

MCPB Item: Date: 7/20/17

July 12, 2017

#### MEMORANDUM

**TO:** Montgomery County Planning Board

VIA: Michael F. Riley, Director of Parks Mitra Pedoeem, Deputy Director, Department of Parks Michael Ma, Division Chief, Park Development Division Patricia McManus, Design Section Supervisor, Park Development Division

FROM: Linda Komes, Landscape Architect/Project Manager, 301-650-2860

#### **SUBJECT:** Concept Plan for the partial renovation of Dewey Local Park

**STAFF RECOMMENDATION:** APPROVE the Recommended Concept Plan, including the cost estimate.

#### **PROJECT DESCRIPTION**

#### Introduction

The purpose of this project is to prepare a concept plan for the partial renovation of Dewey Local Park located at 11720 Dewey Road in Silver Spring. The goal of the concept plan is to develop a combination of recreational facilities that both addresses the needs of the community and re-energizes the park making it an exciting recreational destination for neighbors, residents of the surrounding communities and users of the Rock Creek Trail.

Dewey Local Park is an existing 14.5acre park located approximately 2,000 feet south of the intersection of Dewey Road and Randolph Road. Rock Creek Park Stream Valley Unit 4 wraps around



9500 Brunett Avenue, Silver Spring, Maryland 20901 www.MontgomeryParks.org General Information: 301.495.2595

the park on the south, west and the majority of the northern property lines. A single-family home abuts the park in the northeast corner of the park property. The Dewey Road right of way forms the eastern property line of the park. Single family homes face the park across Dewey Road.

Dewey Local Park is one of several parks located within the Rock Creek stream valley corridor. Randolph Hills Local Park is located in close proximity on the west side of Rock Creek Park and is connected to Dewey Local Park by a trail. Veirs Mill Local Park is located nearby to the south and is connected via the Rock Creek Trail. The Rock Creek Trail, a fourteen-mile hard surface trail which extends from Lake Needwood to the District of Columbia line, runs parallel to Dewey Road along the entire length of the park.



The surrounding neighborhood consists primarily of modest, single-family homes built during the 1950's. Veirs Mill Elementary School, with approximately 650 pre-K through 5<sup>th</sup> grade students is located just two blocks east of the park, within easy walking distance.

Vehicular access to the park is currently provided via two separate. unconnected entrances off Dewey Road. The southern entrance provides access to a 27-space parking lot. The northern entrance. located adiacent to the playground provides access to a

23-space parking lot and the WSSC subsurface sewage storage facility. Pedestrian access to the park is provided via an existing public sidewalk along Dewey Road, the Rock Creek Trail and a connector trail from nearby Randolph Hills Local Park.

The parkland was acquired by the Commission in 1951 and was later developed with active recreational facilities. In 1985 a joint use agreement was executed between the Commission and WSSC which allowed WSSC to locate a large, underground sewage holding facility in the park. In exchange, WSSC agreed to make numerous park improvements. Existing facilities consist of the following:

- Four Tennis Courts on top of the WSSC facility
- One Basketball Court on top of the WSSC facility
- One playground
- One rectangular field
- Two small parking lots with a total of 50 spaces
- Approximately 1,200 linear feet of the regional Rock Creek Trail

Dewey Local Park has served the community well for the past 60+ years; however, today the park is badly in need of renovation. Overall, the facilities are outdated, deteriorating and difficult to maintain. The surfacing of the court area over the WSSC facility is in extremely poor

condition. The basketball court has been closed to use for several years as the posts can no longer be safely attached to the underlying concrete slab. Only two of the four tennis courts have nets, and since the tennis courts in nearby Randolph Hills Local Park were recently renovated, tennis is no longer necessary at Dewey to serve the community's needs. The playground equipment is old, in poor condition and needs to be replaced. In addition, many other site issues need to be addressed including universal access noncompliance, the poor condition of the Rock Creek Trail along the park frontage, poor sight distance for trail users at the southern vehicular entrance, and the lack of storm water treatment and management facilities.

