554	S	1	X	X	X		05																																																																																																																												
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BPSB-171002-C05-B4		1558	S	1	X	X	X		07																																																																																																																												
BPSB-171002-C05-comp		1601	S	1	X	X	X		08																																																																																																																												
BPSB-171002-C06-comp		1535	S	1	X	X	X		—																																																																																																																												
BPSB-171002-C06-A2		1525	S	1	X	X	X		—																																																																																																																												
BPSB-171002-C06-A3		1527	S	1	X	X	X		—																																																																																																																												
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BPSB-171002-C06-A6		1531	S	1	X	X	X		—																																																																																																																												
Sampled By (Print): <b>Nick Sharkey &amp; Dan Barton</b>					<table border="1"> <tr> <td colspan="3">Invoice To:</td> </tr> <tr> <td colspan="3">Company:</td> </tr> <tr> <td colspan="3">Address 1:</td> </tr> <tr> <td colspan="3">Address 2:</td> </tr> </table>					Invoice To:			Company:			Address 1:			Address 2:			Address 1:																																																																																																															
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Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact					Shipped Via: <b>walkin</b>					Receipt Temp: <b>on ice</b>																																																																																																																											
					Thermometer #/ Exp. Date:					Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N																																																																																																																											



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# CHAIN OF CUSTODY

No. 7191

Page: of:

Project Number: <u>4709</u> PO Number:					Lab Work Order #: <u>A174119</u>					Report To:																																														
Project Name: <u>PHASE II BIOPLOT</u>					Preservation Codes					Company: <u>ACCOM</u>																																														
Project Location (City, State): <u>BARKSDALE, WI</u>					Analyses Requested					Address 1:																																														
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">Matrix</td> <td style="width:5%;">Total # of Containers</td> <td style="width:5%;">NNOCs</td> <td style="width:5%;">PH</td> <td style="width:5%;">% MOISTURE</td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> </tr> <tr> <td></td> <td></td> <td>*</td> <td><del>PH</del></td> <td>*</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					Matrix	Total # of Containers	NNOCs	PH	% MOISTURE											*	<del>PH</del>	*									Address 2:																				
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		*	<del>PH</del>	*																																																				
If Rush, Report Due Date:										<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">Sample Description</td> <td style="width:5%;">Collection Date</td> <td style="width:5%;">Collection Time</td> <td style="width:5%;">Matrix</td> <td style="width:5%;">Total # of Containers</td> <td style="width:5%;">NNOCs</td> <td style="width:5%;">PH</td> <td style="width:5%;">% MOISTURE</td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;">Comments</td> <td style="width:5%;">Lab ID</td> <td style="width:5%;">Lab Receipt Time</td> </tr> <tr> <td><u>BPSB-171002-C18-COMP</u></td> <td><u>10/2/17</u></td> <td><u>13:45</u></td> <td><u>S</u></td> <td><u>1</u></td> <td><u>*</u></td> <td><u><del>PH</del></u></td> <td><u>*</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u>09</u></td> <td></td> </tr> </table>					Sample Description	Collection Date	Collection Time	Matrix	Total # of Containers	NNOCs	PH	% MOISTURE											Comments	Lab ID	Lab Receipt Time	<u>BPSB-171002-C18-COMP</u>	<u>10/2/17</u>	<u>13:45</u>	<u>S</u>	<u>1</u>	<u>*</u>	<u><del>PH</del></u>	<u>*</u>													
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Sampled By (Print): <u>NICK SHIRKEY + DAN BARTON</u>					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">Date</td> <td style="width:5%;">Time</td> <td style="width:5%;">Received By:</td> <td style="width:5%;">Date:</td> <td style="width:5%;">Time:</td> <td style="width:5%;">Received By:</td> <td style="width:5%;">Date:</td> <td style="width:5%;">Time:</td> </tr> <tr> <td></td> <td></td> <td><u>[Signature]</u></td> <td><u>10/5/17</u></td> <td><u>1030</u></td> <td><u>[Signature]</u></td> <td><u>10/5/17</u></td> <td><u>1030</u></td> </tr> </table>					Date	Time	Received By:	Date:	Time:	Received By:	Date:	Time:			<u>[Signature]</u>	<u>10/5/17</u>	<u>1030</u>	<u>[Signature]</u>	<u>10/5/17</u>	<u>1030</u>	Invoice To:																														
Date	Time	Received By:	Date:	Time:						Received By:	Date:	Time:																																												
		<u>[Signature]</u>	<u>10/5/17</u>	<u>1030</u>	<u>[Signature]</u>	<u>10/5/17</u>	<u>1030</u>																																																	
<p><b>Preservation Codes</b>          A=None B=HCL C=H<sub>2</sub>SO<sub>4</sub>          D=HNO<sub>3</sub> E=EnCore F=Methanol          G=NaOH O=Other (Indicate)</p> <p><b>Matrix Codes</b>          A=Air S=Soil W=Water O=Other</p>					<p><b>Other Comments:</b>  <u>placed in site freezer following sampling</u></p>					Company:																																														
										Address 1:																																														
<p><b>Custody Seal:</b>  <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact</p>					<p><b>Shipped Via:</b>  <u>Walkin</u></p>					Address 2:																																														
										Receipt Temp:																																														
<p><b>Temp Blank:</b>  <input type="checkbox"/> Y <input type="checkbox"/> N</p>					<p><b>Thermometer #/ Exp. Date:</b></p>					Comments																																														
										Lab ID																																														
<p><b>Temp Blank:</b>  <input type="checkbox"/> Y <input type="checkbox"/> N</p>					<p><b>Thermometer #/ Exp. Date:</b></p>					Lab Receipt Time																																														
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# CHAIN OF CUSTODY

No. 7180

Page: of:

Project Number: <b>7911</b>		PO Number:		Lab Work Order #: <b>A174119</b>				Report To:									
Project Name: <b>Phase II BioPilot</b>		Project Location (City, State): <b>Barkesdale, WI</b>		Preservation Codes				Company: <b>AECOM</b>									
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		If Rush, Report Due Date:		Analyses Requested				Address 1:									
Sampled By (Print): <b>Mike Shortay &amp; Dan Barton</b>								Address 2:									
								E-mail Address:									
								Invoice To:									
								Company:									
								Address 1:									
								Address 2:									
Sample Description	Collection		Matrix	Total # of Containers	NNOC	PH	% Moist				Comments	Lab ID	Lab Receipt Time				
	Date	Time															
BPSB-171002 - C-19 CoM	10/24/17	1125	S	1	X	X	X					10					
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other		<b>Other Comments:</b> placed in site freezer following sampling (NS)		Relinquished By: <i>[Signature]</i> Date: 10/5/17 Time: 1030		Relinquished By: <i>[Signature]</i> Date: 10/5/17 Time: 1700		Received By: <i>[Signature]</i> Date: 10/5/17 Time: 1030		Received By: <i>[Signature]</i> Date: 10-05-17 Time: 1700		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Shipped Via: <b>Wakin</b> Receipt Temp: <b>on ice</b>		Thermometer #/ Exp. Date: Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N	



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# CHAIN OF CUSTODY

No. 7178

Page: of:

Project Number: <b>7911</b>		PO Number:		Lab Work Order #: <b>A174119</b>				Report To:																					
Project Name: <b>Phase II BioPilot</b>		Preservation Codes				Company: <b>AECOM</b>																							
Project Location (City, State): <b>Barksdale, WI</b>		Analyses Requested				Address 1:																							
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> </tr> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Matrix</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Total # of Containers</td> <td style="text-align: center;">NNOX</td> <td style="text-align: center;">PH</td> <td style="text-align: center;">% Moist</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>														Matrix	Total # of Containers	NNOX	PH	% Moist						Address 2:			
Matrix	Total # of Containers	NNOX	PH	% Moist																									
If Rush, Report Due Date:						E-mail Address:																							
Sampled By (Print): <b>Nick Shurkey &amp; Dan Barton</b>						Invoice To:																							
						Company:																							
						Address 1:																							
						Address 2:																							
Sample Description		Collection		Matrix	Total # of Containers	NNOX	PH	% Moist	Comments	Lab ID	Lab Receipt Time																		
		Date	Time																										
BPSB-171002 -- COMP. <sup>DB</sup> C-20		10/02/17	1118	S	1	X	X	X		11																			
BPSB-171002 - C-20 A-1			1114	S	1	X	X	X		12																			
BPSB-171002 - C-20 B-4			1117	S	1	X	X	X		13																			
BPSB-171002 - C-20 A-3			1116	S	1	X	X	X		14																			
BPSB-171002 - C-20 B-2			1115	S	1	X	X	X		15																			
BPSB-171002 - C-16 COMP			1020	S	1	X	X	X		—																			
BPSB-171002 - C-16 B-1			1016	S	1	X	X	X		—																			
BPSB-171002 - C-16 B-2			1018	S	1	X	X	X		—																			
BPSB-171002 - C-16 A-4			1017	S	1	X	X	X		—																			
BPSB-171002 - C-07 COMP			1515	S	1	X	X	X		16																			
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other		<b>Other Comments:</b> <i>placed in site freezer following sampling (DB)</i>		Relinquished By: <i>[Signature]</i> Date: 10/5/17		Time: 1030		Received By: <i>[Signature]</i> Date: 10/5/17		Time: 1030																			
				Relinquished By: <i>[Signature]</i> Date: 10/5/17		Time: 1700		Received By: <i>[Signature]</i> Date: 10-05-17		Time: 1700																			
		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Shipped Via: <i>Walk in</i>		Receipt Temp: <i>on ice</i>		Thermometer #/ Exp. Date:		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N																			





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# CHAIN OF CUSTODY

No. 7186

Page: of:

Project Number: <b>4709</b>		PO Number:		Lab Work Order #: <b>A174119</b>			Report To:				
Project Name: <b>PHASE II BIOPILLOT</b>		Preservation Codes			Company: <b>AECOM</b>			Address 1:			
Project Location (City, State): <b>BARRISDALE, WI</b>		Analyses Requested			Address 2:			E-mail Address:			
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		Matrix	Total # of Containers	NNOCS	PH	% MOISTURE	Invoice To:				
If Rush, Report Due Date:							Company:				
Sampled By (Print): <b>NICK SHORNEY + DAN BARTON</b>						Address 1:					
						Address 2:					
Sample Description	Collection Date	Collection Time					Comments	Lab ID	Lab Receipt Time		
BPSB-171004-CO1-A2	10/4/17	1607	S	1	x	x		17			
BPSB-171004-CO1-A4	10/4/17	1609		1	x	x		18			
BPSB-171004-CO1-B3	10/4/17	1605		1	x	x		19			
BPSB-171004-CO1-B6	10/4/17	1611		1	x	x		20			
BPSB-171004-CO1-COMP	10/4/17	1613		1	x	x		21			
BPSB-171004-CO2-A3	10/4/17	1615		1	x	x		22			
BPSB-171004-CO2-A4	10/4/17	1617		1	x	x		23			
BPSB-171004-CO2-A5	10/4/17	1619		1	x	x		24			
BPSB-171004-CO2-B2	10/4/17	1621		1	x	x		25			
BPSB-171004-CO2-COMP	10/4/17	1623	W	1	x	x		26			
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate)		<b>Other Comments:</b> placed in site freezer for further sampling (NS)		Relinquished By: <i>[Signature]</i>		Date: 10/5/17	Time: 1080	Received By: <i>[Signature]</i>		Date: 10/5/17	Time: 1030
<b>Matrix Codes</b> A=Air S=Soil W=Water O=Other				Relinquished By: <i>[Signature]</i>		Date: 10/5/17	Time: 1700	Received By: <i>[Signature]</i>		Date: 10-05-17	Time: 1700
		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Shipped Via: <b>Walkin</b>		Receipt Temp: <b>on ice</b>		Thermometer #/ Exp. Date:		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N	



**Pace Analytical - ECCS Division**  
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 Madison, WI 53718  
 608-221-8700 (phone)  
 608-221-4889 (fax)

# CHAIN OF CUSTODY

No. 7190

Page: of:

Project Number: <b>4709</b>				PO Number:				Lab Work Order #: <b>A174119</b>				Report To:			
Project Name: <b>PHASE II Biopilot</b>				Project Location (City, State): <b>BARKSDALE, WI</b>				Preservation Codes				Company: <b>AECOM</b>			
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush				If Rush, Report Due Date:				Analyses Requested				Address 1:			
Sampled By (Print): <b>NICK SHIRKEY + DAN BARTON</b>				Matrix				Total # of Containers				Address 2:			
Sample Description				Collection Date / Time		Matrix	Total # of Containers	NNOCS	PH	% MOISTURE			Comments	Lab ID	Lab Receipt Time
BPSB-171004-CO3-A4				10/4/17 1616		S	1	x	x	x	%		27		
BPSB-171004-CO3-A5				1618			1	x	x	x	%		28		
BPSB-171004-CO3-A6				1620			1	x	x	x	%		29		
BPSB-171004-CO3-B2				1624			1	x	x	x	%		30		
BPSB-171004-CO3-COMP				1622			1	x	x	x	%		31		
BPSB-171004-CO4-A2				1612			1	x	x	x	%		32		
BPSB-171004-CO4-A4				1614			1	x	x	x	%		33		
BPSB-171004-CO4-B1				1606			1	x	x	x	%		34		
BPSB-171004-CO4-B3				1608			1	x	x	x	%		35		
BPSB-171004-CO4-COMP				1610			1	x	x	x	%		36		
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate)		<b>Other Comments:</b> <i>placed in site free to following sampling (wb)</i>		Relinquished By: <i>[Signature]</i> Date: <b>10/15/17</b> Time: <b>1030</b>		Relinquished By: <i>[Signature]</i> Date: <b>10/15/17</b> Time: <b>1700</b>		Received By: <i>[Signature]</i> Date: <b>10/15/17</b> Time: <b>1030</b>		Received By: <i>[Signature]</i> Date: <b>10/15/17</b> Time: <b>1700</b>		Receipt Temp: <b>on ice</b>		Thermometer #/ Exp. Date:	
<b>Matrix Codes</b> A=Air S=Soil W=Water O=Other		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Shipped Via: <b>Walk in</b>		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N									



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# CHAIN OF CUSTODY

No. 7189

Page:            of:

Project Number: <b>4709</b>		PO Number:		Lab Work Order #: <b>A174119</b>		Report To:					
Project Name: <b>Phase II Bio Pilot</b>		Preservation Codes		Analyses Requested		Company: <b>AECOM</b>					
Project Location (City, State): <b>Barksdale, WI</b>		Turn Around (check one): <input type="checkbox"/> Normal <input type="checkbox"/> Rush		E-mail Address:		Address 1:					
If Rush, Report Due Date:		Sampled By (Print): <b>Dan Barton &amp; Nick Sherkey</b>		Invoice To:		Company:					
Sample Description		Collection		Matrix	Total # of Containers	NNOC	% Moist	PH	Comments	Lab ID	Lab Receipt Time
		Date	Time								
BPSB-171004-C-17 A-1		10/4/17	17:10	S	1	X	X	X		37	
BPSB-171004-C-17 A-2		1	17:12	S	1	X	X	X		38	
BPSB-171004-C-17 A-3			17:14	S	1	X	X	X		39	
BPSB-171004-C-17 A-4			17:16	S	1	X	X	X		40	
BPSB-171004-C-17 B-1			17:11	S	1	X	X	X		41	
BPSB-171004-C-17 B-2			17:13	S	1	X	X	X		42	
BPSB-171004-C-17 B-3			17:15	S	1	X	X	X		43	
BPSB-171004-C-17 B-4			17:17	S	1	X	X	X		44	
BPSB-171004-C-17 COMP			17:18	S	1	X	X	X		45	
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other		<b>Other Comments:</b> placed in site Squeezer following sampling (US)		Relinquished By: <i>[Signature]</i> Date: 10/4/17 Time: 1030 Received By: <i>[Signature]</i> Date: 10/5/17 Time: 1030		Relinquished By: <i>[Signature]</i> Date: 10/5/17 Time: 1700 Received By: <i>[Signature]</i> Date: 10-05-17 Time: 1700		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Shipped Via: <b>Walkin</b> Receipt Temp: <b>on ice</b> Thermometer #/ Exp. Date: Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N	



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December 22, 2017

Cary Pooler  
AECOM  
500 West Jefferson St, Ste 1600  
Louisville, KY 40202

RE: DuPont Barksdale Explosives Plant - Barksdale, WI

Enclosed are the analytical results for the samples received by the laboratory on 10/05/2017.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. These results are in compliance with the 2009 NELAC Standards and the appropriate agencies listed below, unless otherwise noted in the case narrative. This analytical report should be reproduced in its entirety.

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

Sincerely,

Jessica Esser  
Project Manager

**Certification List**

Certification List			Expires
ADEQ	Arkansas Department of Environmental Quality	17-065-0	09/26/2018
DODELAP	DOD ELAP Accreditation (A2LA)	3269.01	03/31/2018
ILEPA	Illinois Secondary NELAP Accreditation	003174	04/30/2018
KDHE	Kansas Secondary NELAP Accreditation	E-10384	04/30/2018
LELAP	Louisiana Primary NELAP Accreditation	04165	06/30/2018
NCDEQ	North Carolina Dept. of Environmental Quality Accreditation	688	12/31/2018
NJDEP	New Jersey Secondary NELAP Accreditation	WI004	06/30/2018
ODEQ	Oklahoma Department of Environmental Quality Accreditation	2017-154	08/31/2018
TCEQ	Texas Secondary NELAP Accreditation	T104704504-16-7	11/30/2018
WDNR	Wisconsin Certification under NR 149	113289110	08/31/2018



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AECOM  
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 Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BPSB-170620-C12-AH	A174145-01	Soil	06/20/2017	10/05/2017
BPSB-170711-C06-COMP	A174145-02	Soil	07/11/2017	10/05/2017
BPSB-170925-C16-AH-A1	A174145-03	Soil	09/25/2017	10/05/2017
BPSB-170925-C16-AH-A2	A174145-04	Soil	09/25/2017	10/05/2017
BPSB-170925-C16-AH-A3	A174145-05	Soil	09/25/2017	10/05/2017
BPSB-170925-C16-AH-B4	A174145-06	Soil	09/25/2017	10/05/2017
BPSB-170925-C16-AH-B3	A174145-07	Soil	09/25/2017	10/05/2017
BPSB-170927-C31-A	A174145-08	Soil	09/27/2017	10/05/2017
BPSB-170927-C31-B	A174145-09	Soil	09/27/2017	10/05/2017
BPSB-171002-C06-COMP	A174145-10	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-A2	A174145-11	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-A3	A174145-12	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-A5	A174145-13	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-A6	A174145-14	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-B1	A174145-15	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-B3	A174145-16	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-B4	A174145-17	Soil	10/02/2017	10/05/2017
BPSB-171002-C06-B6	A174145-18	Soil	10/02/2017	10/05/2017
BPSB-171002-C16-COMP	A174145-19	Soil	10/02/2017	10/05/2017
BPSB-171002-C16-B1	A174145-20	Soil	10/02/2017	10/05/2017
BPSB-171002-C16-B2	A174145-21	Soil	10/02/2017	10/05/2017
BPSB-171002-C16-A4	A174145-22	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-A1	A174145-23	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-A2	A174145-24	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-A3	A174145-25	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-A4	A174145-26	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-B1	A174145-27	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-B2	A174145-28	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-B3	A174145-29	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-B4	A174145-30	Soil	10/02/2017	10/05/2017



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BPSB-171002-C21-A-COMP	A174145-31	Soil	10/02/2017	10/05/2017
BPSB-171002-C21-B-COMP	A174145-32	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-A1	A174145-33	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-A2	A174145-34	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-A3	A174145-35	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-A4	A174145-36	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-B1	A174145-37	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-B2	A174145-38	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-B3	A174145-39	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-B4	A174145-40	Soil	10/02/2017	10/05/2017
BPSB-171002-C25-COMP	A174145-41	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-A1	A174145-42	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-A2	A174145-43	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-A3	A174145-44	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-A4	A174145-45	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-B1	A174145-46	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-B2	A174145-47	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-B3	A174145-48	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-B4	A174145-49	Soil	10/02/2017	10/05/2017
BPSB-171002-C26-COMP	A174145-50	Soil	10/02/2017	10/05/2017
BPSB-171003-C24-A1	A174145-51	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-A2	A174145-52	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-A3	A174145-53	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-A4	A174145-54	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-B1	A174145-55	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-B2	A174145-56	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-B3	A174145-57	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-B4	A174145-58	Soil	10/03/2017	10/05/2017
BPSB-171003-C24-COMP	A174145-59	Soil	10/03/2017	10/05/2017
BPSB-171004-C12-A1	A174145-60	Soil	10/04/2017	10/05/2017
BPSB-171004-C12-A2	A174145-61	Soil	10/04/2017	10/05/2017



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BPSB-171004-C12-A3	A174145-62	Soil	10/04/2017	10/05/2017
BPSB-171004-C12-A4	A174145-63	Soil	10/04/2017	10/05/2017
BPSB-171004-C12-B1	A174145-64	Soil	10/04/2017	10/05/2017
BPSB-171004-C12-B2	A174145-65	Soil	10/04/2017	10/05/2017
BPSB-171004-C12-B3	A174145-66	Soil	10/04/2017	10/05/2017
BPSB-171004-C12-B4	A174145-67	Soil	10/04/2017	10/05/2017
BPSB-171004-C12-COMP	A174145-68	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-A1	A174145-69	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-A2	A174145-70	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-A3	A174145-71	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-A4	A174145-72	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-B1	A174145-73	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-B2	A174145-74	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-B3	A174145-75	Soil	10/04/2017	10/05/2017
BPSB-171004-C27-B4	A174145-76	Soil	10/04/2017	10/05/2017
BPSB-171005-C31-COMP	A174145-77	Soil	10/05/2017	10/05/2017
BPSB-170711-C06-COMP-D	A174145-78	Soil	07/11/2017	10/05/2017
BPSB-170620-C12-AH-D	A174145-79	Soil	06/20/2017	10/05/2017
BPSB-171129-C31	A174145-80	Soil	11/29/2017	11/30/2017



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**CASE NARRATIVE**

**Sample Receipt Information:**

79 samples were received on 10/05/2017 and 1 sample was received on 11/30/2017. Samples were received on ice. Samples were received in acceptable condition, with the exception of the label discrepancies noted on the chain of custody (COC). Per client instruction, the information from the sample container was used for any sample with a discrepancy.

Please see the chain of custody (COC) document at the end of this report for additional information.

**Laboratory Control Samples (LCS):**

The LCS recovery indicates a potential high bias for 1,3-dinitrobenzene for samples A174145-61 through A174145-80. Samples are qualified with an E1 where results were detected for these compounds. The LCS recovery was 139% and the acceptable limit is 129%. For the samples where results were less than the reporting limit no further action is required.

**Continuing Calibration Verification (CCV):**

CCV indicates a potential high bias for 1,3-dinitrobenzene for samples A174145-44, A174145-45, A174145-47 through A174145-50, A174145-61 through A174145-69, A174145-73, A174145-74, A174145-76 and A174145-78 through A174145-80. The upper control limit is 130% and the highest recovery was 141%. Any detections are footnoted with an HC. For the samples where results were less than the reporting limit no further action is required.





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Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170620-C12-AH**

Date Sampled

A174145-01 (Soil)

06/20/2017 10:45

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>10.2</b>		pH Units	1	12/11/2017	12/12/2017 13:04	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>270</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>260</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>250</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>350</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>29000</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 03:46	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>17000</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 03:46	EPA 8270D	D
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>890</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>820</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>300</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3200</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>580</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 14:44	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		96.7 %	48.3-152		12/13/2017	12/13/2017 14:44	EPA 8270D	
Surrogate: Nitrobenzene-d5		95.0 %	72-126		12/13/2017	12/13/2017 14:44	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712024**

<b>% Moisture</b>	<b>23.9</b>	0.00	% by Weight	1	12/11/2017	12/13/2017 09:46	SM 2540B	
<b>% Solids</b>	<b>98.5</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**BPSB-170711-C06-COMP**

**A174145-02 (Soil)**

Date Sampled  
 07/11/2017 14:40

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

pH	7.95		pH Units	1	12/11/2017	12/12/2017 13:06	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	570	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	340	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	320	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	690	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,3-Dinitrobenzene	270	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	640	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	320	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	2000	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
2,3-Dinitrotoluene	2200	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
2,4,6-Trinitrotoluene	300000	10000	ug/kg dry	50	12/13/2017	12/14/2017 14:03	EPA 8270D	M1, D
2,4-Dinitrotoluene	13000	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
2,5-Dinitrotoluene	350	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
2,6-Dinitrotoluene	5200	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	M
2-Amino-4,6-dinitrotoluene	8900	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
2-Nitrotoluene	500	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
3,4-Dinitrotoluene	3100	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
3,5-Dinitroaniline	620	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
3,5-Dinitrotoluene	330	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
4-Amino-2,6-dinitrotoluene	17000	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	X
4-Nitrotoluene	520	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	2300	200	ug/kg dry	1	12/13/2017	12/13/2017 17:20	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl

104 % 48.3-152

12/13/2017 12/13/2017 17:20

EPA 8270D

Surrogate: Nitrobenzene-d5

98.1 % 72-126

12/13/2017 12/13/2017 17:20

EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712024**

% Moisture	22.4	0.00	% by Weight	1	12/11/2017	12/13/2017 09:46	SM 2540B	
% Solids	97.9	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170925-C16-AH-A1**  
**A174145-03 (Soil)**

Date Sampled  
09/25/2017 15:35

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>8.10</b>		pH Units	1	12/11/2017	12/12/2017 13:12	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>760</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>370</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>1800</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:10	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		77.9 %	48.3-152		12/13/2017	12/13/2017 15:10	EPA 8270D	
Surrogate: Nitrobenzene-d5		95.2 %	72-126		12/13/2017	12/13/2017 15:10	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.5</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170925-C16-AH-A2**  
**A174145-04 (Soil)**

Date Sampled  
09/25/2017 15:37

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>8.04</b>		pH Units	1	12/11/2017	12/12/2017 13:14	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>22000</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 04:12	EPA 8270D	D
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>390</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>810</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 15:36	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		83.7 %	48.3-152		12/13/2017	12/13/2017 15:36	EPA 8270D	
Surrogate: Nitrobenzene-d5		97.1 %	72-126		12/13/2017	12/13/2017 15:36	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.7</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170925-C16-AH-A3**  
**A174145-05 (Soil)**

Date Sampled  
09/25/2017 15:39

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>7.92</b>		pH Units	1	12/11/2017	12/12/2017 13:16	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>420</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>290</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>360</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:02	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl	69.2 %	48.3-152	12/13/2017	12/13/2017 16:02	EPA 8270D
Surrogate: Nitrobenzene-d5	93.1 %	72-126	12/13/2017	12/13/2017 16:02	EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.2</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170925-C16-AH-B4**

**A174145-06 (Soil)**

Date Sampled  
09/25/2017 15:40

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>7.74</b>		pH Units	1	12/11/2017	12/12/2017 13:18	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>260</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:28	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		75.9 %	48.3-152		12/13/2017	12/13/2017 16:28	EPA 8270D	
Surrogate: Nitrobenzene-d5		96.4 %	72-126		12/13/2017	12/13/2017 16:28	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.2</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170925-C16-AH-B3**

**A174145-07 (Soil)**

Date Sampled  
09/25/2017 15:38

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>7.73</b>		pH Units	1	12/11/2017	12/12/2017 13:19	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>4800</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>280</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>340</b>	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/13/2017	12/13/2017 16:54	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		83.8 %	48.3-152		12/13/2017	12/13/2017 16:54	EPA 8270D	
Surrogate: Nitrobenzene-d5		96.0 %	72-126		12/13/2017	12/13/2017 16:54	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.1</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170927-C31-A**

**A174145-08 (Soil)**

Date Sampled  
**09/27/2017 15:01**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>9.47</b>		pH Units	1	12/11/2017	12/12/2017 13:21	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1400000</b>	200000	ug/kg dry	1000	12/13/2017	12/14/2017 13:11	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>22000</b>	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	D
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
2,6-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>39000</b>	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>39000</b>	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:22	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl			%	48.3-152	12/13/2017	12/13/2017 20:22	EPA 8270D	DO
Surrogate: Nitrobenzene-d5			%	72-126	12/13/2017	12/13/2017 20:22	EPA 8270D	DO

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.4</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170927-C31-B**

**A174145-09 (Soil)**

Date Sampled  
**09/27/2017 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>11.0</b>		pH Units	1	12/11/2017	12/12/2017 13:25	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>26000</b>	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	D
1,3-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>670000</b>	100000	ug/kg dry	500	12/13/2017	12/14/2017 13:37	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>21000</b>	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	D
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
2,6-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>41000</b>	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>36000</b>	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	20000	ug/kg dry	100	12/13/2017	12/13/2017 20:48	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		%	48.3-152		12/13/2017	12/13/2017 20:48	EPA 8270D	DO
Surrogate: Nitrobenzene-d5		%	72-126		12/13/2017	12/13/2017 20:48	EPA 8270D	DO

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.6</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**BPSB-171002-C06-COMP**

**A174145-10 (Soil)**

Date Sampled  
**10/02/2017 15:35**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>10.6</b>		pH Units	1	12/11/2017	12/12/2017 13:28	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>47000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>3900</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>3500</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>4900</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>15000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2400</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:14	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		152 %	48.3-152		12/13/2017	12/13/2017 21:14	EPA 8270D	D
Surrogate: Nitrobenzene-d5		96.4 %	72-126		12/13/2017	12/13/2017 21:14	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712024**

<b>% Moisture</b>	<b>21.2</b>	0.00	% by Weight	1	12/11/2017	12/13/2017 09:46	SM 2540B	
<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-A2**

**A174145-11 (Soil)**

Date Sampled  
**10/02/2017 15:25**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>12.0</b>		pH Units	1	12/11/2017	12/12/2017 15:07	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>2100</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>2700</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>2200</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>4300</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>120000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>4900</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>3000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>6400</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>2200</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
<b>3,5-Dinitroaniline</b>	<b>3300</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>20000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>3400</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 21:41	EPA 8270D	D
Surrogate: 2,2'-Dinitrobiphenyl		172 %	48.3-152		12/13/2017	12/13/2017 21:41	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		92.8 %	72-126		12/13/2017	12/13/2017 21:41	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.1</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-A3**

Date Sampled  
10/02/2017 15:27

A174145-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712025

pH	12.1		pH Units	1	12/11/2017	12/12/2017 15:10	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712030

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>110000</b>	20000	ug/kg dry	100	12/13/2017	12/15/2017 04:26	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>7600</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>3700</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>5100</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>3000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>20000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2500</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:07	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		164 %	48.3-152		12/13/2017	12/13/2017 22:07	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		101 %	72-126		12/13/2017	12/13/2017 22:07	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712031

% Solids	98.3	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-A5**

Date Sampled  
10/02/2017 15:29

A174145-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712025

pH	9.60		pH Units	1	12/11/2017	12/12/2017 15:13	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712030

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>72000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>4800</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>3700</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>5700</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>2100</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
<b>3,5-Dinitroaniline</b>	<b>3000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>17000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2200</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:33	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		165 %	48.3-152		12/13/2017	12/13/2017 22:33	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		94.3 %	72-126		12/13/2017	12/13/2017 22:33	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712031

% Solids	98.6	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-A6**

Date Sampled  
10/02/2017 15:31

A174145-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712025

pH	11.2		pH Units	1	12/11/2017	12/12/2017 15:16	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712030

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>68000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>4100</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>3300</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>4100</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>2000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	D
<b>3,5-Dinitroaniline</b>	<b>2800</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>15000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 22:59	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		156 %	48.3-152		12/13/2017	12/13/2017 22:59	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		101 %	72-126		12/13/2017	12/13/2017 22:59	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712031

% Solids	98.2	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-B1**

Date Sampled  
10/02/2017 15:26

**A174145-15 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712025

pH	8.17		pH Units	1	12/11/2017	12/12/2017 15:19	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712030

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>2000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	D
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>170000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2400</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>4000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>11000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:25	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		161 %	48.3-152		12/13/2017	12/13/2017 23:25	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		92.4 %	72-126		12/13/2017	12/13/2017 23:25	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712031

% Solids	97.9	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-B3**

**A174145-16 (Soil)**

Date Sampled  
**10/02/2017 15:28**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>11.8</b>		pH Units	1	12/11/2017	12/12/2017 15:23	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>38000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>3400</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3500</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>15000</b>	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/13/2017	12/13/2017 23:51	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		160 %	48.3-152		12/13/2017	12/13/2017 23:51	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		94.2 %	72-126		12/13/2017	12/13/2017 23:51	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.0</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-B4**

**A174145-17 (Soil)**

Date Sampled  
**10/02/2017 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>11.8</b>		pH Units	1	12/11/2017	12/12/2017 16:14	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>31000</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>3000</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3400</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>13000</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:01	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		151 %	48.3-152		12/13/2017	12/14/2017 02:01	EPA 8270D	D
Surrogate: Nitrobenzene-d5		95.2 %	72-126		12/13/2017	12/14/2017 02:01	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.0</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C06-B6**

Date Sampled  
10/02/2017 15:32

A174145-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712025

pH	8.22		pH Units	1	12/11/2017	12/12/2017 16:16	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712030

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>28000</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2200</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	D
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>5700</b>	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/13/2017	12/14/2017 02:28	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		142 %	48.3-152		12/13/2017	12/14/2017 02:28	EPA 8270D	D
Surrogate: Nitrobenzene-d5		91.6 %	72-126		12/13/2017	12/14/2017 02:28	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712031

% Solids	97.7	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C16-COMP**  
**A174145-19 (Soil)**

Date Sampled  
10/02/2017 10:20

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>7.81</b>		pH Units	1	12/11/2017	12/12/2017 16:18	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1500</b>	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>350</b>	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>990</b>	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>200</b>	200	ug/kg dry	1	12/13/2017	12/14/2017 11:04	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		75.9 %	48.3-152		12/13/2017	12/14/2017 11:04	EPA 8270D	
Surrogate: Nitrobenzene-d5		91.7 %	72-126		12/13/2017	12/14/2017 11:04	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712024**

<b>% Moisture</b>	<b>26.4</b>	0.00	% by Weight	1	12/11/2017	12/13/2017 09:46	SM 2540B	
<b>% Solids</b>	<b>98.1</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C16-B1**

**A174145-20 (Soil)**

Date Sampled  
**10/02/2017 10:16**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712025**

<b>pH</b>	<b>7.73</b>		pH Units	1	12/11/2017	12/12/2017 16:20	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712030**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>2900</b>	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>290</b>	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>350</b>	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/13/2017	12/14/2017 11:30	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		77.9 %	48.3-152		12/13/2017	12/14/2017 11:30	EPA 8270D	
Surrogate: Nitrobenzene-d5		94.0 %	72-126		12/13/2017	12/14/2017 11:30	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712031**

<b>% Solids</b>	<b>98.6</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 11:22	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**BPSB-171002-C16-B2**

**A174145-21 (Soil)**

Date Sampled  
**10/02/2017 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>7.73</b>		pH Units	1	12/12/2017	12/13/2017 11:42	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>280</b>	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:30	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		65.1 %	48.3-152		12/14/2017	12/14/2017 14:30	EPA 8270D	
Surrogate: Nitrobenzene-d5		82.1 %	72-126		12/14/2017	12/14/2017 14:30	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.2</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C16-A4**

**A174145-22 (Soil)**

Date Sampled  
**10/02/2017 10:17**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>7.83</b>		pH Units	1	12/12/2017	12/13/2017 11:44	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>2600</b>	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>350</b>	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>460</b>	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/14/2017	12/14/2017 14:56	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		88.3 %	48.3-152		12/14/2017	12/14/2017 14:56	EPA 8270D	
Surrogate: Nitrobenzene-d5		98.4 %	72-126		12/14/2017	12/14/2017 14:56	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.2</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-A1**

**A174145-23 (Soil)**

Date Sampled  
**10/02/2017 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>12.3</b>		pH Units	1	12/12/2017	12/13/2017 11:46	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>210000</b>	20000	ug/kg dry	100	12/14/2017	12/15/2017 04:52	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>4300</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>13000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 15:22	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		158 %	48.3-152		12/14/2017	12/14/2017 15:22	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		99.6 %	72-126		12/14/2017	12/14/2017 15:22	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-A2**

Date Sampled  
10/02/2017 10:54

A174145-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712028

pH	9.97		pH Units	1	12/12/2017	12/13/2017 11:48	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712040

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>2800</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	D
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>3700000</b>	410000	ug/kg dry	2000	12/14/2017	12/19/2017 22:36	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>3100</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>12000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>3200</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>27000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 17:34	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		165 %	48.3-152		12/14/2017	12/14/2017 17:34	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		93.5 %	72-126		12/14/2017	12/14/2017 17:34	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712041

% Solids	98.7	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-A3**

Date Sampled  
10/02/2017 10:56

**A174145-25 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>11.5</b>		pH Units	1	12/12/2017	12/13/2017 11:50	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>3100</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	D
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>620000</b>	20000	ug/kg dry	100	12/14/2017	12/15/2017 09:31	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2100</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>7000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>3500</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>23000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2700</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:00	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		156 %	48.3-152		12/14/2017	12/14/2017 18:00	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		95.1 %	72-126		12/14/2017	12/14/2017 18:00	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.9</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-A4**

Date Sampled  
10/02/2017 10:58

**A174145-26 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>12.2</b>		pH Units	1	12/12/2017	12/13/2017 11:52	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>3700</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	D
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>850000</b>	20000	ug/kg dry	100	12/14/2017	12/15/2017 09:57	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2200</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>7800</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>3400</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>20000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>3100</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 18:26	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		160 %	48.3-152		12/14/2017	12/14/2017 18:26	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		94.6 %	72-126		12/14/2017	12/14/2017 18:26	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-B1**

**A174145-27 (Soil)**

Date Sampled  
**10/02/2017 10:51**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>12.4</b>		pH Units	1	12/12/2017	12/13/2017 11:54	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>2700</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	D
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>110000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	D
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3500</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>3200</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>21000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>3100</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 09:55	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		151 %	48.3-152		12/14/2017	12/20/2017 09:55	EPA 8270D	D
Surrogate: Nitrobenzene-d5		92.9 %	72-126		12/14/2017	12/20/2017 09:55	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-B2**

**A174145-28 (Soil)**

Date Sampled  
**10/02/2017 10:53**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>12.3</b>		pH Units	1	12/12/2017	12/13/2017 11:56	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>150000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3300</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>2900</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>18000</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2300</b>	2000	ug/kg dry	10	12/14/2017	12/14/2017 19:18	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		152 %	48.3-152		12/14/2017	12/14/2017 19:18	EPA 8270D	D
Surrogate: Nitrobenzene-d5		93.1 %	72-126		12/14/2017	12/14/2017 19:18	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.2</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-B3**

**A174145-29 (Soil)**

Date Sampled  
**10/02/2017 10:55**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>12.3</b>		pH Units	1	12/12/2017	12/13/2017 11:57	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>270</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>340</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>13000</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>380</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>1000</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>540</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>17000</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2300</b>	200	ug/kg dry	1	12/14/2017	12/20/2017 12:06	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		109 %	48.3-152		12/14/2017	12/20/2017 12:06	EPA 8270D	
Surrogate: Nitrobenzene-d5		97.9 %	72-126		12/14/2017	12/20/2017 12:06	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.7</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-B4**

Date Sampled  
10/02/2017 10:57

A174145-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712028

pH	12.3		pH Units	1	12/12/2017	12/13/2017 12:00	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712040

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>34000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3400</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>2700</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>13000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2800</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:40	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		151 %	48.3-152		12/14/2017	12/20/2017 11:40	EPA 8270D	D
Surrogate: Nitrobenzene-d5		93.9 %	72-126		12/14/2017	12/20/2017 11:40	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712041

% Solids	98.8	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-A-COMP**

**A174145-31 (Soil)**

Date Sampled  
**10/02/2017 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>12.2</b>		pH Units	1	12/12/2017	12/13/2017 12:05	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>45000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3400</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>2800</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>14000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2900</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 10:48	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		144 %	48.3-152		12/14/2017	12/20/2017 10:48	EPA 8270D	D
Surrogate: Nitrobenzene-d5		90.4 %	72-126		12/14/2017	12/20/2017 10:48	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712029**

<b>% Moisture</b>	<b>15.5</b>	0.00	% by Weight	1	12/12/2017	12/13/2017 09:48	SM 2540B	
<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C21-B-COMP**

**A174145-32 (Soil)**

Date Sampled  
**10/02/2017 10:59**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>12.2</b>		pH Units	1	12/12/2017	12/13/2017 12:09	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>25000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>2800</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>16000</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2900</b>	2000	ug/kg dry	10	12/14/2017	12/20/2017 11:14	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		146 %	48.3-152		12/14/2017	12/20/2017 11:14	EPA 8270D	D
Surrogate: Nitrobenzene-d5		92.3 %	72-126		12/14/2017	12/20/2017 11:14	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712029**

<b>% Moisture</b>	<b>21.7</b>	0.00	% by Weight	1	12/12/2017	12/13/2017 09:48	SM 2540B	
<b>% Solids</b>	<b>98.7</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	





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Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C25-A1**

Date Sampled  
10/02/2017 11:36

A174145-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712028

pH	8.05		pH Units	1	12/12/2017	12/13/2017 12:12	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712040

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>43000</b>	20000	ug/kg dry	100	12/14/2017	12/15/2017 12:33	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>720</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>260</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>600</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>4100</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>360</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:05	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		93.4 %	48.3-152		12/14/2017	12/15/2017 00:05	EPA 8270D	
Surrogate: Nitrobenzene-d5		93.3 %	72-126		12/14/2017	12/15/2017 00:05	EPA 8270D	

**Classical Chemistry Parameters**

Preparation Batch: A712041

% Solids	98.8	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C25-A2**

**A174145-34 (Soil)**

Date Sampled  
**10/02/2017 11:38**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>8.01</b>		pH Units	1	12/12/2017	12/13/2017 12:17	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>4200</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>440</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>300</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>680</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>210</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:31	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		93.3 %	48.3-152		12/14/2017	12/15/2017 00:31	EPA 8270D	
Surrogate: Nitrobenzene-d5		98.3 %	72-126		12/14/2017	12/15/2017 00:31	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>99.1</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C25-A3**

**A174145-35 (Soil)**

Date Sampled  
**10/02/2017 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>9.24</b>		pH Units	1	12/12/2017	12/13/2017 12:19	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1700</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>360</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>200</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>300</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>800</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>210</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 00:57	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		91.3 %	48.3-152		12/14/2017	12/15/2017 00:57	EPA 8270D	
Surrogate: Nitrobenzene-d5		97.9 %	72-126		12/14/2017	12/15/2017 00:57	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.9</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C25-A4**

**A174145-36 (Soil)**

Date Sampled  
**10/02/2017 11:42**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>8.35</b>		pH Units	1	12/12/2017	12/13/2017 12:22	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1800</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>270</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>270</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>390</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:23	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		89.5 %	48.3-152		12/14/2017	12/15/2017 01:23	EPA 8270D	
Surrogate: Nitrobenzene-d5		98.0 %	72-126		12/14/2017	12/15/2017 01:23	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>99.2</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**BPSB-171002-C25-B1**

**A174145-37 (Soil)**

Date Sampled  
**10/02/2017 11:35**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>7.93</b>		pH Units	1	12/12/2017	12/13/2017 12:25	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>11000</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>520</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>440</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2200</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>250</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 01:49	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		110 %	48.3-152		12/14/2017	12/15/2017 01:49	EPA 8270D	
Surrogate: Nitrobenzene-d5		97.2 %	72-126		12/14/2017	12/15/2017 01:49	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.9</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C25-B2**

**A174145-38 (Soil)**

Date Sampled  
**10/02/2017 11:37**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>11.0</b>		pH Units	1	12/12/2017	12/13/2017 12:28	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>850</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>4100</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>210</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>310</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>910</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:15	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		102 %	48.3-152		12/14/2017	12/15/2017 02:15	EPA 8270D	
Surrogate: Nitrobenzene-d5		99.3 %	72-126		12/14/2017	12/15/2017 02:15	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C25-B3**

**A174145-39 (Soil)**

Date Sampled  
**10/02/2017 11:39**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>10.0</b>		pH Units	1	12/12/2017	12/13/2017 12:30	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>570</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>300</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>280</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>440</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 02:41	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		92.9 %	48.3-152		12/14/2017	12/15/2017 02:41	EPA 8270D	
Surrogate: Nitrobenzene-d5		99.8 %	72-126		12/14/2017	12/15/2017 02:41	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>99.1</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C25-B4**

**A174145-40 (Soil)**

Date Sampled  
**10/02/2017 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712028**

<b>pH</b>	<b>9.45</b>		pH Units	1	12/12/2017	12/13/2017 12:31	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712040**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>260</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>640</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>310</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>270</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>360</b>	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/14/2017	12/15/2017 04:00	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		83.8 %	48.3-152		12/14/2017	12/15/2017 04:00	EPA 8270D	
Surrogate: Nitrobenzene-d5		98.8 %	72-126		12/14/2017	12/15/2017 04:00	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712041**

<b>% Solids</b>	<b>99.2</b>	0.00	% by Weight	1	12/14/2017	12/15/2017 11:09	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**BPSB-171002-C25-COMP**  
**A174145-41 (Soil)**

Date Sampled  
 10/02/2017 11:46

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>9.89</b>		pH Units	1	12/13/2017	12/13/2017 17:23	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>17000</b>	2000	ug/kg dry	10	12/15/2017	12/15/2017 17:16	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>300</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>500</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>950</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:24	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		106 %	48.3-152		12/15/2017	12/15/2017 16:24	EPA 8270D	
Surrogate: Nitrobenzene-d5		91.5 %	72-126		12/15/2017	12/15/2017 16:24	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712037**

<b>% Moisture</b>	<b>21.6</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
<b>% Solids</b>	<b>99.2</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-A1**

**A174145-42 (Soil)**

Date Sampled  
**10/02/2017 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>8.28</b>		pH Units	1	12/13/2017	12/13/2017 17:25	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>28000</b>	20000	ug/kg dry	100	12/15/2017	12/16/2017 07:15	EPA 8270D	M1, D
<b>2,4-Dinitrotoluene</b>	<b>240</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>420</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2100</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>220</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 18:34	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		91.4 %	48.3-152		12/15/2017	12/15/2017 18:34	EPA 8270D	
Surrogate: Nitrobenzene-d5		92.5 %	72-126		12/15/2017	12/15/2017 18:34	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>99.4</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-A2**

**A174145-43 (Soil)**

Date Sampled  
**10/02/2017 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>12.4</b>		pH Units	1	12/13/2017	12/13/2017 17:29	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>110000</b>	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2700</b>	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 18:08	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		132 %	48.3-152		12/15/2017	12/15/2017 18:08	EPA 8270D	D
Surrogate: Nitrobenzene-d5		86.0 %	72-126		12/15/2017	12/15/2017 18:08	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>99.3</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-A3**

**A174145-44 (Soil)**

Date Sampled  
**10/02/2017 09:52**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>12.2</b>		pH Units	1	12/13/2017	12/13/2017 17:36	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1800</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
2,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>430</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:07	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl	83.2 %	48.3-152	12/15/2017	12/19/2017 05:07	EPA 8270D
Surrogate: Nitrobenzene-d5	95.6 %	72-126	12/15/2017	12/19/2017 05:07	EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>99.2</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**BPSB-171002-C26-A4**

Date Sampled  
 10/02/2017 09:54

**A174145-45 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>9.23</b>		pH Units	1	12/13/2017	12/13/2017 17:38	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>2000</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>200</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>270</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>810</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 05:34	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		81.7 %	48.3-152		12/15/2017	12/19/2017 05:34	EPA 8270D	
Surrogate: Nitrobenzene-d5		95.4 %	72-126		12/15/2017	12/19/2017 05:34	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>99.3</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-B1**

Date Sampled  
10/02/2017 09:49

**A174145-46 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>9.89</b>		pH Units	1	12/13/2017	12/13/2017 17:42	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>130000</b>	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>4400</b>	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/15/2017 22:56	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		137 %	48.3-152		12/15/2017	12/15/2017 22:56	EPA 8270D	D
Surrogate: Nitrobenzene-d5		82.3 %	72-126		12/15/2017	12/15/2017 22:56	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.9</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-B2**

**A174145-47 (Soil)**

Date Sampled  
**10/02/2017 09:51**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>10.7</b>		pH Units	1	12/13/2017	12/13/2017 17:44	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>10000</b>	2000	ug/kg dry	10	12/15/2017	12/20/2017 16:42	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>270</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>510</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3300</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:00	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		101 %	48.3-152		12/15/2017	12/19/2017 06:00	EPA 8270D	
Surrogate: Nitrobenzene-d5		95.5 %	72-126		12/15/2017	12/19/2017 06:00	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-B3**

**A174145-48 (Soil)**

Date Sampled  
**10/02/2017 09:53**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>12.5</b>		pH Units	1	12/13/2017	12/13/2017 17:46	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>270</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	HC
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>770</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>240</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>490</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2000</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 06:26	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		91.8 %	48.3-152		12/15/2017	12/19/2017 06:26	EPA 8270D	
Surrogate: Nitrobenzene-d5		97.5 %	72-126		12/15/2017	12/19/2017 06:26	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.4</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-B4**

**A174145-49 (Soil)**

Date Sampled  
**10/02/2017 09:55**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>10.0</b>		pH Units	1	12/13/2017	12/13/2017 17:48	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,3,5-Trinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,3-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
2,3-Dinitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>280</b>	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
2,4-Dinitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
2,5-Dinitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
2,6-Dinitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>280</b>	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
2-Nitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
3,4-Dinitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
3,5-Dinitroaniline	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
3,5-Dinitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
3-Nitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>680</b>	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
4-Nitrotoluene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
Nitrobenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	210	ug/kg dry	1	12/15/2017	12/19/2017 06:53	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		66.4 %	48.3-152		12/15/2017	12/19/2017 06:53	EPA 8270D	
Surrogate: Nitrobenzene-d5		89.2 %	72-126		12/15/2017	12/19/2017 06:53	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>97.2</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171002-C26-COMP**

**A174145-50 (Soil)**

Date Sampled  
**10/02/2017 09:56**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>9.79</b>		pH Units	1	12/13/2017	12/13/2017 14:34	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>8600</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>200</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
2,6-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>340</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
3,4-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>1800</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>200</b>	200	ug/kg dry	1	12/15/2017	12/19/2017 07:19	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		98.4 %	48.3-152		12/15/2017	12/19/2017 07:19	EPA 8270D	
Surrogate: Nitrobenzene-d5		96.3 %	72-126		12/15/2017	12/19/2017 07:19	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712037**

<b>% Moisture</b>	<b>21.1</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
<b>% Solids</b>	<b>99.2</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-A1**

Date Sampled  
10/03/2017 15:00

A174145-51 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

pH	12.2		pH Units	1	12/13/2017	12/13/2017 14:37	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>32000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2800</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>4400</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:07	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		134 %	48.3-152		12/15/2017	12/16/2017 01:07	EPA 8270D	D
Surrogate: Nitrobenzene-d5		83.0 %	72-126		12/15/2017	12/16/2017 01:07	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

% Solids	98.8	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-A2**

**A174145-52 (Soil)**

Date Sampled  
**10/03/2017 15:05**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>11.1</b>		pH Units	1	12/13/2017	12/13/2017 14:42	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>150000</b>	20000	ug/kg dry	100	12/15/2017	12/19/2017 17:22	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3900</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>5800</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 01:34	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		146 %	48.3-152		12/15/2017	12/16/2017 01:34	EPA 8270D	D
Surrogate: Nitrobenzene-d5		83.2 %	72-126		12/15/2017	12/16/2017 01:34	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-A3**

**A174145-53 (Soil)**

Date Sampled  
**10/03/2017 15:10**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>8.49</b>		pH Units	1	12/13/2017	12/13/2017 14:44	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>1000000</b>	40000	ug/kg dry	200	12/15/2017	12/19/2017 18:40	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>4200</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>2800</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>5000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 02:00	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		148 %	48.3-152		12/15/2017	12/16/2017 02:00	EPA 8270D	D
Surrogate: Nitrobenzene-d5		84.4 %	72-126		12/15/2017	12/16/2017 02:00	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>99.0</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-A4**

Date Sampled  
10/03/2017 15:15

**A174145-54 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>8.06</b>		pH Units	1	12/13/2017	12/13/2017 14:48	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>2000000</b>	400000	ug/kg dry	2000	12/15/2017	12/20/2017 12:33	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>6500</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>6600</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:11	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		168 %	48.3-152		12/15/2017	12/16/2017 04:11	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		84.7 %	72-126		12/15/2017	12/16/2017 04:11	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.9</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-B1**

Date Sampled  
10/03/2017 15:35

**A174145-55 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>11.6</b>		pH Units	1	12/13/2017	12/13/2017 14:50	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>210000</b>	4100	ug/kg dry	20	12/15/2017	12/20/2017 13:30	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3100</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>5000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 04:37	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		161 %		48.3-152	12/15/2017	12/16/2017 04:37	EPA 8270D	D, S
Surrogate: Nitrobenzene-d5		94.0 %		72-126	12/15/2017	12/16/2017 04:37	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.7</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-B2**

**A174145-56 (Soil)**

Date Sampled  
**10/03/2017 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>10.0</b>		pH Units	1	12/13/2017	12/13/2017 17:06	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>49000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2700</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>4000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:03	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		138 %	48.3-152		12/15/2017	12/16/2017 05:03	EPA 8270D	D
Surrogate: Nitrobenzene-d5		88.5 %	72-126		12/15/2017	12/16/2017 05:03	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-B3**

**A174145-57 (Soil)**

Date Sampled  
**10/03/2017 15:25**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>8.79</b>		pH Units	1	12/13/2017	12/13/2017 17:08	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>110000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3900</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:30	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		144 %	48.3-152		12/15/2017	12/16/2017 05:30	EPA 8270D	D
Surrogate: Nitrobenzene-d5		85.6 %	72-126		12/15/2017	12/16/2017 05:30	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.5</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-B4**

**A174145-58 (Soil)**

Date Sampled  
**10/03/2017 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>10.5</b>		pH Units	1	12/13/2017	12/13/2017 17:11	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>67000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2700</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3800</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 05:56	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		148 %	48.3-152		12/15/2017	12/16/2017 05:56	EPA 8270D	D
Surrogate: Nitrobenzene-d5		94.7 %	72-126		12/15/2017	12/16/2017 05:56	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.8</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171003-C24-COMP**  
**A174145-59 (Soil)**

Date Sampled  
10/03/2017 15:42

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712035

pH	8.81		pH Units	1	12/13/2017	12/13/2017 17:13	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712058

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>710000</b>	20000	ug/kg dry	100	12/15/2017	12/19/2017 18:14	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>4200</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>2800</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	D
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>5600</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:22	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		146 %	48.3-152		12/15/2017	12/16/2017 06:22	EPA 8270D	D
Surrogate: Nitrobenzene-d5		92.0 %	72-126		12/15/2017	12/16/2017 06:22	EPA 8270D	D

**Classical Chemistry Parameters**

Preparation Batch: A712037

% Moisture	22.9	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
% Solids	98.1	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-A1**

**A174145-60 (Soil)**

Date Sampled  
**10/04/2017 16:49**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712035**

<b>pH</b>	<b>10.8</b>		pH Units	1	12/13/2017	12/13/2017 17:16	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712058**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>200</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>250</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>210</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>340</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>390</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>21000</b>	2000	ug/kg dry	10	12/15/2017	12/16/2017 06:48	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>1400</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>580</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>1200</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>370</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>320</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>4900</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>910</b>	200	ug/kg dry	1	12/15/2017	12/15/2017 16:50	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 96.3 % 48.3-152 12/15/2017 12/15/2017 16:50 EPA 8270D