Jordan Honeyman Landscape Architecture, LLC was hired in February 2015 as the project's prime design consultant leading a team of sub-consultants including Delon Hampton & Associates (civil and structural engineers), SaLut, Inc.(geotechnical engineers), JVP Engineers, PC (MEP engineering), and Scharf Associates, Inc. (cost estimators). The project began as a playground renovation project, but the scope was subsequently expanded to include the court area, improvements to the parking lot and the Rock Creek Trail. Design of the park improvements was funded with \$365,000 from the Department of Parks playground renovation and facility planning programs.



#### THE RECOMMENDED PLAN

#### The Playground Area

The renovation of Dewey Local Park began as a playground renovation project. The Dewey playground was installed in 1992 and over the past several years had become difficult to maintain and consisted of old, worn and outdated equipment; some of which had been removed due to non-compliance with safety standards. At the project start staff contacted nearby Viers Mill Elementary School to inquire whether the children might like to be involved in the design of their neighborhood playground. The school's art teacher, a graduate of Viers Mill Elementary and a parent of children at the school, was enthusiastic about participating, and agreed to be the school's main point of contact.

Staff met with the school's Principal on April 22, 2015 and later met with an assembly of primarily 5<sup>th</sup> graders on May 26, 2015. During the assembly, staff presented a PowerPoint of different playground themes and different types of playground equipment. A lively brainstorming

session ensued before a vote was taken. The school's art teacher then presented the PowerPoint to second, third and fourth grade art classes and tallied the votes. Ninety percent of the voters favored a "Ropes and Bridges" theme. Activities such as bouncing, spinning, hanging and sliding were also requested to be included in the design.

The design of the playground for children ages 5-12 features a constructed hill and embankment slide which takes advantage of the existing slope in the area. The design incorporates six large existing trees which provide context, help define the space and provide immediate shade. The play equipment includes a series of ropes and bridges and is designed in a playful circuit. A group swing and spinner provide additional play value and variety. Surfacing in the 5-12 year-old play area consists of a combination of engineered-wood-fiber and poured-in-place rubber. A concrete seatwall provides seating for children and caregivers and provides spatial definition.



The design of the playground for children ages 2-5 years includes swings, a teeter totter, spinning equipment and a small climbing structure which looks like a playhouse for imaginary play. The younger children's play area is partially enclosed by a low fence, and at the request of the community is located adjacent to the adult fitness area. The playground surfacing in the 2-5 year-old area engineered-woodis fiber.

At the request of the community, a five-foot-wide, accessible asphalt path, striped with a centerline and furnished with child size road signs encircles the play area providing a safe and fun place for children on tricycles, bicycles, scooter's and roller skates. Also at the request of the community a small picnic shelter is included in the playground area providing shade and an area for family picnics.

#### Soil Contamination Issues

During design of the playground in October of 2016, four soil borings were performed to determine the infiltration rate of the soil for stormwater management purposes and the bearing capacity of the soil near the proposed picnic shelter. The geotechnical evaluation revealed the presence of fill material in the underlying soils approximately 2-12 feet below the surface. The fill material consisted of asphalt, concrete, gravel, grout, brick, metal and other building materials. A petroleum odor was detected in three of the borings located 4-8 feet below the surface.

Staff met with the Montgomery County Department of Permitting Services (DPS) on January 18, 2017 to discuss the soil contamination issue and its impact on stormwater management. DPS requested further evaluation of the potential petroleum contamination to determine if removal was necessary or if a liner might be required.

In April 2017, a Phase II Environmental Site Assessment was completed by SaLUT Inc. (refer to Attachment 1). Soil samples were collected from six borings. According to the report, "The analytical results indicate detectable levels of petroleum exist in three of the six borings at relatively low concentrations". The samples were collected from 4-5 feet below grade. In two of the samples the concentrations were above the current Generic Numeric Cleanup Standards (NCS) for groundwater and soil adopted by the Maryland Department of the Environment. The report states, "The impacted soil is located 4-5 feet below ground surface and if it is impacted during construction of the new playground it should be managed as petroleum contaminated waste, properly characterized and disposed of at a local facility licensed to accept the waste".