Surrogate: Nitrobenzene-d5 97.4 % 72-126 12/15/2017 12/15/2017 16:50 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712059**

<b>% Solids</b>	<b>98.4</b>	0.00	% by Weight	1	12/15/2017	12/18/2017 16:06	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-A2**

**A174145-61 (Soil)**

Date Sampled  
**10/04/2017 16:47**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.12</b>		pH Units	1	12/13/2017	12/14/2017 11:09	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>210</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>250</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	E1, HC
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>260</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>6500</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>1200</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>350</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>520</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>210</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>290</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2200</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>320</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:33	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		92.1 %	48.3-152		12/18/2017	12/18/2017 15:33	EPA 8270D	
Surrogate: Nitrobenzene-d5		97.8 %	72-126		12/18/2017	12/18/2017 15:33	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>98.4</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-A3**

**A174145-62 (Soil)**

Date Sampled  
**10/04/2017 16:42**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.18</b>		pH Units	1	12/13/2017	12/14/2017 11:11	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>230</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>220</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>370</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
1,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>430</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>250</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>600</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
2,3-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>33000</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 10:22	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>120000</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 10:22	EPA 8270D	D
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>2400</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>1000</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>470</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>310</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>4400</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>770</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 15:59	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 103 % 48.3-152 12/18/2017 12/18/2017 15:59 EPA 8270D

Surrogate: Nitrobenzene-d5 101 % 72-126 12/18/2017 12/18/2017 15:59 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>98.0</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-A4**

Date Sampled  
10/04/2017 16:43

**A174145-63 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.26</b>		pH Units	1	12/13/2017	12/14/2017 11:14	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>380</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>340</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	E1, HC
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>380</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>230</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>470</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>530</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>490000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 09:56	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>3300</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>1300</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>1400</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>470</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>320</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>260</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>5700</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>2000</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 16:25	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 101 % 48.3-152 12/18/2017 12/18/2017 16:25 EPA 8270D

Surrogate: Nitrobenzene-d5 101 % 72-126 12/18/2017 12/18/2017 16:25 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>97.9</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-B1**

**A174145-64 (Soil)**

Date Sampled  
**10/04/2017 16:50**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>11.2</b>		pH Units	1	12/13/2017	12/14/2017 11:17	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>340</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>300</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	E1, HC
1,4-Dimethyl-2,3-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>220</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
2,3-Dinitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>31000</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 10:48	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2200</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
2,5-Dinitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>1900</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>680</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
2-Nitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>230</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>310</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
3,5-Dinitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
3-Nitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>1900</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
4-Nitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
Nitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>610</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 16:51	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		109 %	48.3-152		12/18/2017	12/18/2017 16:51	EPA 8270D	
Surrogate: Nitrobenzene-d5		102 %	72-126		12/18/2017	12/18/2017 16:51	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>93.9</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-B2**

**A174145-65 (Soil)**

Date Sampled  
**10/04/2017 16:48**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.61</b>		pH Units	1	12/13/2017	12/14/2017 11:19	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,3,5-Trinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>280</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	E1, HC
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>210</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>250</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>210</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>12000</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>2100</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>1500</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>540</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>290</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
3,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2300</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>3000</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:18	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		103 %	48.3-152		12/18/2017	12/18/2017 17:18	EPA 8270D	
Surrogate: Nitrobenzene-d5		101 %	72-126		12/18/2017	12/18/2017 17:18	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>98.1</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-B3**

**A174145-66 (Soil)**

Date Sampled  
**10/04/2017 16:46**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.31</b>		pH Units	1	12/13/2017	12/14/2017 11:24	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

<b>1,2-Dimethyl-3,4-Dinitrobenzene</b>	<b>240</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>210</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>320</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>390</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>270</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	E1, HC
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>390</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>1,4-Dimethyl-2,6-Dinitrobenzene</b>	<b>230</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>560</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>570</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>15000</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 19:59	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>1800</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>750</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>780</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>530</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>310</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>270</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>4800</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>940</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 17:44	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl		100 %	48.3-152		12/18/2017	12/18/2017 17:44	EPA 8270D
Surrogate: Nitrobenzene-d5		96.2 %	72-126		12/18/2017	12/18/2017 17:44	EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-B4**

**A174145-67 (Soil)**

Date Sampled  
**10/04/2017 16:44**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.30</b>		pH Units	1	12/13/2017	12/14/2017 11:26	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>330</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>310</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>270</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	E1, HC
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>300</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>360</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>250</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>28000</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 11:41	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>1500</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>640</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>910</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>280</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>210</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3900</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>800</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:10	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 104 % 48.3-152 12/18/2017 12/18/2017 18:10 EPA 8270D

Surrogate: Nitrobenzene-d5 97.6 % 72-126 12/18/2017 12/18/2017 18:10 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C12-COMP**  
**A174145-68 (Soil)**

Date Sampled  
10/04/2017 16:53

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>9.27</b>		pH Units	1	12/13/2017	12/14/2017 11:28	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>360</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>330</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>280</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	E1, HC
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>280</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>380</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>430</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>69000</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:07	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2000</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>1200</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>750</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>420</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
3,5-Dinitroaniline	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>230</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3300</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>1300</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 18:36	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 101 % 48.3-152 12/18/2017 12/18/2017 18:36 EPA 8270D

Surrogate: Nitrobenzene-d5 101 % 72-126 12/18/2017 12/18/2017 18:36 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712037**

<b>% Moisture</b>	<b>26.8</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
<b>% Solids</b>	<b>98.3</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-A1**

**A174145-69 (Soil)**

Date Sampled  
**10/04/2017 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>7.65</b>		pH Units	1	12/13/2017	12/14/2017 11:30	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>770000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	D
2,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
2,6-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>25000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>25000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 21:14	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl	%	48.3-152		12/18/2017	12/18/2017 21:14	EPA 8270D	DO
Surrogate: Nitrobenzene-d5	%	72-126		12/18/2017	12/18/2017 21:14	EPA 8270D	DO

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>99.2</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-A2**

**A174145-70 (Soil)**

Date Sampled  
**10/04/2017 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.45</b>		pH Units	1	12/13/2017	12/14/2017 11:33	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>32000</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
2-Amino-4,6-dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2500</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:33	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		121 %	48.3-152		12/18/2017	12/19/2017 12:33	EPA 8270D	D
Surrogate: Nitrobenzene-d5		85.0 %	72-126		12/18/2017	12/19/2017 12:33	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>98.6</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-A3**

**A174145-71 (Soil)**

Date Sampled  
**10/04/2017 14:40**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.23</b>		pH Units	1	12/13/2017	12/14/2017 11:39	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>170000</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2800</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 12:59	EPA 8270D	
Surrogate: 2,2'-Dinitrophenyl		136 %	48.3-152		12/18/2017	12/19/2017 12:59	EPA 8270D	D
Surrogate: Nitrobenzene-d5		91.4 %	72-126		12/18/2017	12/19/2017 12:59	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>99.2</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-A4**

**A174145-72 (Soil)**

Date Sampled  
**10/04/2017 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>7.79</b>		pH Units	1	12/13/2017	12/14/2017 11:43	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>190000</b>	20000	ug/kg dry	100	12/18/2017	12/20/2017 17:09	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2700</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2900</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:26	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		137 %	48.3-152		12/18/2017	12/19/2017 13:26	EPA 8270D	D
Surrogate: Nitrobenzene-d5		92.8 %	72-126		12/18/2017	12/19/2017 13:26	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>99.3</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-B1**

Date Sampled  
10/04/2017 15:05

A174145-73 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712036

pH	7.97		pH Units	1	12/13/2017	12/14/2017 11:45	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712060

1,2-Dimethyl-3,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>480000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	D
2,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
2,6-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>25000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>24000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 22:59	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		%	48.3-152		12/18/2017	12/18/2017 22:59	EPA 8270D	DO
Surrogate: Nitrobenzene-d5		%	72-126		12/18/2017	12/18/2017 22:59	EPA 8270D	DO

**Classical Chemistry Parameters**

Preparation Batch: A712061

% Solids	99.5	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-B2**

**A174145-74 (Soil)**

Date Sampled  
**10/04/2017 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>7.93</b>		pH Units	1	12/13/2017	12/14/2017 11:48	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>670000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	D
2,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
2,6-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>25000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>24000</b>	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	20000	ug/kg dry	100	12/18/2017	12/18/2017 23:25	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl	%	48.3-152		12/18/2017	12/18/2017 23:25	EPA 8270D	DO
Surrogate: Nitrobenzene-d5	%	72-126		12/18/2017	12/18/2017 23:25	EPA 8270D	DO

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>99.5</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-B3**

**A174145-75 (Soil)**

Date Sampled  
**10/04/2017 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>7.89</b>		pH Units	1	12/13/2017	12/14/2017 11:50	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
2,3-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>140000</b>	20000	ug/kg dry	100	12/18/2017	12/20/2017 17:35	EPA 8270D	D
2,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
2,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
2,6-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>2500</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	D
2-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
3,4-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
3,5-Dinitroaniline	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
3,5-Dinitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
3-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>2700</b>	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	D
4-Nitrotoluene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
Nitrobenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	2000	ug/kg dry	10	12/18/2017	12/19/2017 13:52	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		137 %	48.3-152		12/18/2017	12/19/2017 13:52	EPA 8270D	D
Surrogate: Nitrobenzene-d5		93.1 %	72-126		12/18/2017	12/19/2017 13:52	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>99.6</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171004-C27-B4**

**A174145-76 (Soil)**

Date Sampled  
**10/04/2017 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>8.45</b>		pH Units	1	12/13/2017	12/14/2017 11:51	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>240000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	D
2,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
2,6-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>25000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>24000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	
1,3,5-Trinitro-2,4-dimethylbenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 03:48	EPA 8270D	

Surrogate: 2,2'-Dinitrophenyl		%	48.3-152		12/18/2017	12/19/2017 03:48	EPA 8270D	DO
Surrogate: Nitrobenzene-d5		%	72-126		12/18/2017	12/19/2017 03:48	EPA 8270D	DO

**Classical Chemistry Parameters**

**Preparation Batch: A712061**

<b>% Solids</b>	<b>99.4</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	
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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171005-C31-COMP**

**A174145-77 (Soil)**

Date Sampled  
**10/05/2017 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>12.5</b>		pH Units	1	12/13/2017	12/14/2017 11:54	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,3,5-Trinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,3-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
2,3-Dinitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>25000</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>2300</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	D
2,5-Dinitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
2,6-Dinitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3000</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	D
2-Nitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
3,4-Dinitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>3100</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	D
3,5-Dinitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
3-Nitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3800</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	D
4-Nitrotoluene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
Nitrobenzene	ND	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>3400</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:29	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl		135 %	48.3-152		12/18/2017	12/19/2017 16:29	EPA 8270D	D
Surrogate: Nitrobenzene-d5		91.4 %	72-126		12/18/2017	12/19/2017 16:29	EPA 8270D	D

**Classical Chemistry Parameters**

**Preparation Batch: A712037**

<b>% Moisture</b>	<b>39.6</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
<b>% Solids</b>	<b>95.8</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170711-C06-COMP-D**

**A174145-78 (Soil)**

Date Sampled  
07/11/2017 14:40

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

Preparation Batch: A712036

pH	8.07		pH Units	1	12/13/2017	12/14/2017 11:55	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

Preparation Batch: A712060

1,2-Dimethyl-3,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,3,5-Trinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,3-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,4-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
2,3-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>360000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	D
<b>2,4-Dinitrotoluene</b>	<b>22000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	D
2,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
2,6-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>26000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	D
2-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
3,4-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
3,5-Dinitroaniline	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
3,5-Dinitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
3-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>29000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	D
4-Nitrotoluene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
Nitrobenzene	ND	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>21000</b>	20000	ug/kg dry	100	12/18/2017	12/19/2017 04:41	EPA 8270D	D
Surrogate: 2,2'-Dinitrophenyl			%	48.3-152	12/18/2017	12/19/2017 04:41	EPA 8270D	DO
Surrogate: Nitrobenzene-d5			%	72-126	12/18/2017	12/19/2017 04:41	EPA 8270D	DO

**Classical Chemistry Parameters**

Preparation Batch: A712037

% Moisture	21.9	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
% Solids	98.0	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-170620-C12-AH-D**

**A174145-79 (Soil)**

Date Sampled  
**06/20/2017 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>10.1</b>		pH Units	1	12/13/2017	12/14/2017 11:59	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>1,2-Dimethyl-3,5-Dinitrobenzene</b>	<b>210</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>1,3,5-Trinitrobenzene</b>	<b>310</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>1,3-Dimethyl-2,4-Dinitrobenzene</b>	<b>310</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>260</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	E1, HC
<b>1,4-Dimethyl-2,3-Dinitrobenzene</b>	<b>270</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>1,5-Dimethyl-2,4-Dinitrobenzene</b>	<b>390</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>2,3-Dinitrotoluene</b>	<b>300</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>8500</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>2,4-Dinitrotoluene</b>	<b>2400</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
2,5-Dinitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>1000</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>730</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
2-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>3,4-Dinitrotoluene</b>	<b>310</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>310</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>220</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
3-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3400</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
4-Nitrotoluene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
Nitrobenzene	ND	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>590</b>	200	ug/kg dry	1	12/18/2017	12/18/2017 19:03	EPA 8270D	

Surrogate: 2,2'-Dinitrobiphenyl 102 % 48.3-152 12/18/2017 12/18/2017 19:03 EPA 8270D

Surrogate: Nitrobenzene-d5 98.8 % 72-126 12/18/2017 12/18/2017 19:03 EPA 8270D

**Classical Chemistry Parameters**

**Preparation Batch: A712037**

<b>% Moisture</b>	<b>22.5</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
<b>% Solids</b>	<b>98.4</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	



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Project Number: 60525839  
Project Manager: Cary Pooler

**BPSB-171129-C31**

Date Sampled  
11/29/2017 10:30

**A174145-80 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
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**Pace Analytical - Madison**

**pH by EPA Method 9045**

**Preparation Batch: A712036**

<b>pH</b>	<b>12.5</b>		pH Units	1	12/13/2017	12/14/2017 12:02	EPA 9045D	
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**Explosive Compounds by EPA Method 8270**

**Preparation Batch: A712060**

1,2-Dimethyl-3,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,2-Dimethyl-3,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,2-Dimethyl-3,6-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,2-Dimethyl-4,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,3,5-Trinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	M
1,3-Dimethyl-2,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,3-Dimethyl-2,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>1,3-Dinitrobenzene</b>	<b>620</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	HC, M, E1
1,4-Dimethyl-2,3-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,4-Dimethyl-2,5-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,4-Dimethyl-2,6-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,5-Dimethyl-2,3-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
1,5-Dimethyl-2,4-Dinitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
2,3-Dinitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>2,4,6-Trinitrotoluene</b>	<b>18000</b>	2100	ug/kg dry	10	12/18/2017	12/19/2017 16:55	EPA 8270D	M1, D
<b>2,4-Dinitrotoluene</b>	<b>730</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
2,5-Dinitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>2,6-Dinitrotoluene</b>	<b>260</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>2-Amino-4,6-dinitrotoluene</b>	<b>980</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
2-Nitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
3,4-Dinitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>3,5-Dinitroaniline</b>	<b>940</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>3,5-Dinitrotoluene</b>	<b>240</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
3-Nitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>4-Amino-2,6-dinitrotoluene</b>	<b>5000</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
4-Nitrotoluene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
Nitrobenzene	ND	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
<b>1,3,5-Trinitro-2,4-dimethylbenzene</b>	<b>1900</b>	210	ug/kg dry	1	12/18/2017	12/18/2017 23:52	EPA 8270D	
Surrogate: 2,2'-Dinitrobiphenyl		103 %	48.3-152		12/18/2017	12/18/2017 23:52	EPA 8270D	
Surrogate: Nitrobenzene-d5		95.1 %	72-126		12/18/2017	12/18/2017 23:52	EPA 8270D	

**Classical Chemistry Parameters**

**Preparation Batch: A712037**

<b>% Moisture</b>	<b>37.3</b>	0.00	% by Weight	1	12/13/2017	12/14/2017 09:55	SM 2540B	
<b>% Solids</b>	<b>96.0</b>	0.00	% by Weight	1	12/18/2017	12/19/2017 10:14	SM 2540B	





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**pH by EPA Method 9045 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712025 - Default Prep GenChem**

<b>Duplicate (A712025-DUP1)</b>		<b>Source: A174145-02</b>		Prepared: 12/11/2017 Analyzed: 12/12/2017 16:22						
pH	7.68		pH Units		7.95			3.39	20	
<b>Duplicate (A712025-DUP2)</b>		<b>Source: A174145-20</b>		Prepared: 12/11/2017 Analyzed: 12/12/2017 16:26						
pH	7.59		pH Units		7.73			1.79	20	

**Batch A712028 - Default Prep GenChem**

<b>Duplicate (A712028-DUP1)</b>		<b>Source: A174145-21</b>		Prepared: 12/12/2017 Analyzed: 12/13/2017 12:39						
pH	7.24		pH Units		7.73			6.54	20	
<b>Duplicate (A712028-DUP2)</b>		<b>Source: A174145-31</b>		Prepared: 12/12/2017 Analyzed: 12/13/2017 12:42						
pH	12.3		pH Units		12.2			0.923	20	

**Batch A712035 - Default Prep GenChem**

<b>Duplicate (A712035-DUP1)</b>		<b>Source: A174145-41</b>		Prepared: 12/13/2017 Analyzed: 12/13/2017 17:18						
pH	10.8		pH Units		9.89			9.20	20	
<b>Duplicate (A712035-DUP2)</b>		<b>Source: A174145-51</b>		Prepared: 12/13/2017 Analyzed: 12/13/2017 17:21						
pH	12.4		pH Units		12.2			1.62	20	

**Batch A712036 - Default Prep GenChem**

<b>Duplicate (A712036-DUP1)</b>		<b>Source: A174145-61</b>		Prepared: 12/13/2017 Analyzed: 12/14/2017 12:07						
pH	8.27		pH Units		8.12			1.84	20	
<b>Duplicate (A712036-DUP2)</b>		<b>Source: A174145-71</b>		Prepared: 12/13/2017 Analyzed: 12/14/2017 12:09						
pH	8.14		pH Units		8.23			1.09	20	



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 Project Number: 60525839  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712030 - EPA 3570**

**Blank (A712030-BLK1)**

Prepared: 12/13/2017 Analyzed: 12/13/2017 19:56

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
2,3-Dinitrotoluene	ND	200	ug/kg wet							
2,4,6-Trinitrotoluene	ND	200	ug/kg wet							
2,4-Dinitrotoluene	ND	200	ug/kg wet							
2,5-Dinitrotoluene	ND	200	ug/kg wet							
2,6-Dinitrotoluene	ND	200	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg wet							
2-Nitrotoluene	ND	200	ug/kg wet							
3,4-Dinitrotoluene	ND	200	ug/kg wet							
3,5-Dinitroaniline	ND	200	ug/kg wet							
3,5-Dinitrotoluene	ND	200	ug/kg wet							
3-Nitrotoluene	ND	200	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg wet							
4-Nitrotoluene	ND	200	ug/kg wet							
Nitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg wet							
Surrogate: 2,2'-Dinitrobiphenyl	1420		ug/kg wet	2000		71.0	48.3-152			
Surrogate: Nitrobenzene-d5	2010		ug/kg wet	2000		100	72-126			

**LCS (A712030-BS1)**

Prepared: 12/13/2017 Analyzed: 12/13/2017 18:38

1,2-Dimethyl-3,4-Dinitrobenzene	2110	200	ug/kg wet	2038		103	81.4-119			
1,2-Dimethyl-3,5-Dinitrobenzene	2100	200	ug/kg wet	2000		105	80.1-121			
1,2-Dimethyl-3,6-Dinitrobenzene	2060	200	ug/kg wet	2000		103	81.8-116			
1,2-Dimethyl-4,5-Dinitrobenzene	1990	200	ug/kg wet	2002		99.5	79.2-122			
1,3,5-Trinitrobenzene	2000	200	ug/kg wet	2000		99.9	60.4-167			
1,3-Dimethyl-2,4-Dinitrobenzene	2100	200	ug/kg wet	2000		105	79.6-118			
1,3-Dimethyl-2,5-Dinitrobenzene	2060	200	ug/kg wet	2000		103	82.7-116			
1,3-Dinitrobenzene	2440	200	ug/kg wet	2000		122	69.8-129			
1,4-Dimethyl-2,3-Dinitrobenzene	2030	200	ug/kg wet	2082		97.6	68.8-126			
1,4-Dimethyl-2,5-Dinitrobenzene	2080	200	ug/kg wet	2096		99.5	81.7-118			
1,4-Dimethyl-2,6-Dinitrobenzene	2040	200	ug/kg wet	2065		99.0	81.5-117			
1,5-Dimethyl-2,3-Dinitrobenzene	2100	200	ug/kg wet	2000		105	80.6-119			



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Project Number: 60525839  
Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712030 - EPA 3570**

**LCS (A712030-BS1)**

Prepared: 12/13/2017 Analyzed: 12/13/2017 18:38

1,5-Dimethyl-2,4-Dinitrobenzene	2080	200	ug/kg wet	2058		101	79.4-120			
2,4,6-Trinitrotoluene	2400	200	ug/kg wet	2000		120	74.1-139			
2,4-Dinitrotoluene	2100	200	ug/kg wet	2000		105	67.8-133			
2,6-Dinitrotoluene	2200	200	ug/kg wet	2000		110	79.5-120			
2-Amino-4,6-dinitrotoluene	2070	200	ug/kg wet	2000		104	60.5-138			
2-Nitrotoluene	2060	200	ug/kg wet	2000		103	77.7-117			
3,4-Dinitrotoluene	2030	200	ug/kg wet	2000		101	81.2-120			
3,5-Dinitroaniline	2210	200	ug/kg wet	2000		111	53.2-145			
3-Nitrotoluene	2130	200	ug/kg wet	2000		107	82.5-114			
4-Amino-2,6-dinitrotoluene	2270	200	ug/kg wet	2000		113	64.1-133			
4-Nitrotoluene	2070	200	ug/kg wet	2000		104	83.6-112			
Nitrobenzene	2090	200	ug/kg wet	2000		105	83.4-112			
Surrogate: 2,2'-Dinitrobiphenyl	2030		ug/kg wet	2000		101	48.3-152			
Surrogate: Nitrobenzene-d5	2040		ug/kg wet	2000		102	72-126			

**Matrix Spike (A712030-MS1)**

Source: A174145-02

Prepared: 12/13/2017 Analyzed: 12/13/2017 17:46

1,2-Dimethyl-3,4-Dinitrobenzene	2580	200	ug/kg dry	2082	565	96.8	64.4-124			
1,2-Dimethyl-3,5-Dinitrobenzene	2450	200	ug/kg dry	2043	336	103	67.8-131			
1,2-Dimethyl-3,6-Dinitrobenzene	2290	200	ug/kg dry	2043	ND	112	72.5-119			
1,2-Dimethyl-4,5-Dinitrobenzene	2310	200	ug/kg dry	2045	321	97.1	62.8-131			
1,3,5-Trinitrobenzene	3010	200	ug/kg dry	2043	ND	148	39.2-186			
1,3-Dimethyl-2,4-Dinitrobenzene	2860	200	ug/kg dry	2043	686	106	70.2-124			
1,3-Dimethyl-2,5-Dinitrobenzene	2270	200	ug/kg dry	2043	ND	111	75.8-121			
1,3-Dinitrobenzene	2500	200	ug/kg dry	2043	267	109	58.7-132			
1,4-Dimethyl-2,3-Dinitrobenzene	2650	200	ug/kg dry	2127	635	94.8	65.6-120			
1,4-Dimethyl-2,5-Dinitrobenzene	2280	200	ug/kg dry	2141	ND	106	69.3-127			
1,4-Dimethyl-2,6-Dinitrobenzene	2450	200	ug/kg dry	2109	318	101	72.8-122			
1,5-Dimethyl-2,3-Dinitrobenzene	2170	200	ug/kg dry	2043	ND	106	63.4-128			
1,5-Dimethyl-2,4-Dinitrobenzene	4380	200	ug/kg dry	2102	2040	112	63.6-130			
2,4,6-Trinitrotoluene	165000	200	ug/kg dry	2043	301000	NR	26.1-194			M1
2,4-Dinitrotoluene	14900	200	ug/kg dry	2043	12600	111	66.7-135			
2,6-Dinitrotoluene	7920	200	ug/kg dry	2043	5240	131	66.1-127			M
2-Amino-4,6-dinitrotoluene	10900	200	ug/kg dry	2043	8860	102	39-140			
2-Nitrotoluene	2540	200	ug/kg dry	2043	496	100	72-121			
3,4-Dinitrotoluene	5370	200	ug/kg dry	2043	3130	110	64.3-124			
3,5-Dinitroaniline	2660	200	ug/kg dry	2043	623	99.9	33.5-149			
3-Nitrotoluene	2300	200	ug/kg dry	2043	ND	113	78.3-118			
4-Amino-2,6-dinitrotoluene	19000	200	ug/kg dry	2043	17100	90.2	26.4-153			
4-Nitrotoluene	2660	200	ug/kg dry	2043	522	105	78.6-116			
Nitrobenzene	2070	200	ug/kg dry	2043	ND	102	75.8-113			
Surrogate: 2,2'-Dinitrobiphenyl	2120		ug/kg dry	2043		104	48.3-152			
Surrogate: Nitrobenzene-d5	2050		ug/kg dry	2043		100	72-126			



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Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
 Project Number: 60525839  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712030 - EPA 3570**

**Matrix Spike Dup (A712030-MSD1)**

Source: A174145-02

Prepared: 12/13/2017 Analyzed: 12/13/2017 18:12

1,2-Dimethyl-3,4-Dinitrobenzene	2570	200	ug/kg dry	2082	565	96.4	64.4-124	0.455	20	
1,2-Dimethyl-3,5-Dinitrobenzene	2390	200	ug/kg dry	2043	336	101	67.8-131	2.71	20	
1,2-Dimethyl-3,6-Dinitrobenzene	2250	200	ug/kg dry	2043	ND	110	72.5-119	2.03	20	
1,2-Dimethyl-4,5-Dinitrobenzene	2270	200	ug/kg dry	2045	321	95.2	62.8-131	1.97	20	
1,3,5-Trinitrobenzene	3130	200	ug/kg dry	2043	ND	153	39.2-186	3.83	20	
1,3-Dimethyl-2,4-Dinitrobenzene	2860	200	ug/kg dry	2043	686	106	70.2-124	0.0527	20	
1,3-Dimethyl-2,5-Dinitrobenzene	2200	200	ug/kg dry	2043	ND	108	75.8-121	3.10	20	
1,3-Dinitrobenzene	2560	200	ug/kg dry	2043	267	112	58.7-132	2.59	20	
1,4-Dimethyl-2,3-Dinitrobenzene	2620	200	ug/kg dry	2127	635	93.1	65.6-120	1.79	20	
1,4-Dimethyl-2,5-Dinitrobenzene	2240	200	ug/kg dry	2141	ND	105	69.3-127	1.86	20	
1,4-Dimethyl-2,6-Dinitrobenzene	2410	200	ug/kg dry	2109	318	99.0	72.8-122	2.19	20	
1,5-Dimethyl-2,3-Dinitrobenzene	2160	200	ug/kg dry	2043	ND	106	63.4-128	0.340	20	
1,5-Dimethyl-2,4-Dinitrobenzene	4360	200	ug/kg dry	2102	2040	111	63.6-130	0.987	20	
2,4,6-Trinitrotoluene	171000	200	ug/kg dry	2043	301000	NR	26.1-194	NR	20	M1
2,4-Dinitrotoluene	14700	200	ug/kg dry	2043	12600	101	66.7-135	9.89	20	
2,6-Dinitrotoluene	7870	200	ug/kg dry	2043	5240	129	66.1-127	1.59	20	M
2-Amino-4,6-dinitrotoluene	11100	200	ug/kg dry	2043	8860	111	39-140	8.89	20	
2-Nitrotoluene	2560	200	ug/kg dry	2043	496	101	72-121	0.788	20	
3,4-Dinitrotoluene	5420	200	ug/kg dry	2043	3130	112	64.3-124	2.36	20	
3,5-Dinitroaniline	2720	200	ug/kg dry	2043	623	103	33.5-149	2.64	20	
3-Nitrotoluene	2320	200	ug/kg dry	2043	ND	114	78.3-118	0.837	20	
4-Amino-2,6-dinitrotoluene	19500	200	ug/kg dry	2043	17100	113	26.4-153	22.7	20	X
4-Nitrotoluene	2680	200	ug/kg dry	2043	522	105	78.6-116	0.673	20	
Nitrobenzene	2090	200	ug/kg dry	2043	ND	102	75.8-113	0.822	20	
Surrogate: 2,2'-Dinitrobiphenyl	2160		ug/kg dry	2043		106	48.3-152			
Surrogate: Nitrobenzene-d5	2060		ug/kg dry	2043		101	72-126			



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 Project Number: 60525839  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712040 - EPA 3570**

**Blank (A712040-BLK1)**

Prepared: 12/14/2017 Analyzed: 12/14/2017 17:08

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
2,3-Dinitrotoluene	ND	200	ug/kg wet							
2,4,6-Trinitrotoluene	ND	200	ug/kg wet							
2,4-Dinitrotoluene	ND	200	ug/kg wet							
2,5-Dinitrotoluene	ND	200	ug/kg wet							
2,6-Dinitrotoluene	ND	200	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg wet							
2-Nitrotoluene	ND	200	ug/kg wet							
3,4-Dinitrotoluene	ND	200	ug/kg wet							
3,5-Dinitroaniline	ND	200	ug/kg wet							
3,5-Dinitrotoluene	ND	200	ug/kg wet							
3-Nitrotoluene	ND	200	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg wet							
4-Nitrotoluene	ND	200	ug/kg wet							
Nitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg wet							
Surrogate: 2,2'-Dinitrobiphenyl	1250		ug/kg wet	2000		62.5	48.3-152			
Surrogate: Nitrobenzene-d5	1900		ug/kg wet	2000		95.1	72-126			

**LCS (A712040-BS1)**

Prepared: 12/14/2017 Analyzed: 12/14/2017 21:02

1,2-Dimethyl-3,4-Dinitrobenzene	1990	200	ug/kg wet	2038		97.6	81.4-119			
1,2-Dimethyl-3,5-Dinitrobenzene	1980	200	ug/kg wet	2000		99.1	80.1-121			
1,2-Dimethyl-3,6-Dinitrobenzene	2090	200	ug/kg wet	2000		104	81.8-116			
1,2-Dimethyl-4,5-Dinitrobenzene	1890	200	ug/kg wet	2002		94.6	79.2-122			
1,3,5-Trinitrobenzene	1850	200	ug/kg wet	2000		92.4	60.4-167			
1,3-Dimethyl-2,4-Dinitrobenzene	1980	200	ug/kg wet	2000		98.9	79.6-118			
1,3-Dimethyl-2,5-Dinitrobenzene	2030	200	ug/kg wet	2000		101	82.7-116			
1,3-Dinitrobenzene	2340	200	ug/kg wet	2000		117	69.8-129			
1,4-Dimethyl-2,3-Dinitrobenzene	2010	200	ug/kg wet	2082		96.7	68.8-126			
1,4-Dimethyl-2,5-Dinitrobenzene	2040	200	ug/kg wet	2096		97.1	81.7-118			
1,4-Dimethyl-2,6-Dinitrobenzene	2000	200	ug/kg wet	2065		96.9	81.5-117			
1,5-Dimethyl-2,3-Dinitrobenzene	1940	200	ug/kg wet	2000		97.0	80.6-119			



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 Project Number: 60525839  
 Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712040 - EPA 3570**

**LCS (A712040-BS1)**

Prepared: 12/14/2017 Analyzed: 12/14/2017 21:02

1,5-Dimethyl-2,4-Dinitrobenzene	2030	200	ug/kg wet	2058		98.6	79.4-120			
2,4,6-Trinitrotoluene	2130	200	ug/kg wet	2000		107	74.1-139			
2,4-Dinitrotoluene	2100	200	ug/kg wet	2000		105	67.8-133			
2,6-Dinitrotoluene	2200	200	ug/kg wet	2000		110	79.5-120			
2-Amino-4,6-dinitrotoluene	1990	200	ug/kg wet	2000		99.3	60.5-138			
2-Nitrotoluene	2030	200	ug/kg wet	2000		101	77.7-117			
3,4-Dinitrotoluene	2070	200	ug/kg wet	2000		104	81.2-120			
3,5-Dinitroaniline	2140	200	ug/kg wet	2000		107	53.2-145			
3-Nitrotoluene	2100	200	ug/kg wet	2000		105	82.5-114			
4-Amino-2,6-dinitrotoluene	2110	200	ug/kg wet	2000		106	64.1-133			
4-Nitrotoluene	2060	200	ug/kg wet	2000		103	83.6-112			
Nitrobenzene	2080	200	ug/kg wet	2000		104	83.4-112			
Surrogate: 2,2'-Dinitrobiphenyl	1970		ug/kg wet	2000		98.4	48.3-152			
Surrogate: Nitrobenzene-d5	2000		ug/kg wet	2000		100	72-126			

**Matrix Spike (A712040-MS1)**

Source: A174145-21

Prepared: 12/14/2017 Analyzed: 12/14/2017 20:10

1,2-Dimethyl-3,4-Dinitrobenzene	2080	200	ug/kg dry	2075	ND	100	64.4-124			
1,2-Dimethyl-3,5-Dinitrobenzene	2010	200	ug/kg dry	2036	ND	98.6	67.8-131			
1,2-Dimethyl-3,6-Dinitrobenzene	2090	200	ug/kg dry	2036	ND	102	72.5-119			
1,2-Dimethyl-4,5-Dinitrobenzene	1890	200	ug/kg dry	2038	ND	92.8	62.8-131			
1,3,5-Trinitrobenzene	1780	200	ug/kg dry	2036	ND	87.4	39.2-186			
1,3-Dimethyl-2,4-Dinitrobenzene	1970	200	ug/kg dry	2036	ND	96.5	70.2-124			
1,3-Dimethyl-2,5-Dinitrobenzene	2030	200	ug/kg dry	2036	ND	99.5	75.8-121			
1,3-Dinitrobenzene	2140	200	ug/kg dry	2036	ND	105	58.7-132			
1,4-Dimethyl-2,3-Dinitrobenzene	2000	200	ug/kg dry	2120	ND	94.2	65.6-120			
1,4-Dimethyl-2,5-Dinitrobenzene	2020	200	ug/kg dry	2134	ND	94.6	69.3-127			
1,4-Dimethyl-2,6-Dinitrobenzene	1980	200	ug/kg dry	2102	ND	94.2	72.8-122			
1,5-Dimethyl-2,3-Dinitrobenzene	1970	200	ug/kg dry	2036	ND	96.7	63.4-128			
1,5-Dimethyl-2,4-Dinitrobenzene	2040	200	ug/kg dry	2095	ND	97.5	63.6-130			
2,4,6-Trinitrotoluene	2550	200	ug/kg dry	2036	277	112	26.1-194			
2,4-Dinitrotoluene	2010	200	ug/kg dry	2036	ND	98.9	66.7-135			
2,6-Dinitrotoluene	2170	200	ug/kg dry	2036	ND	107	66.1-127			
2-Amino-4,6-dinitrotoluene	1980	200	ug/kg dry	2036	250	84.9	39-140			
2-Nitrotoluene	2070	200	ug/kg dry	2036	ND	101	72-121			
3,4-Dinitrotoluene	1990	200	ug/kg dry	2036	ND	97.5	64.3-124			
3,5-Dinitroaniline	2070	200	ug/kg dry	2036	ND	102	33.5-149			
3-Nitrotoluene	2130	200	ug/kg dry	2036	ND	105	78.3-118			
4-Amino-2,6-dinitrotoluene	2090	200	ug/kg dry	2036	251	90.5	26.4-153			
4-Nitrotoluene	2110	200	ug/kg dry	2036	ND	104	78.6-116			
Nitrobenzene	2120	200	ug/kg dry	2036	ND	104	75.8-113			
Surrogate: 2,2'-Dinitrobiphenyl	2050		ug/kg dry	2036		101	48.3-152			
Surrogate: Nitrobenzene-d5	2050		ug/kg dry	2036		101	72-126			



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Project Number: 60525839  
Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712040 - EPA 3570**

**Matrix Spike Dup (A712040-MSD1)**

Source: A174145-21

Prepared: 12/14/2017 Analyzed: 12/14/2017 20:36

1,2-Dimethyl-3,4-Dinitrobenzene	1990	200	ug/kg dry	2075	ND	96.0	64.4-124	4.38	20	
1,2-Dimethyl-3,5-Dinitrobenzene	2000	200	ug/kg dry	2036	ND	98.4	67.8-131	0.301	20	
1,2-Dimethyl-3,6-Dinitrobenzene	2050	200	ug/kg dry	2036	ND	101	72.5-119	1.63	20	
1,2-Dimethyl-4,5-Dinitrobenzene	1910	200	ug/kg dry	2038	ND	93.7	62.8-131	0.914	20	
1,3,5-Trinitrobenzene	1720	200	ug/kg dry	2036	ND	84.3	39.2-186	3.66	20	
1,3-Dimethyl-2,4-Dinitrobenzene	2000	200	ug/kg dry	2036	ND	98.2	70.2-124	1.72	20	
1,3-Dimethyl-2,5-Dinitrobenzene	2040	200	ug/kg dry	2036	ND	100	75.8-121	0.528	20	
1,3-Dinitrobenzene	2240	200	ug/kg dry	2036	ND	110	58.7-132	4.45	20	
1,4-Dimethyl-2,3-Dinitrobenzene	1980	200	ug/kg dry	2120	ND	93.5	65.6-120	0.750	20	
1,4-Dimethyl-2,5-Dinitrobenzene	2010	200	ug/kg dry	2134	ND	94.4	69.3-127	0.214	20	
1,4-Dimethyl-2,6-Dinitrobenzene	1980	200	ug/kg dry	2102	ND	94.1	72.8-122	0.128	20	
1,5-Dimethyl-2,3-Dinitrobenzene	1940	200	ug/kg dry	2036	ND	95.2	63.4-128	1.48	20	
1,5-Dimethyl-2,4-Dinitrobenzene	2050	200	ug/kg dry	2095	ND	97.7	63.6-130	0.245	20	
2,4,6-Trinitrotoluene	2480	200	ug/kg dry	2036	277	108	26.1-194	3.40	20	
2,4-Dinitrotoluene	2030	200	ug/kg dry	2036	ND	99.5	66.7-135	0.637	20	
2,6-Dinitrotoluene	2180	200	ug/kg dry	2036	ND	107	66.1-127	0.350	20	
2-Amino-4,6-dinitrotoluene	1950	200	ug/kg dry	2036	250	83.3	39-140	1.87	20	
2-Nitrotoluene	2060	200	ug/kg dry	2036	ND	101	72-121	0.238	20	
3,4-Dinitrotoluene	1980	200	ug/kg dry	2036	ND	97.0	64.3-124	0.516	20	
3,5-Dinitroaniline	2070	200	ug/kg dry	2036	ND	102	33.5-149	0.299	20	
3-Nitrotoluene	2110	200	ug/kg dry	2036	ND	104	78.3-118	0.801	20	
4-Amino-2,6-dinitrotoluene	2130	200	ug/kg dry	2036	251	92.4	26.4-153	2.11	20	
4-Nitrotoluene	2090	200	ug/kg dry	2036	ND	103	78.6-116	0.899	20	
Nitrobenzene	2090	200	ug/kg dry	2036	ND	103	75.8-113	1.27	20	
Surrogate: 2,2'-Dinitrobiphenyl	2010		ug/kg dry	2036		98.8	48.3-152			
Surrogate: Nitrobenzene-d5	2050		ug/kg dry	2036		101	72-126			



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Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712058 - EPA 3570**

**Blank (A712058-BLK1)**

Prepared: 12/15/2017 Analyzed: 12/15/2017 15:58

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
2,3-Dinitrotoluene	ND	200	ug/kg wet							
2,4,6-Trinitrotoluene	ND	200	ug/kg wet							
2,4-Dinitrotoluene	ND	200	ug/kg wet							
2,5-Dinitrotoluene	ND	200	ug/kg wet							
2,6-Dinitrotoluene	ND	200	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg wet							
2-Nitrotoluene	ND	200	ug/kg wet							
3,4-Dinitrotoluene	ND	200	ug/kg wet							
3,5-Dinitroaniline	ND	200	ug/kg wet							
3,5-Dinitrotoluene	ND	200	ug/kg wet							
3-Nitrotoluene	ND	200	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg wet							
4-Nitrotoluene	ND	200	ug/kg wet							
Nitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg wet							
Surrogate: 2,2'-Dinitrobiphenyl	927		ug/kg wet	2000		46.4	48.3-152			S
Surrogate: Nitrobenzene-d5	1850		ug/kg wet	2000		92.3	72-126			

**LCS (A712058-BS1)**

Prepared: 12/15/2017 Analyzed: 12/15/2017 19:53

1,2-Dimethyl-3,4-Dinitrobenzene	1940	200	ug/kg wet	2038		95.2	81.4-119			
1,2-Dimethyl-3,5-Dinitrobenzene	1880	200	ug/kg wet	2000		94.0	80.1-121			
1,2-Dimethyl-3,6-Dinitrobenzene	1990	200	ug/kg wet	2000		99.5	81.8-116			
1,2-Dimethyl-4,5-Dinitrobenzene	1730	200	ug/kg wet	2002		86.6	79.2-122			
1,3,5-Trinitrobenzene	1740	200	ug/kg wet	2000		86.8	60.4-167			
1,3-Dimethyl-2,4-Dinitrobenzene	1890	200	ug/kg wet	2000		94.3	79.6-118			
1,3-Dimethyl-2,5-Dinitrobenzene	1950	200	ug/kg wet	2000		97.4	82.7-116			
1,3-Dinitrobenzene	2090	200	ug/kg wet	2000		104	69.8-129			
1,4-Dimethyl-2,3-Dinitrobenzene	1890	200	ug/kg wet	2082		90.7	68.8-126			
1,4-Dimethyl-2,5-Dinitrobenzene	1950	200	ug/kg wet	2096		93.0	81.7-118			
1,4-Dimethyl-2,6-Dinitrobenzene	1880	200	ug/kg wet	2065		90.8	81.5-117			
1,5-Dimethyl-2,3-Dinitrobenzene	1840	200	ug/kg wet	2000		92.2	80.6-119			





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AECOM  
500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712058 - EPA 3570**

**LCS (A712058-BS1)**

Prepared: 12/15/2017 Analyzed: 12/15/2017 19:53

1,5-Dimethyl-2,4-Dinitrobenzene	1920	200	ug/kg wet	2058		93.2	79.4-120			
2,4,6-Trinitrotoluene	2070	200	ug/kg wet	2000		104	74.1-139			
2,4-Dinitrotoluene	1930	200	ug/kg wet	2000		96.4	67.8-133			
2,6-Dinitrotoluene	2070	200	ug/kg wet	2000		104	79.5-120			
2-Amino-4,6-dinitrotoluene	1940	200	ug/kg wet	2000		96.9	60.5-138			
2-Nitrotoluene	1910	200	ug/kg wet	2000		95.3	77.7-117			
3,4-Dinitrotoluene	1920	200	ug/kg wet	2000		95.8	81.2-120			
3,5-Dinitroaniline	1950	200	ug/kg wet	2000		97.7	53.2-145			
3-Nitrotoluene	1990	200	ug/kg wet	2000		99.4	82.5-114			
4-Amino-2,6-dinitrotoluene	1920	200	ug/kg wet	2000		96.0	64.1-133			
4-Nitrotoluene	1960	200	ug/kg wet	2000		98.2	83.6-112			
Nitrobenzene	1980	200	ug/kg wet	2000		99.1	83.4-112			
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>	<i>1870</i>		<i>ug/kg wet</i>	<i>2000</i>		<i>93.4</i>	<i>48.3-152</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>1910</i>		<i>ug/kg wet</i>	<i>2000</i>		<i>95.5</i>	<i>72-126</i>			

**Matrix Spike (A712058-MS1)**

Source: A174145-42

Prepared: 12/15/2017 Analyzed: 12/15/2017 19:00

1,2-Dimethyl-3,4-Dinitrobenzene	1920	200	ug/kg dry	2050	ND	93.8	64.4-124			
1,2-Dimethyl-3,5-Dinitrobenzene	1930	200	ug/kg dry	2012	ND	95.8	67.8-131			
1,2-Dimethyl-3,6-Dinitrobenzene	2030	200	ug/kg dry	2012	ND	101	72.5-119			
1,2-Dimethyl-4,5-Dinitrobenzene	1810	200	ug/kg dry	2014	ND	89.9	62.8-131			
1,3,5-Trinitrobenzene	1720	200	ug/kg dry	2012	ND	85.3	39.2-186			
1,3-Dimethyl-2,4-Dinitrobenzene	1870	200	ug/kg dry	2012	ND	93.2	70.2-124			
1,3-Dimethyl-2,5-Dinitrobenzene	2000	200	ug/kg dry	2012	ND	99.5	75.8-121			
1,3-Dinitrobenzene	2040	200	ug/kg dry	2012	ND	102	58.7-132			
1,4-Dimethyl-2,3-Dinitrobenzene	1920	200	ug/kg dry	2094	ND	91.8	65.6-120			
1,4-Dimethyl-2,5-Dinitrobenzene	1950	200	ug/kg dry	2108	ND	92.4	69.3-127			
1,4-Dimethyl-2,6-Dinitrobenzene	1900	200	ug/kg dry	2077	ND	91.7	72.8-122			
1,5-Dimethyl-2,3-Dinitrobenzene	1850	200	ug/kg dry	2012	ND	91.9	63.4-128			
1,5-Dimethyl-2,4-Dinitrobenzene	1930	200	ug/kg dry	2070	ND	93.5	63.6-130			
2,4,6-Trinitrotoluene	25600	200	ug/kg dry	2012	27700	NR	26.1-194			M1
2,4-Dinitrotoluene	2080	200	ug/kg dry	2012	238	91.7	66.7-135			
2,6-Dinitrotoluene	2170	200	ug/kg dry	2012	ND	108	66.1-127			
2-Amino-4,6-dinitrotoluene	2160	200	ug/kg dry	2012	420	86.4	39-140			
2-Nitrotoluene	1970	200	ug/kg dry	2012	ND	97.8	72-121			
3,4-Dinitrotoluene	1920	200	ug/kg dry	2012	ND	95.3	64.3-124			
3,5-Dinitroaniline	2090	200	ug/kg dry	2012	ND	104	33.5-149			
3-Nitrotoluene	2040	200	ug/kg dry	2012	ND	101	78.3-118			
4-Amino-2,6-dinitrotoluene	4490	200	ug/kg dry	2012	2130	117	26.4-153			
4-Nitrotoluene	2020	200	ug/kg dry	2012	ND	100	78.6-116			
Nitrobenzene	2040	200	ug/kg dry	2012	ND	101	75.8-113			
<i>Surrogate: 2,2'-Dinitrobiphenyl</i>	<i>1930</i>		<i>ug/kg dry</i>	<i>2012</i>		<i>95.9</i>	<i>48.3-152</i>			
<i>Surrogate: Nitrobenzene-d5</i>	<i>1840</i>		<i>ug/kg dry</i>	<i>2012</i>		<i>91.4</i>	<i>72-126</i>			



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Project Number: 60525839  
Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712058 - EPA 3570**

**Matrix Spike Dup (A712058-MSD1)**

Source: A174145-42

Prepared: 12/15/2017 Analyzed: 12/15/2017 19:27

1,2-Dimethyl-3,4-Dinitrobenzene	1860	200	ug/kg dry	2050	ND	90.6	64.4-124	3.52	20	
1,2-Dimethyl-3,5-Dinitrobenzene	1860	200	ug/kg dry	2012	ND	92.6	67.8-131	3.37	20	
1,2-Dimethyl-3,6-Dinitrobenzene	1970	200	ug/kg dry	2012	ND	98.1	72.5-119	2.88	20	
1,2-Dimethyl-4,5-Dinitrobenzene	1770	200	ug/kg dry	2014	ND	87.9	62.8-131	2.28	20	
1,3,5-Trinitrobenzene	1670	200	ug/kg dry	2012	ND	82.9	39.2-186	2.84	20	
1,3-Dimethyl-2,4-Dinitrobenzene	1860	200	ug/kg dry	2012	ND	92.6	70.2-124	0.629	20	
1,3-Dimethyl-2,5-Dinitrobenzene	1940	200	ug/kg dry	2012	ND	96.5	75.8-121	2.98	20	
1,3-Dinitrobenzene	2060	200	ug/kg dry	2012	ND	102	58.7-132	0.768	20	
1,4-Dimethyl-2,3-Dinitrobenzene	1860	200	ug/kg dry	2094	ND	88.9	65.6-120	3.23	20	
1,4-Dimethyl-2,5-Dinitrobenzene	1950	200	ug/kg dry	2108	ND	92.7	69.3-127	0.329	20	
1,4-Dimethyl-2,6-Dinitrobenzene	1870	200	ug/kg dry	2077	ND	90.2	72.8-122	1.59	20	
1,5-Dimethyl-2,3-Dinitrobenzene	1800	200	ug/kg dry	2012	ND	89.4	63.4-128	2.79	20	
1,5-Dimethyl-2,4-Dinitrobenzene	1920	200	ug/kg dry	2070	ND	92.8	63.6-130	0.708	20	
2,4,6-Trinitrotoluene	24400	200	ug/kg dry	2012	27700	NR	26.1-194	NR	20	M1
2,4-Dinitrotoluene	2030	200	ug/kg dry	2012	238	89.0	66.7-135	3.00	20	
2,6-Dinitrotoluene	2130	200	ug/kg dry	2012	ND	106	66.1-127	1.84	20	
2-Amino-4,6-dinitrotoluene	2110	200	ug/kg dry	2012	420	84.0	39-140	2.86	20	
2-Nitrotoluene	1910	200	ug/kg dry	2012	ND	95.0	72-121	2.98	20	
3,4-Dinitrotoluene	1870	200	ug/kg dry	2012	ND	93.1	64.3-124	2.29	20	
3,5-Dinitroaniline	1990	200	ug/kg dry	2012	ND	99.1	33.5-149	4.66	20	
3-Nitrotoluene	1990	200	ug/kg dry	2012	ND	98.7	78.3-118	2.55	20	
4-Amino-2,6-dinitrotoluene	4280	200	ug/kg dry	2012	2130	107	26.4-153	9.13	20	
4-Nitrotoluene	1960	200	ug/kg dry	2012	ND	97.6	78.6-116	2.59	20	
Nitrobenzene	1980	200	ug/kg dry	2012	ND	98.6	75.8-113	2.79	20	
Surrogate: 2,2'-Dinitrobiphenyl	1830		ug/kg dry	2012		90.9	48.3-152			
Surrogate: Nitrobenzene-d5	1940		ug/kg dry	2012		96.2	72-126			



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**Explosive Compounds by EPA Method 8270 - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712060 - EPA 3570**

**Blank (A712060-BLK1)**

Prepared: 12/18/2017 Analyzed: 12/18/2017 15:07

1,2-Dimethyl-3,4-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,5-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-3,6-Dinitrobenzene	ND	200	ug/kg wet							
1,2-Dimethyl-4,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,5-Dinitrobenzene	ND	200	ug/kg wet							
1,4-Dimethyl-2,6-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,3-Dinitrobenzene	ND	200	ug/kg wet							
1,5-Dimethyl-2,4-Dinitrobenzene	ND	200	ug/kg wet							
2,3-Dinitrotoluene	ND	200	ug/kg wet							
2,4,6-Trinitrotoluene	ND	200	ug/kg wet							
2,4-Dinitrotoluene	ND	200	ug/kg wet							
2,5-Dinitrotoluene	ND	200	ug/kg wet							
2,6-Dinitrotoluene	ND	200	ug/kg wet							
2-Amino-4,6-dinitrotoluene	ND	200	ug/kg wet							
2-Nitrotoluene	ND	200	ug/kg wet							
3,4-Dinitrotoluene	ND	200	ug/kg wet							
3,5-Dinitroaniline	ND	200	ug/kg wet							
3,5-Dinitrotoluene	ND	200	ug/kg wet							
3-Nitrotoluene	ND	200	ug/kg wet							
4-Amino-2,6-dinitrotoluene	ND	200	ug/kg wet							
4-Nitrotoluene	ND	200	ug/kg wet							
Nitrobenzene	ND	200	ug/kg wet							
1,3,5-Trinitro-2,4-dimethylbenzene	ND	200	ug/kg wet							
Surrogate: 2,2'-Dinitrobiphenyl	1200		ug/kg wet	2000		59.8	48.3-152			
Surrogate: Nitrobenzene-d5	1960		ug/kg wet	2000		98.2	72-126			

**LCS (A712060-BS1)**

Prepared: 12/18/2017 Analyzed: 12/19/2017 01:11

1,2-Dimethyl-3,4-Dinitrobenzene	2050	200	ug/kg wet	2038		101	81.4-119			
1,2-Dimethyl-3,5-Dinitrobenzene	2110	200	ug/kg wet	2000		106	80.1-121			
1,2-Dimethyl-3,6-Dinitrobenzene	2210	200	ug/kg wet	2000		110	81.8-116			
1,2-Dimethyl-4,5-Dinitrobenzene	1930	200	ug/kg wet	2002		96.2	79.2-122			
1,3,5-Trinitrobenzene	2170	200	ug/kg wet	2000		109	60.4-167			
1,3-Dimethyl-2,4-Dinitrobenzene	2120	200	ug/kg wet	2000		106	79.6-118			
1,3-Dimethyl-2,5-Dinitrobenzene	2150	200	ug/kg wet	2000		107	82.7-116			
1,3-Dinitrobenzene	2770	200	ug/kg wet	2000		139	69.8-129			
1,4-Dimethyl-2,3-Dinitrobenzene	2080	200	ug/kg wet	2082		100	68.8-126			
1,4-Dimethyl-2,5-Dinitrobenzene	2160	200	ug/kg wet	2096		103	81.7-118			
1,4-Dimethyl-2,6-Dinitrobenzene	2100	200	ug/kg wet	2065		102	81.5-117			
1,5-Dimethyl-2,3-Dinitrobenzene	2000	200	ug/kg wet	2000		99.8	80.6-119			



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**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712060 - EPA 3570**

**LCS (A712060-BS1)**

Prepared: 12/18/2017 Analyzed: 12/19/2017 01:11

1,5-Dimethyl-2,4-Dinitrobenzene	2290	200	ug/kg wet	2058		111	79.4-120			
2,4,6-Trinitrotoluene	2310	200	ug/kg wet	2000		116	74.1-139			
2,4-Dinitrotoluene	2270	200	ug/kg wet	2000		113	67.8-133			
2,6-Dinitrotoluene	2320	200	ug/kg wet	2000		116	79.5-120			
2-Amino-4,6-dinitrotoluene	2000	200	ug/kg wet	2000		100	60.5-138			
2-Nitrotoluene	1950	200	ug/kg wet	2000		97.7	77.7-117			
3,4-Dinitrotoluene	2240	200	ug/kg wet	2000		112	81.2-120			
3,5-Dinitroaniline	2160	200	ug/kg wet	2000		108	53.2-145			
3-Nitrotoluene	2100	200	ug/kg wet	2000		105	82.5-114			
4-Amino-2,6-dinitrotoluene	2130	200	ug/kg wet	2000		107	64.1-133			
4-Nitrotoluene	2110	200	ug/kg wet	2000		105	83.6-112			
Nitrobenzene	2070	200	ug/kg wet	2000		104	83.4-112			
Surrogate: 2,2'-Dinitrobiphenyl	2080		ug/kg wet	2000		104	48.3-152			
Surrogate: Nitrobenzene-d5	2020		ug/kg wet	2000		101	72-126			