Staff has closely evaluated the geotechnical engineer's findings and recommendations within the context of the existing site and the proposed playground. Generally, the plan calls for fill to be placed in the area of the playground in order to build up the hill portion of the playground. Staff has developed a plan which will restrict excavation in the area to a minimum of 1.5-2 feet above the fill material, utilize shallower spread footings for the playground equipment and picnic shelter and limit inlets and under drains. A larger construction contingency has been included in the cost estimate for the playground area which will be used if a determination is made during construction to remove the underlying fill material and replace with new compacted fill. At the time of this writing we are awaiting confirmation of this approach from our consulting civil and geotechnical engineers.

#### The Court Area

While visiting the park staff noticed the overall poor condition of the facilities built over the WSSC vault. The basketball court was closed, two of the tennis courts no longer had nets and the surfacing was peeling and faded, exposing several previous underlying failed surfacing layers. The facilities badly needed replacement/renovation, but were not at that time scheduled or funded.

Late in 2015, staff from the Park Planning and Stewardship Division recommended that Dewey Park be considered as a possible site for the relocation of the street hockey court removed from Rock Creek Hills Local Park in Kensington. The park site had once belonged to Montgomery County Public Schools (MCPS) which requested the land back to build a new school. MCPS agreed to pay Parks for the facilities that would be displaced in the park. The funding presented an opportunity to begin the much-needed renovations to Dewey Local Park. Dewey was chosen due to its geographic proximity to the previous site, adequate separation from nearby homes (Dewey Road, the existing tree buffer, and Rock Creek Trail), and the opportunity to repurpose an under-utilized facility in poor condition.

#### Community Engagement

A Community meeting was held on June 16, 2016 in nearby Veirs Mill Local Park. The focus of the meeting was to brainstorm ideas with the community of how the court area might be reimagined to better serve the recreational needs of area residents of the neighborhoods around the park as well as those living beyond the immediate planning area. Eleven community members attended. Staff explained that the court area at Dewey was being considered for a new street hockey court as a replacement for the facility that was removed from Rock Creek Hills and that some funding could be available to begin the renovations to the court area in the park if street hockey were one of the activities. The design consultant prepared five different concepts and a series of image boards to initiate the discussion with a goal of obtaining clear direction and input from the community. The ensuing discussion was lively (refer to Attachment

2, meeting minutes). At the end of the discussion, each attendee was given five dots to distribute among the different activities that they would most like to see in the court area of Dewey Park. The final vote was as follows:

Outdoor Gym	15
Dog Park	13
Futsal	10
Street Hockey	5
Pickleball	2

In general, residents were concerned about there not being enough parking to support the new activities. They also noted that the community plays a lot of soccer and requested that the street hockey court also be available for Futsal. They noted that the neighborhood around the park is very "dog heavy" and that a dog park would be well used and very much appreciated. A request was made that the outdoor gym be located near the play area so that adults could work out while still supervising their children. They requested shade in both the play and court areas, a loop trail around the play area for young children riding scooters and bikes and a small picnic shelter. The community also noted the importance of facilities that can be used by multiple age groups. A reoccurring comment from residents was the desire for working restroom facilities.

Following the meeting staff continued to collect comments from the community. Most of the respondents favored a dog park and adult fitness facility. Several liked the idea of a skatepark, futsal, basketball, tennis and community gardens. Requests for the provision of more shade and working restrooms were also received. Overall, between the community meeting and subsequent email comments received, the most requested facilities were for a dog park, outdoor gym and Futsal, in that order.

From July 7, 2016 to July 25, 2016 a camera was placed in the court area confirming that most users utilized the area for activities other than tennis. Activities other than tennis included soccer, dog play, skateboarding, karate, walking, roller blading, scootering, yoga and street hockey.

Staff is now proceeding with the design of the new facilities over the court area. The plans include a combined street hockey/futsal court, a dog park with separate areas for small and large dogs, an outdoor gym and a walking track. A structural engineer is reviewing the plans and the equipment that will be attached to the underlying WSSC vault to ensure that the structural integrity of the vault can support the weight of the proposed facilities, any machinery required to recondition the surface and install the facilities, and to advise on proper attachment details.