**Matrix Spike (A712060-MS1)**

Source: A174145-80

Prepared: 12/18/2017 Analyzed: 12/19/2017 00:18

1,2-Dimethyl-3,4-Dinitrobenzene	1820	210	ug/kg dry	2123	ND	85.7	64.4-124			
1,2-Dimethyl-3,5-Dinitrobenzene	1960	210	ug/kg dry	2084	ND	94.0	67.8-131			
1,2-Dimethyl-3,6-Dinitrobenzene	2200	210	ug/kg dry	2084	ND	106	72.5-119			
1,2-Dimethyl-4,5-Dinitrobenzene	2000	210	ug/kg dry	2086	ND	95.9	62.8-131			
1,3,5-Trinitrobenzene	361	210	ug/kg dry	2084	ND	17.3	39.2-186			M
1,3-Dimethyl-2,4-Dinitrobenzene	2100	210	ug/kg dry	2084	ND	101	70.2-124			
1,3-Dimethyl-2,5-Dinitrobenzene	2150	210	ug/kg dry	2084	ND	103	75.8-121			
1,3-Dinitrobenzene	3470	210	ug/kg dry	2084	621	137	58.7-132			M
1,4-Dimethyl-2,3-Dinitrobenzene	2070	210	ug/kg dry	2169	ND	95.2	65.6-120			
1,4-Dimethyl-2,5-Dinitrobenzene	2190	210	ug/kg dry	2184	ND	100	69.3-127			
1,4-Dimethyl-2,6-Dinitrobenzene	2150	210	ug/kg dry	2151	ND	99.8	72.8-122			
1,5-Dimethyl-2,3-Dinitrobenzene	1890	210	ug/kg dry	2084	ND	90.8	63.4-128			
1,5-Dimethyl-2,4-Dinitrobenzene	2250	210	ug/kg dry	2144	ND	105	63.6-130			
2,4,6-Trinitrotoluene	121000	210	ug/kg dry	2084	17700	NR	26.1-194			M1
2,4-Dinitrotoluene	3260	210	ug/kg dry	2084	734	121	66.7-135			
2,6-Dinitrotoluene	2510	210	ug/kg dry	2084	257	108	66.1-127			
2-Amino-4,6-dinitrotoluene	3070	210	ug/kg dry	2084	983	100	39-140			
2-Nitrotoluene	2040	210	ug/kg dry	2084	ND	97.9	72-121			
3,4-Dinitrotoluene	2240	210	ug/kg dry	2084	ND	107	64.3-124			
3,5-Dinitroaniline	3110	210	ug/kg dry	2084	943	104	33.5-149			
3-Nitrotoluene	2190	210	ug/kg dry	2084	ND	105	78.3-118			
4-Amino-2,6-dinitrotoluene	7150	210	ug/kg dry	2084	4960	105	26.4-153			
4-Nitrotoluene	2200	210	ug/kg dry	2084	ND	106	78.6-116			
Nitrobenzene	2150	210	ug/kg dry	2084	ND	103	75.8-113			
Surrogate: 2,2'-Dinitrobiphenyl	2210		ug/kg dry	2084		106	48.3-152			
Surrogate: Nitrobenzene-d5	2110		ug/kg dry	2084		101	72-126			



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Project Manager: Cary Pooler

**Explosive Compounds by EPA Method 8270 - Quality Control**  
**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712060 - EPA 3570**

Matrix Spike Dup (A712060-MSD1)	Source: A174145-80			Prepared: 12/18/2017 Analyzed: 12/19/2017 00:44						
1,2-Dimethyl-3,4-Dinitrobenzene	1810	210	ug/kg dry	2123	ND	85.3	64.4-124	0.544	20	
1,2-Dimethyl-3,5-Dinitrobenzene	1950	210	ug/kg dry	2084	ND	93.4	67.8-131	0.657	20	
1,2-Dimethyl-3,6-Dinitrobenzene	2160	210	ug/kg dry	2084	ND	104	72.5-119	1.81	20	
1,2-Dimethyl-4,5-Dinitrobenzene	1920	210	ug/kg dry	2086	ND	92.1	62.8-131	4.02	20	
1,3,5-Trinitrobenzene	373	210	ug/kg dry	2084	ND	17.9	39.2-186	3.24	20	M
1,3-Dimethyl-2,4-Dinitrobenzene	2110	210	ug/kg dry	2084	ND	101	70.2-124	0.550	20	
1,3-Dimethyl-2,5-Dinitrobenzene	2150	210	ug/kg dry	2084	ND	103	75.8-121	0.0426	20	
1,3-Dinitrobenzene	3410	210	ug/kg dry	2084	621	134	58.7-132	2.38	20	M
1,4-Dimethyl-2,3-Dinitrobenzene	2040	210	ug/kg dry	2169	ND	94.3	65.6-120	1.01	20	
1,4-Dimethyl-2,5-Dinitrobenzene	2190	210	ug/kg dry	2184	ND	100	69.3-127	0.277	20	
1,4-Dimethyl-2,6-Dinitrobenzene	2130	210	ug/kg dry	2151	ND	98.9	72.8-122	0.965	20	
1,5-Dimethyl-2,3-Dinitrobenzene	1860	210	ug/kg dry	2084	ND	89.4	63.4-128	1.58	20	
1,5-Dimethyl-2,4-Dinitrobenzene	2230	210	ug/kg dry	2144	ND	104	63.6-130	0.804	20	
2,4,6-Trinitrotoluene	120000	210	ug/kg dry	2084	17700	NR	26.1-194	0.427	20	M1
2,4-Dinitrotoluene	3210	210	ug/kg dry	2084	734	119	66.7-135	2.06	20	
2,6-Dinitrotoluene	2470	210	ug/kg dry	2084	257	106	66.1-127	1.78	20	
2-Amino-4,6-dinitrotoluene	2930	210	ug/kg dry	2084	983	93.7	39-140	6.89	20	
2-Nitrotoluene	1980	210	ug/kg dry	2084	ND	95.1	72-121	2.95	20	
3,4-Dinitrotoluene	2170	210	ug/kg dry	2084	ND	104	64.3-124	3.02	20	
3,5-Dinitroaniline	3010	210	ug/kg dry	2084	943	99.0	33.5-149	4.88	20	
3-Nitrotoluene	2160	210	ug/kg dry	2084	ND	104	78.3-118	1.43	20	
4-Amino-2,6-dinitrotoluene	6910	210	ug/kg dry	2084	4960	93.4	26.4-153	11.5	20	
4-Nitrotoluene	2170	210	ug/kg dry	2084	ND	104	78.6-116	1.46	20	
Nitrobenzene	2080	210	ug/kg dry	2084	ND	99.8	75.8-113	3.14	20	
Surrogate: 2,2'-Dinitrobiphenyl	2150		ug/kg dry	2084		103	48.3-152			
Surrogate: Nitrobenzene-d5	2040		ug/kg dry	2084		98.1	72-126			



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**Classical Chemistry Parameters - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712024 - % Solids**

<b>Duplicate (A712024-DUP1)</b>	<b>Source: A174145-02</b>		Prepared: 12/11/2017 Analyzed: 12/13/2017 09:46							
% Moisture	23.1	0.00	% by Weight		22.4			2.90	20	

**Batch A712029 - % Solids**

<b>Duplicate (A712029-DUP1)</b>	<b>Source: A174145-31</b>		Prepared: 12/12/2017 Analyzed: 12/13/2017 09:48							
% Moisture	13.2	0.00	% by Weight		15.5			16.1	20	

**Batch A712031 - % Solids**

<b>Duplicate (A712031-DUP1)</b>	<b>Source: A174145-02</b>		Prepared: 12/13/2017 Analyzed: 12/14/2017 11:22							
% Solids	97.8	0.00	% by Weight		97.9			0.102	20	

**Batch A712037 - % Solids**

<b>Duplicate (A712037-DUP1)</b>	<b>Source: A174145-41</b>		Prepared: 12/13/2017 Analyzed: 12/14/2017 09:55							
% Moisture	19.1	0.00	% by Weight		21.6			12.3	20	

**Batch A712041 - % Solids**

<b>Duplicate (A712041-DUP1)</b>	<b>Source: A174145-21</b>		Prepared: 12/14/2017 Analyzed: 12/15/2017 11:09							
% Solids	98.2	0.00	% by Weight		98.2			0.0706	20	

**Batch A712059 - % Solids**

<b>Duplicate (A712059-DUP1)</b>	<b>Source: A174145-42</b>		Prepared: 12/15/2017 Analyzed: 12/18/2017 16:06							
% Solids	99.3	0.00	% by Weight		99.4			0.0773	20	



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 608.221.8700 Phone  
 608.221.4889 Fax

AECOM 500 West Jefferson St, Ste 1600 Louisville KY, 40202	Project: DuPont Barksdale Explosives Plant - Barksdale, WI Project Number: 60525839 Project Manager: Cary Pooler
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**Classical Chemistry Parameters - Quality Control**

**Pace Analytical - Madison**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch A712061 - % Solids**

Duplicate (A712061-DUP1)	Source: A174145-80	Prepared: 12/18/2017	Analyzed: 12/19/2017 10:14		
% Solids	96.0	0.00 % by Weight	96.0	0.0555	20



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AECOM  
500 West Jefferson St, Ste 1600  
Louisville KY, 40202

Project: DuPont Barksdale Explosives Plant - Barksdale, WI  
Project Number: 60525839  
Project Manager: Cary Pooler

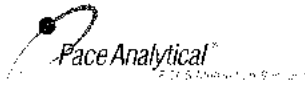
### Notes and Definitions

- X Precision for the matrix spike duplicate, laboratory control sample duplicate or lab duplicate was outside of control limits.
- S Surrogate recovery was outside of laboratory control limits due to an apparent matrix effect.
- M1 Spike recoveries were not evaluated because of elevated levels of the spiked analyte in the parent sample.
- M The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory control limits.
- HC Results may be biased high because of high continuing calibration verification (CCV).
- E1 Estimated value because of quality control sample exceedances.
- DO Diluted out.
- D Data reported from a dilution
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. If the word 'dry' does not appear after the units, results are reported on an as-is basis.
- RPD Relative Percent Difference









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# CHAIN OF CUSTODY

No. 7173

Page: of:

Project Number: <b>7911</b>		PO Number:		Lab Work Order #: <b>A174145</b>				Report To:																																																																																						
Project Name: <b>Phase II Biopilot</b>		Preservation Codes				Company: <b>AECOM</b>																																																																																								
Project Location (City, State): <b>Barkdale, WI</b>		Analyses Requested				Address 1:																																																																																								
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		<table border="1"> <tr> <th rowspan="2">Sample Description</th> <th colspan="2">Collection</th> <th rowspan="2">Matrix</th> <th rowspan="2">Total # of Containers</th> <th rowspan="2">NNOC'S</th> <th rowspan="2">% moisture</th> <th rowspan="2">pH</th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2">Comments</th> <th rowspan="2">Lab ID</th> <th rowspan="2">Lab Receipt Time</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </table>				Sample Description	Collection		Matrix	Total # of Containers	NNOC'S	% moisture	pH						Comments	Lab ID	Lab Receipt Time	Date	Time	Address 2:																																																																						
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If Rush, Report Due Date:						Invoice To:				Company:																																																																																				
Sampled By (Print): <b>Dan Barton/Nick Shortkey</b>		Address 1:				Address 2:																																																																																								
<table border="1"> <tr> <td><b>BPSB-170925-C16AH-A1 (0-0.5')</b></td> <td>9/25/17</td> <td>15:35</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>depth not included in sample name</td> <td>03</td> <td></td> </tr> <tr> <td><b>BPSB-170925-C16AH-A2 (0-0.5')</b></td> <td></td> <td>15:37</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>04</td> <td></td> </tr> <tr> <td><b>BPSB-170925-C16AH-A3 (0-0.5')</b></td> <td></td> <td>15:39</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>05</td> <td></td> </tr> <tr> <td><b>BPSB-170925-C16AH-B1 (0-0.5')</b></td> <td></td> <td>15:40</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>06</td> <td></td> </tr> <tr> <td><b>BPSB-170925-C16AH-B3 (0-0.5')</b></td> <td></td> <td>15:38</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>07</td> <td></td> </tr> </table>															<b>BPSB-170925-C16AH-A1 (0-0.5')</b>	9/25/17	15:35	S	1	X	X	X						depth not included in sample name	03		<b>BPSB-170925-C16AH-A2 (0-0.5')</b>		15:37	S	1	X	X	X							04		<b>BPSB-170925-C16AH-A3 (0-0.5')</b>		15:39	S	1	X	X	X							05		<b>BPSB-170925-C16AH-B1 (0-0.5')</b>		15:40	S	1	X	X	X							06		<b>BPSB-170925-C16AH-B3 (0-0.5')</b>		15:38	S	1	X	X	X							07	
<b>BPSB-170925-C16AH-A1 (0-0.5')</b>	9/25/17	15:35	S	1	X	X	X						depth not included in sample name	03																																																																																
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<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other		<b>Other Comments:</b> placed in site freezer following sampling		Relinquished By: <i>[Signature]</i> Date: <b>10/5/17</b>		Time: <b>1030</b>		Received By: <i>[Signature]</i> Date: <b>10/5/17</b>		Time: <b>1030</b>		Received By: <i>[Signature]</i> Date: <b>10-05-17</b>		Time: <b>1700</b>																																																																																
Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact				Shipped Via: <b>Walk in</b>		Receipt Temp: <b>on ice</b>		Thermometer #/ Exp. Date:		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N																																																																																				





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# CHAIN OF CUSTODY

No. 7176

Page: of:

Project Number: <b>7911</b>				PO Number:				Lab Work Order #: <b>A174145</b>				Report To:			
Project Name: <b>Phase II Bio Pilot</b>				Project Location (City, State): <b>Barkesdale, WI</b>				Preservation Codes				Company:			
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush				If Rush, Report Due Date:				Analyses Requested				Address 1:			
Sampled By (Print): <b>Nick Sherkey &amp; Dan Barton</b>				Matrix				Total # of Containers				Address 2:			
Sample Description				Collection Date Time		Matrix	Total # of Containers	NNOCS	PH	% Moisture	E-mail Address:				
BPSB-171002-C05-A3				10/2/17 1556		S	1	X	X	X	Invoice To:				
BPSB-171002-C05-A6				1554		S	1	X	X	X	Company:				
BPSB-171002-C05-B2				1602		S	1	X	X	X	Address 1:				
BPSB-171002-C05-B4				1558		S	1	X	X	X	Address 2:				
BPSB-171002-C05-comp				1601		S	1	X	X	X	Comments				
BPSB-171002-C06-comp				1535		S	1	X	X	X	Lab ID		Lab Receipt Time		
BPSB-171002-C06-A2				1525		S	1	X	X	X	10				
BPSB-171002-C06-A3				1527		S	1	X	X	X	11				
BPSB-171002-C06-A5				1529		S	1	X	X	X	12				
BPSB-171002-C06-A6				1531		S	1	X	X	X	13				
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water G=Other				<b>Other Comments:</b> Placed in site freezer following sampling on 10/2/17				Relinquished By: <i>[Signature]</i> Date: 10/5/17 Time: 1030				Received By: <i>[Signature]</i> Date: 10/5/17 Time: 1030			
				Relinquished By: <i>[Signature]</i> Date: 10/5/17 Time: 1700				Received By: <i>[Signature]</i> Date: 10-05-17 Time: 1700							
Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact				Shipped Via: <b>walkin</b>				Receipt Temp: <b>on ice</b>				Thermometer #/ Exp. Date: _____ Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N			



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# CHAIN OF CUSTODY

No. 7177

Page:            of:

Project Number: <b>7911</b>				PO Number:				Lab Work Order #: <b>A174145</b>				Report To:									
Project Name: <b>Phase II Bio Pilot</b>				Project Location (City, State): <b>Barksdale, WI</b>				Preservation Codes				Company:									
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush				If Rush, Report Due Date:				Analyses Requested				Address 1:									
Sampled By (Print): <b>Nick Shorkley &amp; Dan Barton</b>				Matrix				Total # of Containers				Address 2:									
Sample Description				Collection		Matrix	Total # of Containers	NNOCS	PH	% Moisture				Comments	Lab ID	Lab Receipt Time					
				Date	Time																
BPSB-17002-C06-B1				10/2/17	1526	S	1	X	X	X				15							
BPSB-17002-C06-B3					1528	S	1	X	X	X				16							
BPSB-17002-C06-B4					1530	S	1	X	X	X				17							
BPSB-171002-C06-B6					1532	S	1	X	X	X				18							
<del>BPSB-171002</del>																					
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<b>Matrix Codes</b> A=Air S=Soil W=Water O=Other								Relinquished By: <i>[Signature]</i>				Date: 10/5/17		Time: 1700		Received By: <i>[Signature]</i>		Date: 10-05-17		Time: 1700	
				Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact				Shipped Via: <b>Walk in</b>				Receipt Temp: <b>on ice</b>		Thermometer #/ Exp. Date:		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N					



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# CHAIN OF CUSTODY

No. 7178

Page: of:

Project Number: 7911				PO Number:				Lab Work Order #: <b>A174145</b>				Report To:			
Project Name: <b>Phase II BioPilot</b>				Project Location (City, State): <b>Barksdale, WI</b>				Preservation Codes				Company: <b>AECOM</b>			
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush				If Rush, Report Due Date:				Analyses Requested				Address 1:			
Sampled By (Print): <b>Nick Shurkey &amp; Dan Barton</b>				Matrix				Total # of Containers				Address 2:			
Sample Description				Collection Date		Time		Matrix				E-mail Address:			
BPSB-171002 - COMP. <sup>dg</sup> C-20				10/04/17		1118		S 1				Invoice To:			
BPSB-171002 - C-20 A-1						1114		S 1				Company:			
BPSB-171002 - C-20 B-4						1117		S 1				Address 1:			
BPSB-171002 - C-20 A-3						1116		S 1				Address 2:			
BPSB-171002 - C-20 B-2						1115		S 1				Comments			
BPSB-171002 - C-16 COMP						1020		S 1				Lab ID			
BPSB-171002 - C-16 B-1						1016		S 1				Lab Receipt Time			
BPSB-171002 - C-16 B-2						1018		S 1				19			
BPSB-171002 - C-16 A-4						1017		S 1				20			
BPSB-171002 - C-07 COMP						1515		S 1				21			
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other				<b>Other Comments:</b> placed in site freezer following sampling (AS)				Relinquished By: <i>[Signature]</i> Date: 10/5/17 Time: 1030				Received By: <i>[Signature]</i> Date: 10/5/17 Time: 1030			
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# CHAIN OF CUSTODY

No. 7179

Page: of:

Project Number: <b>7911</b>		PO Number:		Lab Work Order #: <b>A174145</b>				Report To:																																																																																																																										
Project Name: <b>PHASE II BIO PLOT</b>		Preservation Codes				Company:																																																																																																																												
Project Location (City, State): <b>BARKSDALE, WI</b>		Analyses Requested				Address 1:																																																																																																																												
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Matrix</th> <th>Total # of Containers</th> <th>ANOCs</th> <th>PH</th> <th>% MOISTURE</th> </tr> </thead> <tbody> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> <tr><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td></tr> </tbody> </table>				Matrix	Total # of Containers	ANOCs	PH	% MOISTURE	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	S	1	x	x	x	Address 2:																																																											
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If Rush, Report Due Date:		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample Description</th> <th>Collection Date</th> <th>Collection Time</th> <th>Matrix</th> <th>Total # of Containers</th> <th>ANOCs</th> <th>PH</th> <th>% MOISTURE</th> <th>Comments</th> <th>Lab ID</th> <th>Lab Receipt Time</th> </tr> </thead> <tbody> <tr><td>BPSB-171002-C21-A1</td><td>10/02/17</td><td>1052 <del>0948</del></td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>23</td><td></td></tr> <tr><td>BPSB-171002-C21-A2</td><td></td><td>1054</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>24</td><td></td></tr> <tr><td>BPSB-171002-C21-A3</td><td></td><td>1056</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>25</td><td></td></tr> <tr><td>BPSB-171002-C21-A4</td><td></td><td>1058</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>26</td><td></td></tr> <tr><td>BPSB-171002-C21-B1</td><td></td><td>1051</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>27</td><td></td></tr> <tr><td>BPSB-171002-C21-B2</td><td></td><td>1053</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>28</td><td></td></tr> <tr><td>BPSB-171002-C21-B3</td><td></td><td>1055</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>29</td><td></td></tr> <tr><td>BPSB-171002-C21-B4</td><td></td><td>1057</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>30</td><td></td></tr> <tr><td>BPSB-171002-C21-A-COMP</td><td></td><td>1100</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>31</td><td></td></tr> <tr><td>BPSB-171002-C21-B-COMP</td><td></td><td>1059</td><td>S</td><td>1</td><td>x</td><td>x</td><td>x</td><td></td><td>32</td><td></td></tr> </tbody> </table>				Sample Description	Collection Date	Collection Time	Matrix	Total # of Containers	ANOCs	PH	% MOISTURE	Comments	Lab ID	Lab Receipt Time	BPSB-171002-C21-A1	10/02/17	1052 <del>0948</del>	S	1	x	x	x		23		BPSB-171002-C21-A2		1054	S	1	x	x	x		24		BPSB-171002-C21-A3		1056	S	1	x	x	x		25		BPSB-171002-C21-A4		1058	S	1	x	x	x		26		BPSB-171002-C21-B1		1051	S	1	x	x	x		27		BPSB-171002-C21-B2		1053	S	1	x	x	x		28		BPSB-171002-C21-B3		1055	S	1	x	x	x		29		BPSB-171002-C21-B4		1057	S	1	x	x	x		30		BPSB-171002-C21-A-COMP		1100	S	1	x	x	x		31		BPSB-171002-C21-B-COMP		1059	S	1	x	x	x		32		Invoice To:			
Sample Description	Collection Date					Collection Time	Matrix	Total # of Containers	ANOCs	PH	% MOISTURE	Comments	Lab ID	Lab Receipt Time																																																																																																																				
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		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Shipped Via: <b>Walk in</b>		Receipt Temp: <b>ONICE</b>		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N																																																																																																																										





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# CHAIN OF CUSTODY

No. 7175

Page:            of:

Project Number: <b>7911</b>		PO Number:		Lab Work Order #: <b>A174145</b>				Report To:			
Project Name: <b>Phase II Bio Pilot</b>				Preservation Codes				Company: <b>AECOM</b>			
Project Location (City, State): <b>Barkdale, WI</b>				Analyses Requested				Address 1:			
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush								Address 2:			
If Rush, Report Due Date:								E-mail Address:			
Sampled By (Print): <b>Nick Shorley &amp; Dan Barton</b>								Invoice To:			
								Company:			
								Address 1:			
								Address 2:			
								Comments			
								Lab ID			
								Lab Receipt Time			
Sample Description		Collection Date    Time		Matrix	Total # of Containers	NNOG	pH	% Moist			
BPSB-171002-C-25 A-1		10/02/17 1136		S	1	X	X	X	33		
BPSB-171002-C-25 A-2		1138		S	1	X	X	X	34		
BPSB-171002-C-25 A-3		1140		S	1	X	X	X	35		
BPSB-171002-C-25 A-4		1142		S	1	X	X	X	36		
BPSB-171002-C-25 B-1		1135		S	1	X	X	X	37		
BPSB-171002-C-25 B-2		1137		S	1	X	X	X	38		
BPSB-171002-C-25 B-3		1139		S	1	X	X	X	39		
BPSB-171002-C-25 B-4		1141		S	1	X	X	X	40		
BPSB-171002-C-25 COMP		1146		S	1	X	X	X	41		
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other		<b>Other Comments:</b> placed in site freezer following sampling (3)		Relinquished By: <i>Nick Shorley</i> Date: 10/5/17		Relinquished By: <i>D. Barton</i> Date: 10/5/17		Received By: <i>[Signature]</i> Date: 10/5/17		Received By: <i>[Signature]</i> Date: 10/5/17	
		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Shipped Via: <b>walkin</b>		Receipt Temp: <b>on ice</b>		Thermometer #/ Exp. Date:		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N	



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# CHAIN OF CUSTODY

No. 7174

Page: of:

Project Number: <u>7111</u> PO Number: _____				Lab Work Order #: <u>A174145</u>				Report To: _____				
Project Name: <u>Phase II Bio Pilot</u>				Preservation Codes				Company: _____				
Project Location (City, State): <u>Barkusdale, WI</u>				Analyses Requested				Address 1: _____				
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush								Address 2: _____				
If Rush, Report Due Date: _____								E-mail Address: _____				
Sampled By (Print): <u>Nick Sharkey &amp; Dan Berken</u>								Invoice To: _____				
								Company: _____				
								Address 1: _____				
								Address 2: _____				
Sample Description	Collection		Matrix	Total # of Containers	NADCS	P.H.	Biomass			Comments	Lab ID	Lab Receipt Time
	Date	Time										
BPSB-171002-C26-A1	10/2/17	0948	S	1	X	X	X				42	
BPSB-171002-C26-A2		0950	S	1	X	X	X				43	
BPSB-171002-C26-A3		0952	S	1	X	X	X				44	
BPSB-171002-C26-A4		0954	S	1	X	X	X				45	
BPSB-171002-C26-B1		0949	S	1	X	X	X				46	
BPSB-171002-C26-B2		0951	S	1	X	X	X				47	
BPSB-171002-C26-B3		0953	S	1	X	X	X				48	
BPSB-171002-C26-B4		0955	S	1	X	X	X				49	
BPSB-171002-C26-COMP	✓	0956	S	1	X	X	X				50	

<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate)  <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other	<b>Other Comments:</b> placed @ site receive following sampling NS	Relinquished By: <u>Nick Sharkey</u>	Date: <u>10/5/17</u>	Time: <u>1030</u>	Received By: <u>[Signature]</u>	Date: <u>10/5/17</u>	Time: <u>1030</u>
		Relinquished By: <u>[Signature]</u>	Date: <u>10/5/17</u>	Time: <u>1700</u>	Received By: <u>[Signature]</u>	Date: <u>10/05/17</u>	Time: <u>1700</u>
		Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact	Shipped Via: <u>Walk in</u>	Receipt Temp: <u>on ice</u>	Thermometer #/ Exp. Date:	Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N	



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# CHAIN OF CUSTODY

No. 7182

Page: of:

Project Number: <b>7911</b>				PO Number:				Lab Work Order #: <b>A174145</b>				Report To:									
Project Name: <b>Phase II Bio Pilot</b>				Project Location (City, State): <b>Barkdale, WI</b>				Preservation Codes				Company:									
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush				If Rush, Report Due Date:				Analyses Requested				Address 1:									
Sampled By (Print): <b>Nick Shukung</b>				Matrix				Total # of Containers				Address 2:									
Sample Description				Collection		Matrix				Total # of Containers				Comments				Lab ID		Lab Receipt Time	
				Date	Time													Date		Time	
BPSB-171003-C24-A1				10/3/17	1500	S	1	X	X	X	nick shukung				51						
BPSB-171003-C24-A2					1505	S	1	X	X	52											
BPSB-171003-C24-A3					1510	S	1	X	X	53											
BPSB-171003-C24-A4					1515	S	1	X	X	54											
BPSB-171003-C24-B1					1535	S	1	X	X	55											
BPSB-171003-C24-B2					1530	S	1	X	X	56											
BPSB-171003-C24-B3					1525	S	1	X	X	57											
BPSB-171003-C24-B4					1520	S	1	X	X	58											
BPSB-171003-C24-COMP j				✓	1545	S	1	X	X	59					time on container 15:40						
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other				<b>Other Comments:</b> placed in site freezer following sampling (NS)				Relinquished By: <i>[Signature]</i> Date: 10/4/17 Time: 03:00 Relinquished By: <i>[Signature]</i> Date: 10/5/17 Time: 1700				Received By: <i>[Signature]</i> Date: 10/5/17 Time: 1030 Received By: <i>[Signature]</i> Date: 10-05-17 Time: 1700									
Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact				Shipped Via: <b>Walkin</b>				Receipt Temp: <b>Onice</b>				Thermometer #/ Exp. Date:				Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N					