#### The Outdoor Gym

Approximately 2,400 square feet in the northeast corner of the court area, adjacent to the 2-5 year-old playground, has been designated as an outdoor gym. The gym will include seven pieces of fitness equipment, including cardio, upper body, core, legs and a 13-person cross fitness piece. Several of the pieces are designed to accommodate users in wheelchairs. An agility ladder will be painted on the adjacent concrete surface. The equipment will be installed over impact attenuating protective surfacing in conformance with ASTM F3101:15, Standard Specification for Unsupervised Public Use Outdoor Fitness Equipment. The area will also include shade sails and benches. Lighting on a photocell and timer is planned to be included. Bike racks will be located nearby for the convenience of trail users.

#### The Dog Park

A 22,000 square-foot dog park is planned in the center and western portions of the court area. The new dog park will include separate fenced areas for large and small dogs, double gated entries, and a centrally located, shaded seating area. Both areas will include mounds with artificial grass or "doggy turf", to add interest and play value. The majority of the surface area within the dog park will be concrete, painted with a durable, high-quality acrylic polymer product. At the request of the community the dog park area is proposed to include lighting. A new accessible drinking fountain with a dog bowl will be provided just outside of the dog park adjacent to the court area making water available to park and trail users. A new water line is also planned to be installed along the west side of the court area for maintenance of the dog park.

#### The Street Hockey/Futsal Facility

The southeast corner of the former court area will be the location of a new, combined street hockey/futsal court. This facility is designed to be 150 feet long and 64 feet wide and include player's benches and a penalty box. The facility will be completely enclosed by a fiberglass dasher board system topped by chain link fencing to keep errant balls and pucks from entering the adjacent dog park area. The court will include hockey/futsal goals, a scoreboard and bleachers. The surface of the court area will be a resilient, pervious tile that is appropriate for futsal, street hockey and inline skating. Lighting may be provided pending adequate funding and may be included as an alternate bid item. A walking track will encircle the court providing another fitness opportunity for park users.

The Futsal court in Dewey Park will be the first Futsal court in Montgomery County Parks and is considered a pilot project. There is evidence that the community is already using the court area at Dewey as a soccer/futsal facility as evidenced by the painted soccer goals along the east and west fence lines. The Futsal facility will accommodate soccer play when the adjacent soccer field is closed due to wet conditions, helping to preserve the well-used soccer field.

During design of the facility staff reached out to representatives of the Washington Capitals (Caps) hockey team. The Caps are administering a program through the National Hockey League with a goal of encouraging interest in the sport of hockey. Over the past several years the Caps have built or refurbished street hockey facilities throughout the DC metropolitan area. They recently provided every elementary, middle and high school in DC with street hockey equipment and plan to do the same in Montgomery County this year. They are also currently planning to improve the existing street hockey court at Ridge Road Recreational Park, through the Montgomery Parks Foundation. At the time of this writing, the Caps have offered to contribute over \$74,500 to purchase and install the fiberglass dasher board and chain link fence system at Dewey Local Park.

#### Additional Parking

To address community concerns that the new facilities may create a shortage of parking, staff surveyed the existing parking lots. Through a combination of restriping existing spaces and a slight increase in the parking lot footprint, seven additional parking spaces will be added to the southern parking lot and four additional spaces will be added to the northern parking lot for a total of 64 spaces.

#### The Rock Creek Trail

Approximately 1,200 linear feet of the regional Rock Creek Trail is located within Dewey Park. The condition of the trail is poor in some areas and needs to be repaired. In addition, the trail crosses the entrance to the southern parking lot at an angle making it difficult for cars turning into the parking lot to see people on the trail. This project will realign the trail at the entrance to the parking lot increasing visibility and will repair the failing portions of the trail through the park.

#### MASTER PLAN RECOMMENTATIONS

#### Kensington-Wheaton Master Plan, Approved and Adopted 1989

The Master Plan identifies Dewey Local Park but doesn't include any specific recommendations. It was written before the WSSC facility was constructed in the park as it makes no mention of the associated tennis and basketball courts. The renovation of Dewey Local Park is supported by a stated goal of the Master Plan for community facilities, "To acquire and maintain a high-quality park system of natural areas, open spaces, and recreation facilities."

#### Countywide Park Trails Plan, September 2016

Approximately 1,200 linear feet of the Rock Creek Hiker-Biker Trail lies within Dewey Park. The Plan does not include any specific recommendations for this segment of the trail, however it describes the Rock Creek Trail as being one of several built decades ago within stream valley parks, and states that the trail is, "....intended to serve trail-based recreation needs including walking, running, biking and nature appreciation. Given their age, these trails do not meet modern design standards for bikeways..." and "Although these trails may offer some transportation benefits, their main purpose is recreation." Improving the quality and safety of the Rock Creek Trail is supported by and in conformance with the Countywide Park Trails Plan.

#### **Bicycle Parking Guidelines, October 2016**

The proposed renovation plan includes ample bicycle parking designed in conformance with the Guidelines. Cyclists will be encouraged to bike to the park as a destination or to stop while on the trail taking advantage of the new facilities.

# Vision 2030: Strategic Plan for Parks and Recreation, Montgomery County, Maryland, June 2011

Vision 2030 is a strategic plan for park and recreation services in Montgomery County for the next twenty years. The final plan, dated June 2011, identifies Dewey Local Park as located in the East Transit Corridor planning area. Volume 2 of the current draft (page 63) indicates that the East Transit Corridor area has the highest population of all planning areas and also has the greatest concentration and access to recreation components. On page 22 of Volume 2, user surveys identified facilities of highest importance, including trails, playgrounds and natural areas. There are no detailed recommendations specific to the renovation of Dewey Local Park.

In the table on pages 75 and 76 (Appendix E), 2010 survey results from the East Transit Corridor planning area show increasing demand and need to maintain high levels of service for multi-purpose fields, playgrounds, picnic shelters, and natural and hard surface trails.

#### 2017 Park, Recreation and Open Space (PROS) Plan (Draft)

Building on the findings of the Vision 2030 Plan, the 2017 PROS Plan provides strategies and priorities for delivering the right kinds of services and facilities in the most effective locations. The renovation project proposes to both preserve and enhance existing facilities, fulfilling documented 2017 PROS needs, and piloting a new type of facility while simultaneously relocating another. The project demonstrates Parks' focus and emphasis on providing opportunities for healthy living.

The Dewey Local Park renovation project fits into one of the major themes identified in the 2017 Parks Recreation and Open Space (PROS) Plan, "Optimize Existing Parks and Facilities." Optimization can be a combination of preserving and enhancing facilities while providing new facilities to meet changing demands. The new facilities at Dewey Local Park will provide a destination park, well-served by the hard surface Rock Creek Trail and will be a prime example of the PROS theme to "Optimize Existing Parks and Facilities."

The proposed facilities respond to the changing demands for new types of park facilities. The PROS Plan documents the shortage of dog parks in the County which are now commonly requested by communities. The Plan recommends that the Department of Parks look for an opportunity for a pilot futsal court on an underutilized sports court near an existing rectangular field. This pilot futsal court, combined with street hockey, will provide useful information for the selection of future sites. It should be noted that there is visual evidence of futsal currently being played at Dewey Local Park evidenced by the painted goals on the court's chain link fence.

#### Park Equity and Proximity Analysis

The PROS plan includes an analysis intended to identify areas of the County that may have, "Lower park equity based on high concentrations of lower income households with low walkable access to park entrances and trailheads." The plan recommends that Park Equity be added to the prioritization criteria for the Capital Improvements Program (CIP). The Park Equity Analysis assigns each census block in the County a Park Equity score, ranging from 0-9 with zero being the areas of least concern and nine being the area of highest concern. The values are assigned based on three equally weighted factors: population density, median household income (as a percent of the Area Median Income (AMI)), and walkable access to parks and trailheads.

Based on the Park Equity Analysis Chart in Appendix 4, the Park Equity Analysis area closest to Dewey Local Park, located just to the west, has a value of 7 (refer to Attachment 3). The number was derived as follows:

Medium - High Density (Suburban) Population (2) Between 51% to 65% Area Median Income (AMI) Low Income (2). Poor access for walking distance to park entrances and trail heads (3).

The Park Equity and Proximity Analysis tool supports the expenditure of public funds to optimize the facilities within Dewey Local Park to provide better access to recreation facilities to the underserved communities surrounding the park.