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# CHAIN OF CUSTODY

No. 7185

Page: of:

Project Number: <b>7911</b> PO Number:				Lab Work Order #: <b>A174145</b>				Report To:												
Project Name: <b>Phase II Bio Pilot</b>				Preservation Codes				Company: <b>AECOM</b>												
Project Location (City, State): <b>Barksdale, WI</b>				Analyses Requested				Address 1:												
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush				<table border="1" style="width:100%; text-align: center;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Matrix</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Total # of Containers</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">NNOC</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">p/moist</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">pH</td> </tr> </table>				Matrix	Total # of Containers	NNOC	p/moist	pH	Address 2:							
Matrix	Total # of Containers	NNOC	p/moist					pH												
If Rush, Report Due Date:				E-mail Address:				Invoice To:												
Sampled By (Print): <b>Dan Barton &amp; Nick Shorkey</b>				Company:				Address 1:												
Sample Description				Collection		<table border="1" style="width:100%; text-align: center;"> <tr> <td>Date</td> <td>Time</td> <td>Matrix</td> <td>Total # of Containers</td> <td>NNOC</td> <td>p/moist</td> <td>pH</td> </tr> </table>				Date	Time	Matrix	Total # of Containers	NNOC	p/moist	pH	Address 2:			
				Date	Time					Matrix	Total # of Containers	NNOC	p/moist	pH						
Date		Time		Comments				Lab ID	Lab Receipt Time											
BPSB-171004-C-12 A-1				10/4/17	1649	S	1	X	X	X		60								
BPSB-171004-C-12 A-2					1647	S	1	X	X	X		61								
BPSB-171004-C-12 A-3					1642	S	1	X	X	X		62								
BPSB-171004-C-12 A-4					1643	S	1	X	X	X		63								
BPSB-171004-C-12 B-1					1650	S	1	X	X	X		64								
BPSB-171004-C-12 B-2					1648	S	1	X	X	X		65								
BPSB-171004-C-12 B-3					1646	S	1	X	X	X		66								
BPSB-171004-C-12 B-4					1644	S	1	X	X	X		67								
BPSB-171004-C-12 COMP					1653	S	1	X	X	X		68								
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate) <b>Matrix Codes</b> A=Air S=Soil W=Water O=Other				<b>Other Comments:</b> placed in site freeze & sub-sample sampling				Relinquished By: <i>[Signature]</i> Date: 10/5/17		Received By: <i>[Signature]</i> Date: 10/5/17		Relinquished By: <i>[Signature]</i> Date: 10/5/17		Received By: <i>[Signature]</i> Date: 10-05-17						
Custody Seal: <input type="checkbox"/> NA <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact				Shipped Via: <b>Walk in</b>		Receipt Temp: <b>ONICE</b>		Thermometer #/ Exp. Date:		Temp Blank: <input type="checkbox"/> Y <input type="checkbox"/> N										



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# CHAIN OF CUSTODY

No. 7184

Page: of:

Project Number: <u>7911 4709</u> PO Number:		Lab Work Order #: <u>A174145</u>		Report To:																																																																																																						
Project Name: <u>Phase II Bio Pilot</u>		Preservation Codes		Company: <u>AECOM</u>																																																																																																						
Project Location (City, State): <u>Barkside, WI</u>		Analyses Requested		Address 1:																																																																																																						
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:10%;">Matrix</th> <th style="width:10%;">Total # of Containers</th> <th style="width:10%;">NNOC</th> <th style="width:10%;">% moisture</th> <th style="width:10%;">pH</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		Matrix	Total # of Containers	NNOC	% moisture	pH						Address 2:																																																																																												
Matrix	Total # of Containers			NNOC	% moisture	pH																																																																																																				
If Rush, Report Due Date:				Invoice To:		Company:																																																																																																				
Sampled By (Print): <u>Dan Barton</u>		Address 1:		Address 2:																																																																																																						
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sample Description</th> <th colspan="2">Collection</th> <th rowspan="2">Matrix</th> <th rowspan="2">Total # of Containers</th> <th rowspan="2">NNOC</th> <th rowspan="2">% moisture</th> <th rowspan="2">pH</th> <th rowspan="2">Comments</th> <th rowspan="2">Lab ID</th> <th rowspan="2">Lab Receipt Time</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>BPSB-171004-C27-A1</td> <td>10/4/17</td> <td>14:30</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>69</td> <td></td> </tr> <tr> <td>BPSB-171004-C27-A2</td> <td></td> <td>14:35</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>70</td> <td></td> </tr> <tr> <td>BPSB-171004-C27-A3</td> <td></td> <td>14:40</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>71</td> <td></td> </tr> <tr> <td>BPSB-171004-C27-A4</td> <td></td> <td>14:45</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>72</td> <td></td> </tr> <tr> <td>BPSB-171004-C27-B1</td> <td></td> <td>14:50</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>73</td> <td></td> </tr> <tr> <td>BPSB-171004-C27-B2</td> <td></td> <td>15:00</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>74</td> <td></td> </tr> <tr> <td>BPSB-171004-C27-B3</td> <td></td> <td>14:55</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>75</td> <td></td> </tr> <tr> <td>BPSB-171004-C27-B4</td> <td></td> <td>14:50</td> <td>S</td> <td>1</td> <td>X</td> <td>X</td> <td>Y</td> <td></td> <td>76</td> <td></td> </tr> </tbody> </table>		Sample Description	Collection		Matrix	Total # of Containers	NNOC	% moisture	pH	Comments	Lab ID	Lab Receipt Time	Date	Time	BPSB-171004-C27-A1	10/4/17	14:30	S	1	X	X	X		69		BPSB-171004-C27-A2		14:35	S	1	X	X	X		70		BPSB-171004-C27-A3		14:40	S	1	X	X	X		71		BPSB-171004-C27-A4		14:45	S	1	X	X	X		72		BPSB-171004-C27-B1		14:50	S	1	X	X	X		73		BPSB-171004-C27-B2		15:00	S	1	X	X	X		74		BPSB-171004-C27-B3		14:55	S	1	X	X	X		75		BPSB-171004-C27-B4		14:50	S	1	X	X	Y		76		Address 1:		Address 2:	
Sample Description	Collection		Matrix	Total # of Containers									NNOC	% moisture	pH	Comments	Lab ID	Lab Receipt Time																																																																																								
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<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate)		<b>Other Comments:</b> <u>Place in site freeze following sampling</u>		Relinquished By: <u>[Signature]</u> Date: <u>10/5/17</u> Time: <u>1030</u>																																																																																																						
<b>Matrix Codes</b> A=Air S=Soil W=Water O=Other		Relinquished By: <u>[Signature]</u> Date: <u>10/5/17</u> Time: <u>1700</u>		Received By: <u>[Signature]</u> Date: <u>10/5/17</u> Time: <u>1030</u>																																																																																																						
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Pace Analytical - ECCS Division  
 2525 Advance Road  
 Madison, WI 53718  
 608-221-8700 (phone)  
 608-221-4889 (fax)

# CHAIN OF CUSTODY

No. 7170

Page: of:

Project Number: <b>7911</b>		PO Number:		Lab Work Order #: <b>A174145</b>				Report To: <b>CARY POOLER + SHARON NORDSTROM</b>																					
Project Name: <b>PHASE II Biopilot</b>		Preservation Codes				Company: <b>AECOM</b>																							
Project Location (City, State): <b>BARRSDALE, WI</b>		Analyses Requested				Address 1: <b>SABRE BLDG</b>																							
Turn Around (check one): <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">Matrix</td> <td style="width:5%;">Total # of Containers</td> <td style="width:5%;">NNOCS</td> <td style="width:5%;">FH</td> <td style="width:5%;">% MOISTURE</td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> <td style="width:5%;"></td> </tr> <tr> <td></td> <td></td> <td style="text-align:center;">X</td> <td style="text-align:center;">X</td> <td style="text-align:center;">X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				Matrix	Total # of Containers	NNOCS	FH	% MOISTURE								X	X	X						Address 2: <b>300 OULETMAN, NEWARK, DE</b>			
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						X	X	X																					
If Rush, Report Due Date:		E-mail Address:				Invoice To:																							
Sampled By (Print): <b>ERIC SCHMIDT</b>		Company:				Address 1:																							
		Address 2:																											
Sample Description		Collection		Matrix	Total # of Containers	NNOCS	FH	% MOISTURE				Comments	Lab ID	Lab Receipt Time															
		Date	Time																										
<b>BPSB-171129-C31</b>		<b>11/29/17</b>	<b>10:30</b>	<b>S</b>	<b>1</b>	<b>X</b>	<b>X</b>	<b>X</b>					<b>80</b>																
<b>Preservation Codes</b> A=None B=HCL C=H <sub>2</sub> SO <sub>4</sub> D=HNO <sub>3</sub> E=EnCore F=Methanol G=NaOH O=Other (Indicate)		<b>Other Comments:</b>		Relinquished By: <i>[Signature]</i> Relinquished By:		Date: <b>11/30/17</b> Date:		Time: <b>12:16</b> Time:		Received By: <i>[Signature]</i> Received By:		Date: <b>11/30/17</b> Date:		Time: <b>12:16</b> Time:															
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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Denver  
4955 Yarrow Street  
Arvada, CO 80002  
Tel: (303)736-0100

TestAmerica Job ID: 280-96404-1  
Client Project/Site: BAR - pH

**For:**

Chemours Company FC, LLC The  
c/o AECOM  
Sabre Building, Suite 300  
4051 Ogletown Road  
Newark, Delaware 19713

Attn: Sharon Nordstrom



Authorized for release by:  
5/9/2017 12:34:56 PM

Michelle Johnston, Project Manager II  
(303)736-0110  
[michelle.johnston@testamericainc.com](mailto:michelle.johnston@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

**Job ID: 280-96404-1**

**Laboratory: TestAmerica Denver**

## Narrative

### CASE NARRATIVE

**Client: The Chemours Company FC, LLC**

**Project: BAR - pH**

**Report Number: 280-96404-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Throughout this report the MDL is equivalent to the LOD and the RL is equivalent to the LOQ.

#### **Sample Arrival and Receipt**

The samples were received on 4/27/2017 8:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C. No anomalies were observed during sample receipt.

#### **Corrosivity (pH)**

Samples BPSB-170425-C16AH (280-96404-1), BPSB-170425-C25AH (280-96404-2), BPSB-170425-C24AH (280-96404-3), BPSB-170425-C26AH (280-96404-4) and BPSB-170425-C12AH (280-96404-5) were analyzed for pH in accordance with EPA SW-846 Method 9045C. The samples were leached on 05/01/2017 and analyzed on 05/02/2017.

Corrosivity (pH) analysis should be performed in the field immediately following sampling; therefore, data have been flagged "HF".

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

## Client Sample ID: BPSB-170425-C16AH

## Lab Sample ID: 280-96404-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	8.7	HF	0.1	0.1	SU	1		9045C	Soluble

## Client Sample ID: BPSB-170425-C25AH

## Lab Sample ID: 280-96404-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	9.3	HF	0.1	0.1	SU	1		9045C	Soluble

## Client Sample ID: BPSB-170425-C24AH

## Lab Sample ID: 280-96404-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	10.5	HF	0.1	0.1	SU	1		9045C	Soluble

## Client Sample ID: BPSB-170425-C26AH

## Lab Sample ID: 280-96404-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	12.1	HF	0.1	0.1	SU	1		9045C	Soluble

## Client Sample ID: BPSB-170425-C12AH

## Lab Sample ID: 280-96404-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH adj. to 25 deg C	12.6	HF	0.1	0.1	SU	1		9045C	Soluble

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

# Method Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

---

Method	Method Description	Protocol	Laboratory
9045C	pH	SW846	TAL DEN

---

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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# Sample Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-96404-1	BPSB-170425-C16AH	Solid	04/25/17 14:45	04/27/17 08:55
280-96404-2	BPSB-170425-C25AH	Solid	04/25/17 15:00	04/27/17 08:55
280-96404-3	BPSB-170425-C24AH	Solid	04/25/17 15:15	04/27/17 08:55
280-96404-4	BPSB-170425-C26AH	Solid	04/25/17 15:30	04/27/17 08:55
280-96404-5	BPSB-170425-C12AH	Solid	04/25/17 15:45	04/27/17 08:55

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

**Client Sample ID: BPSB-170425-C16AH**

**Lab Sample ID: 280-96404-1**

**Date Collected: 04/25/17 14:45**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	8.7	HF	0.1	0.1	SU			05/02/17 16:31	1

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

**Client Sample ID: BPSB-170425-C25AH**

**Lab Sample ID: 280-96404-2**

**Date Collected: 04/25/17 15:00**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	9.3	HF	0.1	0.1	SU			05/02/17 16:31	1

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

**Client Sample ID: BPSB-170425-C24AH**

**Lab Sample ID: 280-96404-3**

**Date Collected: 04/25/17 15:15**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	10.5	HF	0.1	0.1	SU			05/02/17 16:31	1

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

**Client Sample ID: BPSB-170425-C26AH**

**Lab Sample ID: 280-96404-4**

**Date Collected: 04/25/17 15:30**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	12.1	HF	0.1	0.1	SU			05/02/17 16:31	1

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

**Client Sample ID: BPSB-170425-C12AH**

**Lab Sample ID: 280-96404-5**

**Date Collected: 04/25/17 15:45**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH adj. to 25 deg C	12.6	HF	0.1	0.1	SU			05/02/17 16:31	1

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# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

## Method: 9045C - pH

Lab Sample ID: LCS 280-371674/1-A  
Matrix: Solid  
Analysis Batch: 371908

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH adj. to 25 deg C	7.00	7.1		SU		101	97 - 103

Lab Sample ID: LCS 280-371674/22-A  
Matrix: Solid  
Analysis Batch: 371908

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH adj. to 25 deg C	7.00	7.0		SU		100	97 - 103

Lab Sample ID: 280-96404-5 DU  
Matrix: Solid  
Analysis Batch: 371908

Client Sample ID: BPSB-170425-C12AH  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH adj. to 25 deg C	12.6	HF	12.6		SU		0.2	5

# QC Association Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

## General Chemistry

### Leach Batch: 371674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-96404-1	BPSB-170425-C16AH	Soluble	Solid	DI Leach	
280-96404-2	BPSB-170425-C25AH	Soluble	Solid	DI Leach	
280-96404-3	BPSB-170425-C24AH	Soluble	Solid	DI Leach	
280-96404-4	BPSB-170425-C26AH	Soluble	Solid	DI Leach	
280-96404-5	BPSB-170425-C12AH	Soluble	Solid	DI Leach	
LCS 280-371674/1-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 280-371674/22-A	Lab Control Sample	Soluble	Solid	DI Leach	
280-96404-5 DU	BPSB-170425-C12AH	Soluble	Solid	DI Leach	

### Analysis Batch: 371908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-96404-1	BPSB-170425-C16AH	Soluble	Solid	9045C	371674
280-96404-2	BPSB-170425-C25AH	Soluble	Solid	9045C	371674
280-96404-3	BPSB-170425-C24AH	Soluble	Solid	9045C	371674
280-96404-4	BPSB-170425-C26AH	Soluble	Solid	9045C	371674
280-96404-5	BPSB-170425-C12AH	Soluble	Solid	9045C	371674
LCS 280-371674/1-A	Lab Control Sample	Soluble	Solid	9045C	371674
LCS 280-371674/22-A	Lab Control Sample	Soluble	Solid	9045C	371674
280-96404-5 DU	BPSB-170425-C12AH	Soluble	Solid	9045C	371674

# Lab Chronicle

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

**Client Sample ID: BPSB-170425-C16AH**

**Lab Sample ID: 280-96404-1**

**Date Collected: 04/25/17 14:45**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			41.18 g	40 mL	371674	05/01/17 13:23	A1D	TAL DEN
Soluble	Analysis	9045C		1	1 mL	1 mL	371908	05/02/17 16:31	A1D	TAL DEN

**Client Sample ID: BPSB-170425-C25AH**

**Lab Sample ID: 280-96404-2**

**Date Collected: 04/25/17 15:00**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			41.30 g	40 mL	371674	05/01/17 13:23	A1D	TAL DEN
Soluble	Analysis	9045C		1	1 mL	1 mL	371908	05/02/17 16:31	A1D	TAL DEN

**Client Sample ID: BPSB-170425-C24AH**

**Lab Sample ID: 280-96404-3**

**Date Collected: 04/25/17 15:15**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			40.06 g	40 mL	371674	05/01/17 13:23	A1D	TAL DEN
Soluble	Analysis	9045C		1	1 mL	1 mL	371908	05/02/17 16:31	A1D	TAL DEN

**Client Sample ID: BPSB-170425-C26AH**

**Lab Sample ID: 280-96404-4**

**Date Collected: 04/25/17 15:30**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			40.83 g	40 mL	371674	05/01/17 13:23	A1D	TAL DEN
Soluble	Analysis	9045C		1	1 mL	1 mL	371908	05/02/17 16:31	A1D	TAL DEN

**Client Sample ID: BPSB-170425-C12AH**

**Lab Sample ID: 280-96404-5**

**Date Collected: 04/25/17 15:45**

**Matrix: Solid**

**Date Received: 04/27/17 08:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			40.37 g	40 mL	371674	05/01/17 13:23	A1D	TAL DEN
Soluble	Analysis	9045C		1	1 mL	1 mL	371908	05/02/17 16:31	A1D	TAL DEN

**Laboratory References:**

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

# Accreditation/Certification Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR - pH

TestAmerica Job ID: 280-96404-1

## Laboratory: TestAmerica Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999615430	08-31-17

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### Chain of Custody Record

<b>Client Information</b>		Lab PM: Johnston, Michelle A		Carrier Tracking No(s): FEDEX		COC No: 170425-2	
Client Contact: Ms. Sharon Nordstrom		E-Mail: michelle.johnston@lestamericainc.com		Phone: 920-621-3878		Page: 1 of 1	
Company: Chermours Company FC, LLC The		Address: c/o AECOM Sabre Building 4051 Ogletown Road, Suite 300		Job #: 60525839		Preservation Codes:	
City: Newark		State, Zip: DE, 19713		PO #: LBIO-664219267-77201000-WH06-508001		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
Phone: 302-781-5936		Email: sharon.nordstrom@aecom.com		Project #: 28003388		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA	
Project Name: BAR-GW-Sampling-017 pH		Site: BARKSDALE, WI		Due Date Requested:		Other:	
TAT Requested (days): STANDARD		Sample Date Requested:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)	
Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=soil, D=dust, A=air)	
Sample Identification		Sample Date		Sample Time		Matrix	
BPSB-170425-C16AH		4/25/17		14:45		C SOIL	
BPSB-170425-C25AH		↓		15:00		C ↓	
BPSB-170425-C24AH		↓		15:15		C ↓	
BPSB-170425-C26AH		↓		15:30		C ↓	
BPSB-170425-C12AH		↓		15:45		C ↓	
Total Number of Containers		8321A - full Dupont list + DNT Isomers + TNX		8270C - DNX Isomers		8260B - VOCs	
Special Instructions/Note:		N N A N		X X X X X		H C	
Barcode		280-96404 Chain of Custody					
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Deliverable Requested: I, II, III, IV, Other (specify)		Date: 3/13/17		Time: 11:45		Method of Shipment:	
Relinquished by: [Signature]		Date/Time: 4/26/17 11:00		Company: AECON		Received by: [Signature]	
Relinquished by: [Signature]		Date/Time: 4/27/17 08:58		Company: [Signature]		Received by: [Signature]	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: Custody Seal No.:		0.3, 1R#7, -0.0, 4/27/17		GD		Cooler Temperature(s) °C and Other Remarks:	





## Login Sample Receipt Checklist

Client: Chemours Company FC, LLC The

Job Number: 280-96404-1

**Login Number: 96404**

**List Number: 1**

**Creator: Parrott, Gregg S**

**List Source: TestAmerica Denver**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Denver

4955 Yarrow Street

Arvada, CO 80002

Tel: (303)736-0100

TestAmerica Job ID: 280-98726-1

Client Project/Site: BAR-2017 Bio-pilot Program

Revision: 1

For:

Chemours Company FC, LLC The

c/o AECOM

Sabre Building, Suite 300

4051 Ogletown Road

Newark, Delaware 19713

Attn: Sharon Nordstrom



Authorized for release by:

8/29/2017 4:46:24 PM

Michelle Johnston, Project Manager II

(303)736-0110

[michelle.johnston@testamericainc.com](mailto:michelle.johnston@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.

### LCMS

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
♠	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Job ID: 280-98726-1**

**Laboratory: TestAmerica Denver**

## Narrative

### CASE NARRATIVE

**Client: The Chemours Company FC, LLC**  
**Project: BAR-2017 Bio-pilot Program**  
**Report Number: 280-98726-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Throughout this report the MDL is equivalent to the LOD and the RL is equivalent to the LOQ.

#### Revision - 8/29/2017

The 8321A data for all samples were revised to report the lowest dilution possible for all analytes.

#### Sample Receipt

The samples were received on 6/27/2017 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

#### Receipt Exceptions

All samples were received at the laboratory past holding time.

The laboratory logged percent moisture analysis for each sample to report the requested analyses on a dry weight basis per instructions received from the client on 6/26/2017 prior to sample receipt. It can be noted that the chain of custody requests samples be reported on a dry weight basis. The client was contacted and asked to confirm on 6/27/2017. In accordance with the client's instructions provided on 6/28/2017, moisture will be performed on all samples if sufficient volumes were received but the results will be reported as received and not dry weight corrected.

No other anomalies were observed during sample receipt.

#### Semivolatiles - Method 8270C DNX

Samples BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7) and BPSB-170601-C21-B4 (280-98726-8) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 07/21/2017 and analyzed on 07/27/2017.

The following samples were extracted outside of holding time as the samples were received at the laboratory already expired: BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7) and BPSB-170601-C21-B4 (280-98726-8).

Elevated reporting limits are provided for the following samples as limited sample volumes were received at the laboratory: BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-B1 (280-98726-5) and BPSB-170601-C21-B4 (280-98726-8).

The method required MS/MSD could not be performed for prep batch 280-381559, due to insufficient sample volume. Method precision and accuracy have been verified by the acceptable LCS/LCSD analyses data.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Case Narrative

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Job ID: 280-98726-1 (Continued)

### Laboratory: TestAmerica Denver (Continued)

#### Explosives - Method 8321A

Samples BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7) and BPSB-170601-C21-B4 (280-98726-8) were analyzed for Explosives (dry weight) in accordance with SW846 8321A. The samples were leached on 07/06/2017 and 07/19/2017, prepared on 07/06/2017 and 07/19/2017 and analyzed on 07/11/2017 and 07/21/2017.

The following samples were extracted outside of holding time as the samples were received at the laboratory already expired: BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7), BPSB-170601-C21-B4 (280-98726-8), BPSB-170601-C21-B4 (280-98726-8[MS]) and BPSB-170601-C21-B4 (280-98726-8[MSD]). In addition, these samples were re-extracted past holding time due to high levels of target analytes.

A reduced aliquot size was used for the preparation of samples BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7), BPSB-170601-C21-B4 (280-98726-8), BPSB-170601-C21-B4 (280-98726-8[MS]) and BPSB-170601-C21-B4 (280-98726-8[MSD]), due to the high concentrations of target analytes. The reporting limits have been elevated accordingly.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high constituent concentrations and/or analytes present above the calibration range, samples BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7), BPSB-170601-C21-B4 (280-98726-8), BPSB-170601-C21-B4 (280-98726-8[MS]) and BPSB-170601-C21-B4 (280-98726-8[MSD]) had to be analyzed at dilutions. Surrogate recoveries could not be accurately calculated for several of the diluted analyses because the extracts were diluted beyond the ability to quantitate recoveries. The reporting limits have been adjusted relative to the dilutions required.

Surrogate recoveries for the following samples were outside control limits: BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7), BPSB-170601-C21-B4 (280-98726-8), BPSB-170601-C21-B4 (280-98726-8[MS]) and BPSB-170601-C21-B4 (280-98726-8[MSD]). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. The associated Method Blank and LCS were in control.

The MS/MSD associated with prep batch 280-379995 was performed on sample BPSB-170601-C21-B4 (280-98726-8). The MS/MSD exhibited spike compound recoveries, RPD data and surrogate recoveries outside the QC control limits for several analytes. In addition, the MS/MSD spike compound recoveries and RPD data could not be reliably calculated for 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene and 4-Amino-2,6-dinitrotoluene because the sample concentrations were greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The MS/MSD associated with prep batch 280-381319 was performed on sample BPSB-170601-C21-B4 (280-98726-8). The MS/MSD exhibited a spike compound recovery below the QC control limits for 2,4,6-Trinitro-3-xylene. In addition, the MS/MSD spike compound recoveries and RPD data could not be reliably calculated for 2,4,6-Trinitrotoluene because the sample concentration was greater than four times the spike amounts. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The continuing calibration verification (CCV) associated with batch 280-380707 recovered outside of control limit for 2,4,6-Trinitrotoluene, PETN and Nitroglycerin due to excessive levels of target analytes. The associated samples were re-extracted and reanalyzed.

The continuing calibration verification (CCV) associated with batch 280-381709 recovered above the upper control limit for Nitrobenzene (+56.8%D). The samples associated with this CCV were non-detect for the affected analyte; therefore, corrective action was not performed.