#### Energized Public Spaces Function Master Plan, Public Hearing Draft, June 22, 2017

Dewey Local Park is not located within a designated Energized Public Spaces (EPS), study area. The renovation of the park utilizes several of the Plans implementation strategies to

increase park usage including adding new recreational opportunities to activate the park, improving connections to the park, renovating existing and repurposing under-utilized facilities.

#### AGENCY COORDINATION AND REGULATORY APPROVALS

The following is a summary of agency coordination performed for this project:

#### M-NCPPC Department of Parks

Staff met and will continue to meet with various stakeholders within M-NCPPC during design as part of the Planning, Design, Construction and Operations (PDCO) team process. This includes staff from Facilities Management, the Southern Region, Urban Forestry, Water Resources, Property Acquisition, and Park & Trail Planning.

#### M-NCPPC Department of Planning

A NRI/FSD is being developed for the expanded project and is anticipated to be submitted in August. Submission of a Forest Conservation plan exemption will follow approval of the NRI/FSD. The project is exempt from Forest Conservation Plan requirements because there is no forest being cleared and the proposed modifications do not increase the developed area by more than 50%.

#### Montgomery County Department of Permitting Services/Water Resources (DPS)

A stormwater management concept plan was submitted to DPS on July 5, 2017 and is currently under review. Stormwater management for the playground area consists of a system of grass swales, underdrains and an infiltration berm. Stormwater management for the court area and the existing parking lots consists of retrofit stormwater facilities including micro-bioretention, bio-swales and non-rooftop disconnection.

#### Washington Sanitary Sewer Commission (WSSC)

Staff met with WSSC on site on several occasions to discuss the park renovation plans, and to review the condition of the existing recreational facilities, the WSSC underground vault and the associated above ground facilities. WSSC fully understands and supports the Commission's desire to renovate the park. A letter from WSSC, dated June 23, 2017 is included as Attachment 4. As the plans are further developed staff will submit plans to WSSC for review and approval.

#### COST ESTIMATE

#### **Construction Costs**

A summary of anticipated construction costs is outlined in the table below.

Item	Subtotal
Site Preparation and Demolition	\$124,890
Sediment & Erosion Control	\$30,000
Earthwork	\$25,569
Stormwater Management	\$110,000
Utilities (incl. lighting)	160,192
Vehicular Pavement	\$20,000
Pedestrian Pavement & Hardscape	\$103,486
Recreation Facilities (street hockey/futsal, outdoor gym, dog park)	\$478,790
Playground	\$217,512
Structures (Picnic shelter, shade structures)	\$127,000
Site Amenities, Furnishings	\$58,000
Landscape Planting	\$33,500
Miscellaneous (Asbuilts, Electronic Submittal Submission, MOM)	\$20,000
Construction Subtotal	\$1,508,939
Construction Contingency (25% of Construction Subtotal)	\$377,235
Construction Total (Subtotal plus Contingency)	\$1,886,178
Construction Management & Inspections (6% of Construction Total)	\$113,171
TOTAL PROJECT COST	\$1,999,349

#### PROJECT FUNDING AND SCHEDULE

This project is proposed to be funded from various sources. Construction of the court area will be funded in part from a \$74,500 donation to the Montgomery Parks Foundation from the Washington Capitals towards construction of the street hockey/futsal facility, and approximately \$357,000 from MCPS as reimbursement for the displaced park facilities in Rock Creek Hills Park. The remaining construction cost will be funded from the Department of Parks Capital Improvements Program from the new "Refresher" PDF. If the plan and funding strategy is approved, the project will likely be completed in several phases with construction of the court area beginning as early as this Fall.

#### **OPERATING BUDGET IMPACT**

Annual operating budget costs to maintain the renovated park are expected to significantly increase. Current maintenance standards for local parks assume weekly visits. It is anticipated

that the volume of visitors will significantly increase following renovation, thereby requiring an increase in the frequency and time required to adequately maintain the newly activated park. Based on recent experience maintaining the new dog park in Ellsworth Park, daily visits will be necessary to remove pet waste, blow the surface for debris and inspect entrance/exit ways and perimeter fencing. It will also be necessary to establish regularly scheduled closings for maintenance.