No other analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Case Narrative

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

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## Job ID: 280-98726-1 (Continued)

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### Laboratory: TestAmerica Denver (Continued)

#### Percent Moisture

Samples BPSB-170601-C21-A1 (280-98726-1), BPSB-170601-C21-A2 (280-98726-2), BPSB-170601-C21-A3 (280-98726-3), BPSB-170601-C21-A4 (280-98726-4), BPSB-170601-C21-B1 (280-98726-5), BPSB-170601-C21-B2 (280-98726-6), BPSB-170601-C21-B3 (280-98726-7) and BPSB-170601-C21-B4 (280-98726-8) were analyzed for percent solids in accordance with ASTM D2216-90. The samples were analyzed on 06/27/2017.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Client Sample ID: BPSB-170601-C21-A1

## Lab Sample ID: 280-98726-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dinitrobenzene	1000	H	98		ug/Kg	1		8321A	Total/NA
2,6-Dinitrotoluene	180	H	98		ug/Kg	1		8321A	Total/NA
3,5-Dinitrotoluene	220	H	98		ug/Kg	1		8321A	Total/NA
Nitrobenzene	120	H	98		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	4100000	H F2	1000000		ug/Kg	100		8321A	Total/NA

## Client Sample ID: BPSB-170601-C21-A2

## Lab Sample ID: 280-98726-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dinitrobenzene	880	H	94		ug/Kg	1		8321A	Total/NA
2,6-Dinitrotoluene	190	H	94		ug/Kg	1		8321A	Total/NA
Nitrobenzene	97	H	94		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	4800000	H	910000		ug/Kg	100		8321A	Total/NA

## Client Sample ID: BPSB-170601-C21-A3

## Lab Sample ID: 280-98726-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	1000	H	100		ug/Kg	1		8321A	Total/NA
2,6-Dinitrotoluene	240	H	100		ug/Kg	1		8321A	Total/NA
3,5-Dinitrotoluene	260	H	100		ug/Kg	1		8321A	Total/NA
Nitrobenzene	110	H	100		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	4100000	H	1000000		ug/Kg	100		8321A	Total/NA

## Client Sample ID: BPSB-170601-C21-A4

## Lab Sample ID: 280-98726-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	250	H	100		ug/Kg	1		8321A	Total/NA
3,5-Dinitrotoluene	350	H	100		ug/Kg	1		8321A	Total/NA
Nitrobenzene	140	H	100		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	6600000	H	910000		ug/Kg	100		8321A	Total/NA

## Client Sample ID: BPSB-170601-C21-B1

## Lab Sample ID: 280-98726-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	360	H	96		ug/Kg	1		8321A	Total/NA
3,5-Dinitrotoluene	370	H	96		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	5000000	H	1000000		ug/Kg	100		8321A	Total/NA

## Client Sample ID: BPSB-170601-C21-B2

## Lab Sample ID: 280-98726-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	560	H	100		ug/Kg	1		8321A	Total/NA
3,5-Dinitrotoluene	410	H	100		ug/Kg	1		8321A	Total/NA
Nitrobenzene	130	H	100		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	4800000	H	1000000		ug/Kg	100		8321A	Total/NA

## Client Sample ID: BPSB-170601-C21-B3

## Lab Sample ID: 280-98726-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,6-Dinitrotoluene	920	H	96		ug/Kg	1		8321A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver



# Detection Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Client Sample ID: BPSB-170601-C21-B3 (Continued)

Lab Sample ID: 280-98726-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
3,5-Dinitrotoluene	410	H	96		ug/Kg	1		8321A	Total/NA
Nitrobenzene	120	H	96		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	4800000	H	910000		ug/Kg	100		8321A	Total/NA

## Client Sample ID: BPSB-170601-C21-B4

Lab Sample ID: 280-98726-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	910	H F1	100		ug/Kg	1		8321A	Total/NA
1,3-Dinitrobenzene	970	H	100		ug/Kg	1		8321A	Total/NA
2,6-Dinitrotoluene	440	H	100		ug/Kg	1		8321A	Total/NA
3,5-Dinitrotoluene	170	H F1	100		ug/Kg	1		8321A	Total/NA
Nitrobenzene	110	H F1 F2	100		ug/Kg	1		8321A	Total/NA
2,4,6-Trinitrotoluene - REDL	3000000	H	1000000		ug/Kg	100		8321A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver

# Method Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8321A	Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)	SW846	TAL DEN
D 2216-90	ASTM D 2216-90	ASTM	TAL DEN

**Protocol References:**

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-98726-1	BPSB-170601-C21-A1	Solid	06/01/17 15:25	06/27/17 09:10
280-98726-2	BPSB-170601-C21-A2	Solid	06/01/17 15:30	06/27/17 09:10
280-98726-3	BPSB-170601-C21-A3	Solid	06/01/17 15:35	06/27/17 09:10
280-98726-4	BPSB-170601-C21-A4	Solid	06/01/17 15:40	06/27/17 09:10
280-98726-5	BPSB-170601-C21-B1	Solid	06/01/17 15:45	06/27/17 09:10
280-98726-6	BPSB-170601-C21-B2	Solid	06/01/17 15:50	06/27/17 09:10
280-98726-7	BPSB-170601-C21-B3	Solid	06/01/17 15:55	06/27/17 09:10
280-98726-8	BPSB-170601-C21-B4	Solid	06/01/17 16:00	06/27/17 09:10

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A1**

**Lab Sample ID: 280-98726-1**

**Date Collected: 06/01/17 15:25**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,2-Dimethyl-3,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,2-Dimethyl-3,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,2-Dimethyl-4,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,3-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,3-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,4-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,4-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,4-Dimethyl-2,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,5-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1
1,5-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 11:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	68		24 - 135	07/21/17 11:42	07/27/17 11:37	1
2-Fluorobiphenyl	81		33 - 135	07/21/17 11:42	07/27/17 11:37	1
2-Fluorophenol	61		39 - 135	07/21/17 11:42	07/27/17 11:37	1
Nitrobenzene-d5	69		32 - 135	07/21/17 11:42	07/27/17 11:37	1
Phenol-d5	66		39 - 135	07/21/17 11:42	07/27/17 11:37	1
Terphenyl-d14	90		30 - 135	07/21/17 11:42	07/27/17 11:37	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,3-Dinitrobenzene</b>	<b>1000</b>	<b>H</b>	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
2,3-Dinitrotoluene	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
2,5-Dinitrotoluene	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
<b>2,6-Dinitrotoluene</b>	<b>180</b>	<b>H</b>	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
2-Nitrotoluene	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
3,4-Dinitrotoluene	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
<b>3,5-Dinitrotoluene</b>	<b>220</b>	<b>H</b>	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
3-Nitrotoluene	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
4-Nitrotoluene	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
HMX	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
<b>Nitrobenzene</b>	<b>120</b>	<b>H</b>	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
Nitroglycerin	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
PETN	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
RDX	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1
Tetryl	98	U H	98		ug/Kg		07/06/17 15:20	07/11/17 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	9	X	68 - 140	07/06/17 15:20	07/11/17 18:45	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 16:25	100
2,4,6-Trinitro-3-xylene	1000000	U H F1	1000000		ug/Kg		07/19/17 13:15	07/21/17 16:25	100
<b>2,4,6-Trinitrotoluene</b>	<b>4100000</b>	<b>H F2</b>	1000000		ug/Kg		07/19/17 13:15	07/21/17 16:25	100
2,4-Dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 16:25	100
2-Amino-4,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 16:25	100
4-Amino-2,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 16:25	100

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A1**

**Lab Sample ID: 280-98726-1**

**Date Collected: 06/01/17 15:25**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	DX	68 - 140	07/19/17 13:15	07/21/17 16:25	100

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.5		0.1		%			06/27/17 16:38	1



# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A2**

**Lab Sample ID: 280-98726-2**

**Date Collected: 06/01/17 15:30**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,2-Dimethyl-3,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,2-Dimethyl-3,6-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,2-Dimethyl-4,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,3-Dimethyl-2,4-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,3-Dimethyl-2,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,4-Dimethyl-2,3-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,4-Dimethyl-2,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,4-Dimethyl-2,6-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,5-Dimethyl-2,3-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1
1,5-Dimethyl-2,4-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 12:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	66		24 - 135	07/21/17 11:42	07/27/17 12:00	1
2-Fluorobiphenyl	80		33 - 135	07/21/17 11:42	07/27/17 12:00	1
2-Fluorophenol	66		39 - 135	07/21/17 11:42	07/27/17 12:00	1
Nitrobenzene-d5	72		32 - 135	07/21/17 11:42	07/27/17 12:00	1
Phenol-d5	66		39 - 135	07/21/17 11:42	07/27/17 12:00	1
Terphenyl-d14	90		30 - 135	07/21/17 11:42	07/27/17 12:00	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,3-Dinitrobenzene</b>	<b>880</b>	<b>H</b>	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
2,3-Dinitrotoluene	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
2,5-Dinitrotoluene	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
<b>2,6-Dinitrotoluene</b>	<b>190</b>	<b>H</b>	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
2-Nitrotoluene	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
3,4-Dinitrotoluene	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
3,5-Dinitrotoluene	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
3-Nitrotoluene	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
4-Nitrotoluene	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
HMX	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
<b>Nitrobenzene</b>	<b>97</b>	<b>H</b>	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
Nitroglycerin	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
PETN	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
RDX	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1
Tetryl	94	U H	94		ug/Kg		07/06/17 15:20	07/11/17 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	1	X	68 - 140	07/06/17 15:20	07/11/17 19:17	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 18:02	100
2,4,6-Trinitro-3-xylene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 18:02	100
<b>2,4,6-Trinitrotoluene</b>	<b>4800000</b>	<b>H</b>	910000		ug/Kg		07/19/17 13:15	07/21/17 18:02	100
2,4-Dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 18:02	100
2-Amino-4,6-dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 18:02	100
4-Amino-2,6-dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 18:02	100

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A2**

**Lab Sample ID: 280-98726-2**

**Date Collected: 06/01/17 15:30**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	61	D X	68 - 140	07/19/17 13:15	07/21/17 18:02	100

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.4		0.1		%			06/27/17 16:38	1

- 1
- 2
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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A3**

**Lab Sample ID: 280-98726-3**

**Date Collected: 06/01/17 15:35**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,2-Dimethyl-3,5-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,2-Dimethyl-3,6-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,2-Dimethyl-4,5-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,3-Dimethyl-2,4-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,3-Dimethyl-2,5-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,4-Dimethyl-2,3-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,4-Dimethyl-2,5-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,4-Dimethyl-2,6-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,5-Dimethyl-2,3-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1
1,5-Dimethyl-2,4-Dinitrobenzene	150	U H	150		ug/Kg		07/21/17 11:42	07/27/17 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		24 - 135	07/21/17 11:42	07/27/17 12:24	1
2-Fluorobiphenyl	84		33 - 135	07/21/17 11:42	07/27/17 12:24	1
2-Fluorophenol	68		39 - 135	07/21/17 11:42	07/27/17 12:24	1
Nitrobenzene-d5	77		32 - 135	07/21/17 11:42	07/27/17 12:24	1
Phenol-d5	70		39 - 135	07/21/17 11:42	07/27/17 12:24	1
Terphenyl-d14	91		30 - 135	07/21/17 11:42	07/27/17 12:24	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,3,5-Trinitrobenzene</b>	<b>1000</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
2,3-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
2,5-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
<b>2,6-Dinitrotoluene</b>	<b>240</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
2-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
3,4-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
<b>3,5-Dinitrotoluene</b>	<b>260</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
3-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
4-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
HMX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
<b>Nitrobenzene</b>	<b>110</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
Nitroglycerin	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
PETN	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
RDX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1
Tetryl	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	8	X	68 - 140	07/06/17 15:20	07/11/17 19:49	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dinitrobenzene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 19:06	100
2,4,6-Trinitro-3-xylene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 19:06	100
<b>2,4,6-Trinitrotoluene</b>	<b>4100000</b>	<b>H</b>	1000000		ug/Kg		07/19/17 13:15	07/21/17 19:06	100
2,4-Dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 19:06	100
2-Amino-4,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 19:06	100
4-Amino-2,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 19:06	100

TestAmerica Denver



# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A3**

**Lab Sample ID: 280-98726-3**

**Date Collected: 06/01/17 15:35**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	D X	68 - 140	07/19/17 13:15	07/21/17 19:06	100

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.5		0.1		%			06/27/17 16:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A4**

**Lab Sample ID: 280-98726-4**

**Date Collected: 06/01/17 15:40**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,2-Dimethyl-3,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,2-Dimethyl-3,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,2-Dimethyl-4,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,3-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,3-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,4-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,4-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,4-Dimethyl-2,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,5-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1
1,5-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		24 - 135	07/21/17 11:42	07/27/17 12:48	1
2-Fluorobiphenyl	75		33 - 135	07/21/17 11:42	07/27/17 12:48	1
2-Fluorophenol	59		39 - 135	07/21/17 11:42	07/27/17 12:48	1
Nitrobenzene-d5	63		32 - 135	07/21/17 11:42	07/27/17 12:48	1
Phenol-d5	61		39 - 135	07/21/17 11:42	07/27/17 12:48	1
Terphenyl-d14	82		30 - 135	07/21/17 11:42	07/27/17 12:48	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
2,5-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
<b>2,6-Dinitrotoluene</b>	<b>250</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
2-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
3,4-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
<b>3,5-Dinitrotoluene</b>	<b>350</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
3-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
4-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
HMX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
<b>Nitrobenzene</b>	<b>140</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
Nitroglycerin	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
PETN	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
RDX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1
Tetryl	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 20:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	9	X	68 - 140	07/06/17 15:20	07/11/17 20:22	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 19:38	100
1,3-Dinitrobenzene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 19:38	100
2,4,6-Trinitro-3-xylene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 19:38	100
<b>2,4,6-Trinitrotoluene</b>	<b>6600000</b>	<b>H</b>	910000		ug/Kg		07/19/17 13:15	07/21/17 19:38	100
2,4-Dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 19:38	100
2-Amino-4,6-dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 19:38	100
4-Amino-2,6-dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 19:38	100

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A4**

**Lab Sample ID: 280-98726-4**

**Date Collected: 06/01/17 15:40**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	DX	68 - 140	07/19/17 13:15	07/21/17 19:38	100

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.5		0.1		%			06/27/17 16:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B1**

**Lab Sample ID: 280-98726-5**

**Date Collected: 06/01/17 15:45**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,2-Dimethyl-3,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,2-Dimethyl-3,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,2-Dimethyl-4,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,3-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,3-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,4-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,4-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,4-Dimethyl-2,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,5-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1
1,5-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	72		24 - 135	07/21/17 11:42	07/27/17 13:12	1
2-Fluorobiphenyl	85		33 - 135	07/21/17 11:42	07/27/17 13:12	1
2-Fluorophenol	71		39 - 135	07/21/17 11:42	07/27/17 13:12	1
Nitrobenzene-d5	78		32 - 135	07/21/17 11:42	07/27/17 13:12	1
Phenol-d5	70		39 - 135	07/21/17 11:42	07/27/17 13:12	1
Terphenyl-d14	87		30 - 135	07/21/17 11:42	07/27/17 13:12	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dinitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
2,5-Dinitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
<b>2,6-Dinitrotoluene</b>	<b>360</b>	<b>H</b>	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
2-Nitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
3,4-Dinitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
<b>3,5-Dinitrotoluene</b>	<b>370</b>	<b>H</b>	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
3-Nitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
4-Nitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
HMX	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
Nitrobenzene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
Nitroglycerin	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
PETN	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
RDX	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1
Tetryl	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 21:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	X	68 - 140	07/06/17 15:20	07/11/17 21:26	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:10	100
1,3-Dinitrobenzene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:10	100
2,4,6-Trinitro-3-xylene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:10	100
<b>2,4,6-Trinitrotoluene</b>	<b>5000000</b>	<b>H</b>	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:10	100
2,4-Dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:10	100
2-Amino-4,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:10	100
4-Amino-2,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:10	100

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B1**

**Lab Sample ID: 280-98726-5**

**Date Collected: 06/01/17 15:45**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	D X	68 - 140	07/19/17 13:15	07/21/17 20:10	100

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.3		0.1		%			06/27/17 16:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B2**

**Lab Sample ID: 280-98726-6**

**Date Collected: 06/01/17 15:50**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,2-Dimethyl-3,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,2-Dimethyl-3,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,2-Dimethyl-4,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,3-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,3-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,4-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,4-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,4-Dimethyl-2,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,5-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1
1,5-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		24 - 135	07/21/17 11:42	07/27/17 13:36	1
2-Fluorobiphenyl	78		33 - 135	07/21/17 11:42	07/27/17 13:36	1
2-Fluorophenol	64		39 - 135	07/21/17 11:42	07/27/17 13:36	1
Nitrobenzene-d5	68		32 - 135	07/21/17 11:42	07/27/17 13:36	1
Phenol-d5	64		39 - 135	07/21/17 11:42	07/27/17 13:36	1
Terphenyl-d14	84		30 - 135	07/21/17 11:42	07/27/17 13:36	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
2,5-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
<b>2,6-Dinitrotoluene</b>	<b>560</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
2-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
3,4-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
<b>3,5-Dinitrotoluene</b>	<b>410</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
3-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
4-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
HMX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
<b>Nitrobenzene</b>	<b>130</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
Nitroglycerin	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
PETN	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
RDX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1
Tetryl	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 21:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	X	68 - 140	07/06/17 15:20	07/11/17 21:58	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:43	100
1,3-Dinitrobenzene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:43	100
2,4,6-Trinitro-3-xylene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:43	100
<b>2,4,6-Trinitrotoluene</b>	<b>4800000</b>	<b>H</b>	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:43	100
2,4-Dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:43	100
2-Amino-4,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:43	100
4-Amino-2,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 20:43	100

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B2**

**Lab Sample ID: 280-98726-6**

**Date Collected: 06/01/17 15:50**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	145	D X	68 - 140	07/19/17 13:15	07/21/17 20:43	100

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.3		0.1		%			06/27/17 16:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B3**

**Lab Sample ID: 280-98726-7**

**Date Collected: 06/01/17 15:55**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,2-Dimethyl-3,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,2-Dimethyl-3,6-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,2-Dimethyl-4,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,3-Dimethyl-2,4-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,3-Dimethyl-2,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,4-Dimethyl-2,3-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,4-Dimethyl-2,5-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,4-Dimethyl-2,6-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,5-Dimethyl-2,3-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1
1,5-Dimethyl-2,4-Dinitrobenzene	170	U H	170		ug/Kg		07/21/17 11:42	07/27/17 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	66		24 - 135	07/21/17 11:42	07/27/17 14:00	1
2-Fluorobiphenyl	80		33 - 135	07/21/17 11:42	07/27/17 14:00	1
2-Fluorophenol	70		39 - 135	07/21/17 11:42	07/27/17 14:00	1
Nitrobenzene-d5	72		32 - 135	07/21/17 11:42	07/27/17 14:00	1
Phenol-d5	71		39 - 135	07/21/17 11:42	07/27/17 14:00	1
Terphenyl-d14	85		30 - 135	07/21/17 11:42	07/27/17 14:00	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3-Dinitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
2,5-Dinitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
<b>2,6-Dinitrotoluene</b>	<b>920</b>	<b>H</b>	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
2-Nitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
3,4-Dinitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
<b>3,5-Dinitrotoluene</b>	<b>410</b>	<b>H</b>	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
3-Nitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
4-Nitrotoluene	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
HMX	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
<b>Nitrobenzene</b>	<b>120</b>	<b>H</b>	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
Nitroglycerin	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
PETN	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
RDX	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1
Tetryl	96	U H	96		ug/Kg		07/06/17 15:20	07/11/17 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	5	X	68 - 140	07/06/17 15:20	07/11/17 22:30	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 21:15	100
1,3-Dinitrobenzene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 21:15	100
2,4,6-Trinitro-3-xylene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 21:15	100
<b>2,4,6-Trinitrotoluene</b>	<b>4800000</b>	<b>H</b>	910000		ug/Kg		07/19/17 13:15	07/21/17 21:15	100
2,4-Dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 21:15	100
2-Amino-4,6-dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 21:15	100
4-Amino-2,6-dinitrotoluene	910000	U H	910000		ug/Kg		07/19/17 13:15	07/21/17 21:15	100

TestAmerica Denver



# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B3**

**Lab Sample ID: 280-98726-7**

**Date Collected: 06/01/17 15:55**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	0	D X	68 - 140	07/19/17 13:15	07/21/17 21:15	100

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.3		0.1		%			06/27/17 16:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B4**

**Lab Sample ID: 280-98726-8**

**Date Collected: 06/01/17 16:00**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,2-Dimethyl-3,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,2-Dimethyl-3,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,2-Dimethyl-4,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,3-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,3-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,4-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,4-Dimethyl-2,5-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,4-Dimethyl-2,6-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,5-Dimethyl-2,3-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1
1,5-Dimethyl-2,4-Dinitrobenzene	160	U H	160		ug/Kg		07/21/17 11:42	07/27/17 14:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	61		24 - 135	07/21/17 11:42	07/27/17 14:24	1
2-Fluorobiphenyl	74		33 - 135	07/21/17 11:42	07/27/17 14:24	1
2-Fluorophenol	63		39 - 135	07/21/17 11:42	07/27/17 14:24	1
Nitrobenzene-d5	68		32 - 135	07/21/17 11:42	07/27/17 14:24	1
Phenol-d5	63		39 - 135	07/21/17 11:42	07/27/17 14:24	1
Terphenyl-d14	81		30 - 135	07/21/17 11:42	07/27/17 14:24	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,3,5-Trinitrobenzene</b>	<b>910</b>	<b>H F1</b>	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
<b>1,3-Dinitrobenzene</b>	<b>970</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
2,3-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
2,5-Dinitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
<b>2,6-Dinitrotoluene</b>	<b>440</b>	<b>H</b>	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
2-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
3,4-Dinitrotoluene	100	U H F1	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
<b>3,5-Dinitrotoluene</b>	<b>170</b>	<b>H F1</b>	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
3-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
4-Nitrotoluene	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
HMX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
<b>Nitrobenzene</b>	<b>110</b>	<b>H F1 F2</b>	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
Nitroglycerin	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
PETN	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
RDX	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1
Tetryl	100	U H	100		ug/Kg		07/06/17 15:20	07/11/17 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	11	X	68 - 140	07/06/17 15:20	07/11/17 23:02	1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trinitro-3-xylene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 21:47	100
<b>2,4,6-Trinitrotoluene</b>	<b>3000000</b>	<b>H</b>	1000000		ug/Kg		07/19/17 13:15	07/21/17 21:47	100
2,4-Dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 21:47	100
2-Amino-4,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 21:47	100
4-Amino-2,6-dinitrotoluene	1000000	U H	1000000		ug/Kg		07/19/17 13:15	07/21/17 21:47	100

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B4**

**Lab Sample ID: 280-98726-8**

**Date Collected: 06/01/17 16:00**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	101	D	68 - 140	07/19/17 13:15	07/21/17 21:47	100

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	1.6		0.1		%			06/27/17 16:38	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Surrogate Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (24-135)	FBP (33-135)	2FP (39-135)	NBZ (32-135)	PHL (39-135)	TPH (30-135)
280-98726-1	BPSB-170601-C21-A1	68	81	61	69	66	90
280-98726-2	BPSB-170601-C21-A2	66	80	66	72	66	90
280-98726-3	BPSB-170601-C21-A3	72	84	68	77	70	91
280-98726-4	BPSB-170601-C21-A4	64	75	59	63	61	82
280-98726-5	BPSB-170601-C21-B1	72	85	71	78	70	87
280-98726-6	BPSB-170601-C21-B2	64	78	64	68	64	84
280-98726-7	BPSB-170601-C21-B3	66	80	70	72	71	85
280-98726-8	BPSB-170601-C21-B4	61	74	63	68	63	81
LCS 280-381559/2-A	Lab Control Sample	65	66	48	55	54	87
LCSD 280-381559/13-A	Lab Control Sample Dup	57	63	48	53	49	78
MB 280-381559/1-A	Method Blank	64	68	51	50	55	86

### Surrogate Legend

TBP = 2,4,6-Tribromophenol  
 FBP = 2-Fluorobiphenyl  
 2FP = 2-Fluorophenol  
 NBZ = Nitrobenzene-d5  
 PHL = Phenol-d5  
 TPH = Terphenyl-d14

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		NBZ (68-140)
280-98726-1	BPSB-170601-C21-A1	9 X
280-98726-1 - REDL	BPSB-170601-C21-A1	0 D X
280-98726-1 MS - REDL	BPSB-170601-C21-A1	127 D
280-98726-1 MSD - REDL	BPSB-170601-C21-A1	55 D X
280-98726-2	BPSB-170601-C21-A2	1 X
280-98726-2 - REDL	BPSB-170601-C21-A2	61 D X
280-98726-3	BPSB-170601-C21-A3	8 X
280-98726-3 - REDL	BPSB-170601-C21-A3	0 D X
280-98726-4	BPSB-170601-C21-A4	9 X
280-98726-4 - REDL	BPSB-170601-C21-A4	0 D X
280-98726-5	BPSB-170601-C21-B1	0 X
280-98726-5 - REDL	BPSB-170601-C21-B1	0 D X
280-98726-6	BPSB-170601-C21-B2	0 X
280-98726-6 - REDL	BPSB-170601-C21-B2	145 D X
280-98726-7	BPSB-170601-C21-B3	5 X
280-98726-7 - REDL	BPSB-170601-C21-B3	0 D X
280-98726-8	BPSB-170601-C21-B4	11 X
280-98726-8 - REDL	BPSB-170601-C21-B4	101 D
280-98726-8 MS	BPSB-170601-C21-B4	6 X
280-98726-8 MSD	BPSB-170601-C21-B4	3 X
LCS 280-379995/2-A	Lab Control Sample	109
LCS 280-381319/2-A	Lab Control Sample	103
MB 280-379995/1-A	Method Blank	97

TestAmerica Denver

# Surrogate Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)**

**Matrix: Solid**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	NBZ (68-140)
MB 280-381319/1-A	Method Blank	134

### Surrogate Legend

NBZ = Nitrobenzene-d5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-381559/1-A**

**Matrix: Solid**

**Analysis Batch: 382207**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 381559**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,2-Dimethyl-3,5-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,2-Dimethyl-3,6-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,2-Dimethyl-4,5-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,3-Dimethyl-2,4-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,3-Dimethyl-2,5-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,4-Dimethyl-2,3-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,4-Dimethyl-2,5-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,4-Dimethyl-2,6-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,5-Dimethyl-2,3-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1
1,5-Dimethyl-2,4-Dinitrobenzene	170	U	170		ug/Kg		07/21/17 11:42	07/27/17 09:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		24 - 135	07/21/17 11:42	07/27/17 09:14	1
2-Fluorobiphenyl	68		33 - 135	07/21/17 11:42	07/27/17 09:14	1
2-Fluorophenol	51		39 - 135	07/21/17 11:42	07/27/17 09:14	1
Nitrobenzene-d5	50		32 - 135	07/21/17 11:42	07/27/17 09:14	1
Phenol-d5	55		39 - 135	07/21/17 11:42	07/27/17 09:14	1
Terphenyl-d14	86		30 - 135	07/21/17 11:42	07/27/17 09:14	1

**Lab Sample ID: LCS 280-381559/2-A**

**Matrix: Solid**

**Analysis Batch: 382207**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 381559**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2-Dimethyl-3,4-Dinitrobenzene	1570	1350		ug/Kg		86	50 - 135
1,2-Dimethyl-3,5-Dinitrobenzene	1570	1310		ug/Kg		84	50 - 135
1,2-Dimethyl-3,6-Dinitrobenzene	1570	1340		ug/Kg		85	50 - 135
1,2-Dimethyl-4,5-Dinitrobenzene	1570	1550		ug/Kg		99	50 - 135
1,3-Dimethyl-2,4-Dinitrobenzene	1570	1320		ug/Kg		84	50 - 135
1,3-Dimethyl-2,5-Dinitrobenzene	1570	1260		ug/Kg		80	50 - 135
1,4-Dimethyl-2,3-Dinitrobenzene	1570	1340		ug/Kg		86	50 - 135
1,4-Dimethyl-2,5-Dinitrobenzene	1570	1320		ug/Kg		84	50 - 135
1,4-Dimethyl-2,6-Dinitrobenzene	1570	1270		ug/Kg		81	50 - 135
1,5-Dimethyl-2,3-Dinitrobenzene	1570	1310		ug/Kg		84	50 - 135
1,5-Dimethyl-2,4-Dinitrobenzene	1570	1330		ug/Kg		85	50 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	65		24 - 135
2-Fluorobiphenyl	66		33 - 135
2-Fluorophenol	48		39 - 135
Nitrobenzene-d5	55		32 - 135
Phenol-d5	54		39 - 135
Terphenyl-d14	87		30 - 135

TestAmerica Denver

# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-381559/13-A**

**Matrix: Solid**

**Analysis Batch: 382207**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 381559**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
1,2-Dimethyl-3,4-Dinitrobenzene	1640	1230		ug/Kg		75	50 - 135	9	30
1,2-Dimethyl-3,5-Dinitrobenzene	1640	1230		ug/Kg		75	50 - 135	6	30
1,2-Dimethyl-3,6-Dinitrobenzene	1640	1230		ug/Kg		75	50 - 135	8	30
1,2-Dimethyl-4,5-Dinitrobenzene	1640	1360		ug/Kg		83	50 - 135	13	30
1,3-Dimethyl-2,4-Dinitrobenzene	1640	1270		ug/Kg		78	50 - 135	4	30
1,3-Dimethyl-2,5-Dinitrobenzene	1640	1240		ug/Kg		76	50 - 135	1	30
1,4-Dimethyl-2,3-Dinitrobenzene	1640	1290		ug/Kg		79	50 - 135	4	30
1,4-Dimethyl-2,5-Dinitrobenzene	1640	1270		ug/Kg		77	50 - 135	4	30
1,4-Dimethyl-2,6-Dinitrobenzene	1640	1200		ug/Kg		73	50 - 135	6	30
1,5-Dimethyl-2,3-Dinitrobenzene	1640	1210		ug/Kg		74	50 - 135	8	30
1,5-Dimethyl-2,4-Dinitrobenzene	1640	1260		ug/Kg		77	50 - 135	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	57		24 - 135
2-Fluorobiphenyl	63		33 - 135
2-Fluorophenol	48		39 - 135
Nitrobenzene-d5	53		32 - 135
Phenol-d5	49		39 - 135
Terphenyl-d14	78		30 - 135

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

**Lab Sample ID: MB 280-379995/1-A**

**Matrix: Solid**

**Analysis Batch: 380707**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 379995**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
1,3-Dinitrobenzene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2,3-Dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2,4,6-Trinitro-3-xylene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2,4,6-Trinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2,4-Dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2,5-Dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2,6-Dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2-Amino-4,6-dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
2-Nitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
3,4-Dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
3,5-Dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
3-Nitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
4-Amino-2,6-dinitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
4-Nitrotoluene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
HMX	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
Nitrobenzene	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
Nitroglycerin	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
PETN	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
RDX	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1

TestAmerica Denver

# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

**Lab Sample ID: MB 280-379995/1-A**  
**Matrix: Solid**  
**Analysis Batch: 380707**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 379995**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetryl	100	U	100		ug/Kg		07/06/17 15:20	07/11/17 17:41	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	97		68 - 140				07/06/17 15:20	07/11/17 17:41	1

**Lab Sample ID: LCS 280-379995/2-A**  
**Matrix: Solid**  
**Analysis Batch: 380707**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 379995**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,3,5-Trinitrobenzene	384	363		ug/Kg		95	45 - 142
1,3-Dinitrobenzene	384	395		ug/Kg		103	74 - 130
2,3-Dinitrotoluene	384	327		ug/Kg		85	50 - 150
2,4,6-Trinitro-3-xylene	384	295		ug/Kg		77	50 - 150
2,4,6-Trinitrotoluene	384	345		ug/Kg		90	60 - 135
2,4-Dinitrotoluene	384	369		ug/Kg		96	63 - 130
2,5-Dinitrotoluene	384	331		ug/Kg		86	50 - 150
2,6-Dinitrotoluene	384	346		ug/Kg		90	65 - 133
2-Amino-4,6-dinitrotoluene	384	323		ug/Kg		84	51 - 148
2-Nitrotoluene	384	362		ug/Kg		94	59 - 150
3,4-Dinitrotoluene	385	331		ug/Kg		86	50 - 150
3,5-Dinitrotoluene	384	338		ug/Kg		88	50 - 150
3-Nitrotoluene	384	342		ug/Kg		89	56 - 154
4-Amino-2,6-dinitrotoluene	384	394		ug/Kg		102	60 - 141
4-Nitrotoluene	384	359		ug/Kg		93	72 - 145
HMX	384	444		ug/Kg		116	48 - 131
Nitrobenzene	384	414		ug/Kg		108	70 - 140
Nitroglycerin	384	272		ug/Kg		71	27 - 146
PETN	384	262		ug/Kg		68	31 - 171
RDX	384	345		ug/Kg		90	69 - 130
Tetryl	384	371		ug/Kg		97	10 - 170
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Nitrobenzene-d5	109		68 - 140				

**Lab Sample ID: 280-98726-8 MS**  
**Matrix: Solid**  
**Analysis Batch: 380707**

**Client Sample ID: BPSB-170601-C21-B4**  
**Prep Type: Total/NA**  
**Prep Batch: 379995**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,3,5-Trinitrobenzene	910	H F1	385	1370	E	ug/Kg		119	45 - 142
1,3-Dinitrobenzene	970	H	385	1320	E	ug/Kg		90	74 - 130
2,3-Dinitrotoluene	100	U H	385	268		ug/Kg		66	50 - 150
2,4,6-Trinitro-3-xylene	1300	H E F1	385	2050	E F1	ug/Kg		198	50 - 150
2,4,6-Trinitrotoluene	330000	H E	385	286000	E 4	ug/Kg		-1058	60 - 135
2,4-Dinitrotoluene	1900	H E	385	2370	E 4	ug/Kg		7	63 - 130
2,5-Dinitrotoluene	100	U H	385	216		ug/Kg		51	50 - 150

TestAmerica Denver



# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

**Lab Sample ID: 280-98726-8 MS**

**Matrix: Solid**

**Analysis Batch: 380707**

**Client Sample ID: BPSB-170601-C21-B4**

**Prep Type: Total/NA**

**Prep Batch: 379995**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
2,6-Dinitrotoluene	440	H	385	902		ug/Kg		119	65 - 133
2-Amino-4,6-dinitrotoluene	NaN	H F1	385	NaN		ug/L			51 - 148
2-Nitrotoluene	100	U H	385	442		ug/Kg		115	59 - 150
3,4-Dinitrotoluene	100	U H F1	386	96	U F1	ug/Kg		22	50 - 150
3,5-Dinitrotoluene	170	H F1	385	757	F1	ug/Kg		151	50 - 150
3-Nitrotoluene	100	U H	385	433		ug/Kg		112	56 - 154
4-Amino-2,6-dinitrotoluene	24000	H E	385	24000	E 4	ug/Kg		129	60 - 141
4-Nitrotoluene	100	U H	385	454		ug/Kg		118	72 - 145
HMX	100	U H	385	313		ug/Kg		81	48 - 131
Nitrobenzene	110	H F1 F2	385	173	F1	ug/Kg		16	70 - 140
Nitroglycerin	100	U H	385	217		ug/Kg		56	27 - 146
PETN	100	U H	385	218		ug/Kg		57	31 - 171
RDX	100	U H	385	358		ug/Kg		93	69 - 130
Tetryl	100	U H	385	310		ug/Kg		81	10 - 170

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	6	X	68 - 140

**Lab Sample ID: 280-98726-8 MSD**

**Matrix: Solid**

**Analysis Batch: 380707**

**Client Sample ID: BPSB-170601-C21-B4**

**Prep Type: Total/NA**

**Prep Batch: 379995**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,3,5-Trinitrobenzene	910	H F1	385	998	F1	ug/Kg		22	45 - 142	32	70
1,3-Dinitrobenzene	970	H	385	1290	E	ug/Kg		84	74 - 130	2	25
2,3-Dinitrotoluene	100	U H	385	263		ug/Kg		64	50 - 150	2	30
2,4,6-Trinitro-3-xylene	1300	H E F1	385	1730	E	ug/Kg		113	50 - 150	17	30
2,4,6-Trinitrotoluene	330000	H E	385	256000	E 4	ug/Kg		-1845	60 - 135	11	25
2,4-Dinitrotoluene	1900	H E	385	2160	E 4	ug/Kg		60	63 - 130	9	25
2,5-Dinitrotoluene	100	U H	385	255		ug/Kg		61	50 - 150	17	30
2,6-Dinitrotoluene	440	H	385	704		ug/Kg		68	65 - 133	25	25
2-Amino-4,6-dinitrotoluene	NaN	H F1	385	NaN	F1	ug/L		0	51 - 148	NC	25
2-Nitrotoluene	100	U H	385	366		ug/Kg		95	59 - 150	19	45
3,4-Dinitrotoluene	100	U H F1	386	96	U F1	ug/Kg		19	50 - 150	14	30
3,5-Dinitrotoluene	170	H F1	385	632		ug/Kg		119	50 - 150	18	30
3-Nitrotoluene	100	U H	385	357		ug/Kg		93	56 - 154	19	25
4-Amino-2,6-dinitrotoluene	24000	H E	385	22300	E 4	ug/Kg		-319	60 - 141	7	48
4-Nitrotoluene	100	U H	385	385		ug/Kg		100	72 - 145	16	25
HMX	100	U H	385	274		ug/Kg		71	48 - 131	13	25
Nitrobenzene	110	H F1 F2	385	96	U F1 F2	ug/Kg		-9	70 - 140	76	25
Nitroglycerin	100	U H	385	249		ug/Kg		65	27 - 146	14	92
PETN	100	U H	385	205		ug/Kg		53	31 - 171	6	40
RDX	100	U H	385	341		ug/Kg		89	69 - 130	5	25
Tetryl	100	U H	385	317		ug/Kg		82	10 - 170	2	50

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	3	X	68 - 140

TestAmerica Denver

# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Lab Sample ID: MB 280-381319/1-A**  
**Matrix: Solid**  
**Analysis Batch: 381709**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 381319**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
1,3-Dinitrobenzene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2,3-Dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2,4,6-Trinitro-3-xylene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2,4,6-Trinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2,4-Dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2,5-Dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2,6-Dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2-Amino-4,6-dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
2-Nitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
3,4-Dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
3,5-Dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
3-Nitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
4-Amino-2,6-dinitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
4-Nitrotoluene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
HMX	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
Nitrobenzene	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
Nitroglycerin	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
PETN	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
RDX	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1
Tetryl	95	U	95		ug/Kg		07/19/17 13:15	07/21/17 15:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	134		68 - 140	07/19/17 13:15	07/21/17 15:21	1

**Lab Sample ID: LCS 280-381319/2-A**  
**Matrix: Solid**  
**Analysis Batch: 381709**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 381319**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,3,5-Trinitrobenzene	377	394		ug/Kg		104	45 - 142
1,3-Dinitrobenzene	377	403		ug/Kg		107	74 - 130
2,3-Dinitrotoluene	377	398		ug/Kg		105	50 - 150
2,4,6-Trinitro-3-xylene	377	307		ug/Kg		81	50 - 150
2,4,6-Trinitrotoluene	377	355		ug/Kg		94	60 - 135
2,4-Dinitrotoluene	377	386		ug/Kg		102	63 - 130
2,5-Dinitrotoluene	377	334		ug/Kg		88	50 - 150
2,6-Dinitrotoluene	377	370		ug/Kg		98	65 - 133
2-Amino-4,6-dinitrotoluene	377	302		ug/Kg		80	51 - 148
2-Nitrotoluene	377	371		ug/Kg		98	59 - 150
3,4-Dinitrotoluene	378	316		ug/Kg		84	50 - 150
3,5-Dinitrotoluene	377	295		ug/Kg		78	50 - 150
3-Nitrotoluene	377	359		ug/Kg		95	56 - 154
4-Amino-2,6-dinitrotoluene	377	348		ug/Kg		92	60 - 141
4-Nitrotoluene	377	362		ug/Kg		96	72 - 145
HMX	377	361		ug/Kg		96	48 - 131
Nitrobenzene	377	408		ug/Kg		108	70 - 140
Nitroglycerin	377	382		ug/Kg		101	27 - 146
PETN	377	340		ug/Kg		90	31 - 171
RDX	377	374		ug/Kg		99	69 - 130

TestAmerica Denver

# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

**Lab Sample ID: LCS 280-381319/2-A**  
**Matrix: Solid**  
**Analysis Batch: 381709**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 381319**  
**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Tetryl	377	429		ug/Kg		114	10 - 170
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Nitrobenzene-d5	103		68 - 140				

## Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) - REDL

**Lab Sample ID: 280-98726-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 381709**

**Client Sample ID: BPSB-170601-C21-A1**  
**Prep Type: Total/NA**  
**Prep Batch: 381319**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
1,3,5-Trinitrobenzene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	45 - 142	
1,3-Dinitrobenzene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	74 - 130	
2,3-Dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	50 - 150	
2,4,6-Trinitro-3-xylene - REDL	1000000	U H F1	36400	910000	U F1	ug/Kg		14	50 - 150	
2,4,6-Trinitrotoluene - REDL	4100000	H F2	36400	3080000	4	ug/Kg		-2893	60 - 135	
2,4-Dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	63 - 130	
2,5-Dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	50 - 150	
2,6-Dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	65 - 133	
2-Amino-4,6-dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	51 - 148	
2-Nitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	59 - 150	
3,4-Dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	50 - 150	
3,5-Dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	50 - 150	
3-Nitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	56 - 154	
4-Amino-2,6-dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	60 - 141	
4-Nitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	72 - 145	
HMX - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	48 - 131	
Nitrobenzene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	70 - 140	
Nitroglycerin - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	27 - 146	
PETN - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	31 - 171	
RDX - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	69 - 130	
Tetryl - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	10 - 170	
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>							
Nitrobenzene-d5 - REDL	127	D	68 - 140							

**Lab Sample ID: 280-98726-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 381709**

**Client Sample ID: BPSB-170601-C21-A1**  
**Prep Type: Total/NA**  
**Prep Batch: 381319**  
**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,3,5-Trinitrobenzene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	45 - 142	NC	70
1,3-Dinitrobenzene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	74 - 130	NC	25
2,3-Dinitrotoluene - REDL	1000000	U H	36400	910000	U	ug/Kg		NC	50 - 150	NC	30
2,4,6-Trinitro-3-xylene - REDL	1000000	U H F1	36400	910000	U	ug/Kg		55	50 - 150	15	30

TestAmerica Denver



# QC Association Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## GC/MS Semi VOA

### Prep Batch: 381559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1	BPSB-170601-C21-A1	Total/NA	Solid	3550C	
280-98726-2	BPSB-170601-C21-A2	Total/NA	Solid	3550C	
280-98726-3	BPSB-170601-C21-A3	Total/NA	Solid	3550C	
280-98726-4	BPSB-170601-C21-A4	Total/NA	Solid	3550C	
280-98726-5	BPSB-170601-C21-B1	Total/NA	Solid	3550C	
280-98726-6	BPSB-170601-C21-B2	Total/NA	Solid	3550C	
280-98726-7	BPSB-170601-C21-B3	Total/NA	Solid	3550C	
280-98726-8	BPSB-170601-C21-B4	Total/NA	Solid	3550C	
MB 280-381559/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 280-381559/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 280-381559/13-A	Lab Control Sample Dup	Total/NA	Solid	3550C	

### Analysis Batch: 382207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1	BPSB-170601-C21-A1	Total/NA	Solid	8270C	381559
280-98726-2	BPSB-170601-C21-A2	Total/NA	Solid	8270C	381559
280-98726-3	BPSB-170601-C21-A3	Total/NA	Solid	8270C	381559
280-98726-4	BPSB-170601-C21-A4	Total/NA	Solid	8270C	381559
280-98726-5	BPSB-170601-C21-B1	Total/NA	Solid	8270C	381559
280-98726-6	BPSB-170601-C21-B2	Total/NA	Solid	8270C	381559
280-98726-7	BPSB-170601-C21-B3	Total/NA	Solid	8270C	381559
280-98726-8	BPSB-170601-C21-B4	Total/NA	Solid	8270C	381559
MB 280-381559/1-A	Method Blank	Total/NA	Solid	8270C	381559
LCS 280-381559/2-A	Lab Control Sample	Total/NA	Solid	8270C	381559
LCSD 280-381559/13-A	Lab Control Sample Dup	Total/NA	Solid	8270C	381559

## LCMS

### ISM Prep Batch: 379993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1	BPSB-170601-C21-A1	Total/NA	Solid	Increment, prep	
280-98726-2	BPSB-170601-C21-A2	Total/NA	Solid	Increment, prep	
280-98726-3	BPSB-170601-C21-A3	Total/NA	Solid	Increment, prep	
280-98726-4	BPSB-170601-C21-A4	Total/NA	Solid	Increment, prep	
280-98726-5	BPSB-170601-C21-B1	Total/NA	Solid	Increment, prep	
280-98726-6	BPSB-170601-C21-B2	Total/NA	Solid	Increment, prep	
280-98726-7	BPSB-170601-C21-B3	Total/NA	Solid	Increment, prep	
280-98726-8	BPSB-170601-C21-B4	Total/NA	Solid	Increment, prep	
280-98726-8 MS	BPSB-170601-C21-B4	Total/NA	Solid	Increment, prep	
280-98726-8 MSD	BPSB-170601-C21-B4	Total/NA	Solid	Increment, prep	

### Prep Batch: 379995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1	BPSB-170601-C21-A1	Total/NA	Solid	8330B	379993
280-98726-2	BPSB-170601-C21-A2	Total/NA	Solid	8330B	379993
280-98726-3	BPSB-170601-C21-A3	Total/NA	Solid	8330B	379993
280-98726-4	BPSB-170601-C21-A4	Total/NA	Solid	8330B	379993
280-98726-5	BPSB-170601-C21-B1	Total/NA	Solid	8330B	379993
280-98726-6	BPSB-170601-C21-B2	Total/NA	Solid	8330B	379993
280-98726-7	BPSB-170601-C21-B3	Total/NA	Solid	8330B	379993

TestAmerica Denver

# QC Association Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## LCMS (Continued)

### Prep Batch: 379995 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-8	BPSB-170601-C21-B4	Total/NA	Solid	8330B	379993
MB 280-379995/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-379995/2-A	Lab Control Sample	Total/NA	Solid	8330B	
280-98726-8 MS	BPSB-170601-C21-B4	Total/NA	Solid	8330B	379993
280-98726-8 MSD	BPSB-170601-C21-B4	Total/NA	Solid	8330B	379993

### Analysis Batch: 380707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1	BPSB-170601-C21-A1	Total/NA	Solid	8321A	379995
280-98726-2	BPSB-170601-C21-A2	Total/NA	Solid	8321A	379995
280-98726-3	BPSB-170601-C21-A3	Total/NA	Solid	8321A	379995
280-98726-4	BPSB-170601-C21-A4	Total/NA	Solid	8321A	379995
280-98726-5	BPSB-170601-C21-B1	Total/NA	Solid	8321A	379995
280-98726-6	BPSB-170601-C21-B2	Total/NA	Solid	8321A	379995
280-98726-7	BPSB-170601-C21-B3	Total/NA	Solid	8321A	379995
280-98726-8	BPSB-170601-C21-B4	Total/NA	Solid	8321A	379995
MB 280-379995/1-A	Method Blank	Total/NA	Solid	8321A	379995
LCS 280-379995/2-A	Lab Control Sample	Total/NA	Solid	8321A	379995
280-98726-8 MS	BPSB-170601-C21-B4	Total/NA	Solid	8321A	379995
280-98726-8 MSD	BPSB-170601-C21-B4	Total/NA	Solid	8321A	379995

### ISM Prep Batch: 381318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1 - REDL	BPSB-170601-C21-A1	Total/NA	Solid	Increment, prep	
280-98726-2 - REDL	BPSB-170601-C21-A2	Total/NA	Solid	Increment, prep	
280-98726-3 - REDL	BPSB-170601-C21-A3	Total/NA	Solid	Increment, prep	
280-98726-4 - REDL	BPSB-170601-C21-A4	Total/NA	Solid	Increment, prep	
280-98726-5 - REDL	BPSB-170601-C21-B1	Total/NA	Solid	Increment, prep	
280-98726-6 - REDL	BPSB-170601-C21-B2	Total/NA	Solid	Increment, prep	
280-98726-7 - REDL	BPSB-170601-C21-B3	Total/NA	Solid	Increment, prep	
280-98726-8 - REDL	BPSB-170601-C21-B4	Total/NA	Solid	Increment, prep	
280-98726-1 MS - REDL	BPSB-170601-C21-A1	Total/NA	Solid	Increment, prep	
280-98726-1 MSD - REDL	BPSB-170601-C21-A1	Total/NA	Solid	Increment, prep	

### Prep Batch: 381319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1 - REDL	BPSB-170601-C21-A1	Total/NA	Solid	8330B	381318
280-98726-2 - REDL	BPSB-170601-C21-A2	Total/NA	Solid	8330B	381318
280-98726-3 - REDL	BPSB-170601-C21-A3	Total/NA	Solid	8330B	381318
280-98726-4 - REDL	BPSB-170601-C21-A4	Total/NA	Solid	8330B	381318
280-98726-5 - REDL	BPSB-170601-C21-B1	Total/NA	Solid	8330B	381318
280-98726-6 - REDL	BPSB-170601-C21-B2	Total/NA	Solid	8330B	381318
280-98726-7 - REDL	BPSB-170601-C21-B3	Total/NA	Solid	8330B	381318
280-98726-8 - REDL	BPSB-170601-C21-B4	Total/NA	Solid	8330B	381318
MB 280-381319/1-A	Method Blank	Total/NA	Solid	8330B	
LCS 280-381319/2-A	Lab Control Sample	Total/NA	Solid	8330B	
280-98726-1 MS - REDL	BPSB-170601-C21-A1	Total/NA	Solid	8330B	381318
280-98726-1 MSD - REDL	BPSB-170601-C21-A1	Total/NA	Solid	8330B	381318

TestAmerica Denver

# QC Association Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## LCMS (Continued)

### Analysis Batch: 381709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1 - REDL	BPSB-170601-C21-A1	Total/NA	Solid	8321A	381319
280-98726-2 - REDL	BPSB-170601-C21-A2	Total/NA	Solid	8321A	381319
280-98726-3 - REDL	BPSB-170601-C21-A3	Total/NA	Solid	8321A	381319
280-98726-4 - REDL	BPSB-170601-C21-A4	Total/NA	Solid	8321A	381319
280-98726-5 - REDL	BPSB-170601-C21-B1	Total/NA	Solid	8321A	381319
280-98726-6 - REDL	BPSB-170601-C21-B2	Total/NA	Solid	8321A	381319
280-98726-7 - REDL	BPSB-170601-C21-B3	Total/NA	Solid	8321A	381319
280-98726-8 - REDL	BPSB-170601-C21-B4	Total/NA	Solid	8321A	381319
MB 280-381319/1-A	Method Blank	Total/NA	Solid	8321A	381319
LCS 280-381319/2-A	Lab Control Sample	Total/NA	Solid	8321A	381319
280-98726-1 MS - REDL	BPSB-170601-C21-A1	Total/NA	Solid	8321A	381319
280-98726-1 MSD - REDL	BPSB-170601-C21-A1	Total/NA	Solid	8321A	381319

## General Chemistry

### Analysis Batch: 378950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-98726-1	BPSB-170601-C21-A1	Total/NA	Solid	D 2216-90	
280-98726-2	BPSB-170601-C21-A2	Total/NA	Solid	D 2216-90	
280-98726-3	BPSB-170601-C21-A3	Total/NA	Solid	D 2216-90	
280-98726-4	BPSB-170601-C21-A4	Total/NA	Solid	D 2216-90	
280-98726-5	BPSB-170601-C21-B1	Total/NA	Solid	D 2216-90	
280-98726-6	BPSB-170601-C21-B2	Total/NA	Solid	D 2216-90	
280-98726-7	BPSB-170601-C21-B3	Total/NA	Solid	D 2216-90	
280-98726-8	BPSB-170601-C21-B4	Total/NA	Solid	D 2216-90	
280-98650-B-15 DU	Duplicate	Total/NA	Solid	D 2216-90	

# Lab Chronicle

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A1**

**Lab Sample ID: 280-98726-1**

**Date Collected: 06/01/17 15:25**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.7 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 11:37	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.23 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 18:45	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.10 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 16:25	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN

**Client Sample ID: BPSB-170601-C21-A2**

**Lab Sample ID: 280-98726-2**

**Date Collected: 06/01/17 15:30**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.0 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 12:00	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.61 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 19:17	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.11 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 18:02	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN

**Client Sample ID: BPSB-170601-C21-A3**

**Lab Sample ID: 280-98726-3**

**Date Collected: 06/01/17 15:35**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			32.5 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 12:24	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.00 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 19:49	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.10 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 19:06	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN



# Lab Chronicle

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-A4**

**Lab Sample ID: 280-98726-4**

**Date Collected: 06/01/17 15:40**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.5 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 12:48	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.00 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 20:22	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.11 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 19:38	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN

**Client Sample ID: BPSB-170601-C21-B1**

**Lab Sample ID: 280-98726-5**

**Date Collected: 06/01/17 15:45**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.7 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 13:12	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.41 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 21:26	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.10 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 20:10	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN

**Client Sample ID: BPSB-170601-C21-B2**

**Lab Sample ID: 280-98726-6**

**Date Collected: 06/01/17 15:50**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			31.6 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 13:36	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.00 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 21:58	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.10 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 20:43	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN

TestAmerica Denver

# Lab Chronicle

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

**Client Sample ID: BPSB-170601-C21-B3**

**Lab Sample ID: 280-98726-7**

**Date Collected: 06/01/17 15:55**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.3 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 14:00	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.42 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 22:30	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.11 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 21:15	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN

**Client Sample ID: BPSB-170601-C21-B4**

**Lab Sample ID: 280-98726-8**

**Date Collected: 06/01/17 16:00**

**Matrix: Solid**

**Date Received: 06/27/17 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			31.0 g	1 mL	381559	07/21/17 11:42	DFB1	TAL DEN
Total/NA	Analysis	8270C		1			382207	07/27/17 14:24	DCK	TAL DEN
Total/NA	ISM Prep	Increment, prep					379993	07/06/17 14:58	CDC	TAL DEN
Total/NA	Prep	8330B			10.00 g	40 mL	379995	07/06/17 15:20	CDC	TAL DEN
Total/NA	Analysis	8321A		1			380707	07/11/17 23:02	AGCM	TAL DEN
Total/NA	ISM Prep	Increment, prep	REDL				381318	07/19/17 11:17	GLK	TAL DEN
Total/NA	Prep	8330B	REDL		0.10 g	40 mL	381319	07/19/17 13:15	GLK	TAL DEN
Total/NA	Analysis	8321A	REDL	100			381709	07/21/17 21:47	AGCM	TAL DEN
Total/NA	Analysis	D 2216-90		1			378950	06/27/17 16:38	A1D	TAL DEN

**Laboratory References:**

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

# Accreditation/Certification Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-2017 Bio-pilot Program

TestAmerica Job ID: 280-98726-1

## Laboratory: TestAmerica Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999615430	08-31-17 *

- 1
- 2
- 3
- 4
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- 9
- 10
- 11
- 12
- 13
- 14
- 15

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# CHAIN OF CUSTODY

No. 7153

Page: 1 of 1

ision



280-98726 Chain of Custody

Project Number: 60525839 PO Number:

Project Name: BARKSDALE - C21

Project Location (City, State): BARKSDALE, WI

Turn Around (check one):  Normal  Rush

If Rush, Report Due Date:

Sampled By (Print): ERIC SCHMIDT

Sample Description	Collection		Matrix	Total # of Containers	Analyses Requested				Comments	Lab ID	Lab Receipt Time
	Date	Time			A	A	A	A			
BPSB-170601-C21-A1	6/11/17	15:25	Soil	3	X	X	X	8321 America - % Moisture	01	1113	
BPSB-170601-C21-A2		15:30			X	X	X		02		
BPSB-170601-C21-A3		15:35			X	X	X		03		
BPSB-170601-C21-A4		15:40			X	X	X		04		
BPSB-170601-C21-B1		15:45			X	X	X		05		
BPSB-170601-C21-B2		15:50			X	X	X		06		
BPSB-170601-C21-B3		15:55			X	X	X		07		
BPSB-170601-C21-B4		16:00			X	X	X		08		

Report To: SHARON NORDSTROM  
 Company: THE CHEMOURS COMPANY FC, LLC  
 Address 1: 66 AECOM SABRE BUILDING, SUITE 300  
 Address 2: 4051 COLLETTOWN RD  
 E-mail Address: SHARON.NORDSTROM@CHEMOURS.COM

Received By: [Signature] Date: 6/17/17 Time: 1113  
 Relinquished By: [Signature] Date: 6/17/17 Time: 1600  
 Custody Seal:  Intact  Not Intact  
 Shipped Via: FEDEX Receipt Temp: 0.1 °C Thermometer #/ Exp. Date: 160142274 / 12/1/18  
 Temp Blank:  Y  N

Rev. 12/15

① Contact Sharon Nordstrom (Chemours/AECOM 302-781-5936) prior to initiating sample analysis.  
 5.110.01277 transferred by SF 6/12/17

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# Login Sample Receipt Checklist

Client: Chemours Company FC, LLC The

Job Number: 280-98726-1

**Login Number: 98726**

**List Number: 1**

**Creator: True, Joshua A**

**List Source: TestAmerica Denver**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	