The upgraded hockey/futsal court will require blowing of the surface, safety inspections of fencing, goals and boards and trash removal. The outdoor gym will also require monthly inspections and maintenance, creating additional work for the Playground Safety Inspector and repair teams. The addition of a picnic shelter will increase the volume of trash and require additional stops by the trash truck and the cleaning and blowing of the shelter area.

Because the existing park was developed before water quality standards were established the new storm water facilities will also require maintenance and there will likely be additional costs to maintain the landscape planting. Additional park police surveillance may also be required.

The projected additional operating budget impacts will be carefully analyzed and included with the FY19-24 Capital Improvements Program submission.

#### CONCLUSION

Staff recommends approval of the Recommended Concept Plan and the associated cost estimate. The proposed plan recognizes, protects and enhances the unique character and features of Dewey Local Park and will reactivate it as a center of the community and an exciting destination along the Rock Creek Trail. The program is balanced to meet the needs of all park users, providing new recreation opportunities for healthy living, while improving the appearance and optimizing the function of the existing park. The proposed project will help improve efficiency in maintenance and operations, and is designed for the enjoyment of current and future generations.

#### ATTACHMENTS

- Attachment 1: Phase II Environmental Site Assessment, SaLUT Inc., April 2017
- Attachment 2: Community Meeting Minutes
- Attachment 3: Park Equity Analysis Map
- Attachment 4: Letter from WSSC to M-NCPPC, June 23, 2017

# ATTACHMENTS



1818 New York Avenue, N.E., Suite 231 Washington, DC 20002

Telephone: (301) 595-3783 www.salutinc.com

May 9, 2017

Ms. Joan Honeyman Jordan Honeyman Landscape Architecture LLC 711 Florida Avenue, NW Washington, DC 20001

Subject:

Phase II Environmental Site Assessment Dewey Local Park 11720 Dewey Road Silver Spring, Maryland 20906

Dear Ms. Honeyman:

SaLUT-TLB is pleased to submit the Phase II Environmental Site Assessment (ESA) for the above referenced property. The Phase II ESA was completed in accordance with the ASTM Standard Practice for Environment al Site Assessments: Phase II Environmental Site Assessment Process (E 1903-11).

We sincerely appreciate this opportunity to provide our environmental services and look forward to working with you on this and future projects. If you have any questions please call me at 202-413-1234.

Sincerely,

Carl Kohlmeyer Program Manager

# FINAL PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT DEWEY LOCAL PARK 11720 DEWEY ROAD SILVER SPRING, MARYLAND

PREPARED FOR:

Jordan Honeyman Landscape Architecture LLC 711 Florida Avenue, NW Washington, DC 20001

#### **REPORT PREPARED BY:**



SALUT-TLB A DIVISION OF SOIL AND LAND USE TECHNOLOGY, INC. 530 MCCORMICK DRIVE, SUITE S GLEN BURNIE, MD 21061

May 9, 2017

#### **EXECUTIVE SUMMARY**

Jordan Honeyman Landscape Architecture LLC retained SaLUT - TLB to perform an ASTM E1903-11 compliant Phase II Environmental Site Assessment (ESA) of the Dewey Local Park located at 11720 Dewey Road in Silver Spring, Maryland. The park is located within a residential zone and is owned and operated by Maryland National Capitol Planning Commission (M-NCPC). The playground is scheduled for renovation and the existing playground will be removed and a completely new playground will be installed. Local park playgrounds are typically 3,500 to 5,000 square feet in size and include playground equipment to meet the needs of children from ages 2 to 12.

The Phase II ESA was performed in general conformance with the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (E 1903-11). This Phase II ESA involved on-site surveying and soil sampling by environmental professionals, sample analysis, and review of analytical data. Groundwater was not encountered at the full depth of the soil borings.

The field team executing the Phase II ESA SaLUT-TLB installed six soil borings and collected soil samples. The samples were placed in ice chest and preserved with ice for transportation under chain of custody to the project laboratory. Samples were analyzed for Total Petroleum Hydrocarbons - Diesel Range Organics (TPH-DRO), Total Petroleum Gasoline Range Organics (TPH-GRO), and Volatile Organic Compounds (VOC). The analytical results indicate detectable levels of petroleum constituents in three of the six borings at relatively low concentrations. An examination of the current conditions of the site and surroundings did not identify an obvious source for the contaminants. The current Generic Numeric Cleanup Standards (NCS) for Groundwater and Soil adopted by the Maryland Department of the Environment indicate a Total Petroleum Hydrocarbon – Diesel Range Organics (TPH-DRO) for Residential Soil is 230 Parts Per Million (ppm). These samples were collected from 4-5 feet below local grade. The analytical results indicate that SB-3 has a THP-DRO concentration of 848 ppm and the sample from SB-4 has a TPH-DRO concentration of 278 ppm and these are above the NCS.

The concentrations are above the cleanup standard and are not associated with any known activity at the site and the source is not known. The impacted soil is located 4-5 feet below ground surface and if it is impacted during construction of the new playground it should be managed as petroleum contaminated waste, properly characterized and disposed of at a local facility licensed to accept the waste. If activities are planned that will impact this soil we recommend an environmental professional equipped with Photo-Ionization Detector (PID) be onsite to screen the soil. Should impacted soil be disturbed it should be stockpiled on 6-mil polyethylene sheeting onsite and covered with the same material pending disposal in accordance with applicable Federal, state and local regulations.

# **Table of Contents**

LIST (	OF ACRONYMS	vi
1. IN	NTRODUCTION	1
1.1	PURPOSE	1
1.2	DETAILED SCOPE OF SERVICES	1
1.3	LIMITATIONS AND EXCEPTIONS	1
1.4	SPECIAL TERMS AND CONDITIONS	2
1.5	USER RELIANCE	2
2. Sľ	ITE DESCRIPTION	2
2.1	LOCATION AND LEGAL DESCRIPTION	2
2.2	SITE AND VICINITY GENERAL CHARACTERISTICS	2
2.3	CURRENT USE OF THE PROPERTY	2
2.4	DESCRIPTION OF ONSITE STRUCTURES, ROADS, AND IMPROVEMENTS	2
2.5	CURRENT USE OF ADJOINING PROPERTIES	3
3. Sľ	ITE ACTIVITIES AND SAMPLING	3
4.	CONCLUSIONS	6
5. RI	ECOMMENDATIONS	6
6. SIC	GNATURE(S) OF THE ENVIRONMENTAL PROFESSIONAL(S)	6
APPEN APPEN	NDIX A: Test Boring Location Plan NDIX B: Boring Logs	

APPENDIX C: Analytical Results

# LIST OF ACRONYMS

AAI	All Appropriate Inquiries
AIRS	Aerometric Information Retrieval System
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
CDL	Clandestine Drug Labs
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCUS	CERCLA Information System
CONSENT	Superfund (CERCLA) Consent Decrees
CORRACTS	RCRA Information System-Corrective Action Sites
DOD	Department of Defense
DOT OPS	Department of Transportation, Office of Pipeline Safety
EDR	Environmental Data Resources, Inc.
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act/TSCA
FINDS	Facility Index System
FTTS	FIFRA/TSCA Tracking System
FOIA	Freedom of Information Act
FUDS	Formerly Used Defense Sites
ICIS	Integrated Compliance Information System
LUCIS	Land Use Control Information System
LUST	Leaking Underground Storage Tank
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
NFRAP	No Further Remedial Action Planned (Delisted CERCLA Site)
NPDES	National Pollutant Discharge Emissions System
NPL	National Priority List

Open Dump Inventory
Polychlorinated Biphenyl Activity Database Polychlorinated Biphenyls
RCRA Administrative Action Tracking System
Radiation Information
Resource Conservation and Recovery Act of 1976
Recognized Environmental Condition
Record of Decision
State Coalition for Remediation of Drycleaners
State Hazardous Waste Sites
Section Seven Tracking System
Solid Waste Facilities/Landfills
Toxic Release Inventory System
Toxic Substances Control Act
Transporters, Storage, and Disposal
Uranium Mill Tailings Site
United States Department of Agriculture
United States Environmental Protection Agency
United States Geological Survey
Underground Storage Tank

## **1. INTRODUCTION**

#### 1.1 PURPOSE

Jordan Honeyman Landscape Architecture LLC retained the SaLUT-TLB environmental group to perform a limited Phase II Environmental Site Assessment (ESA) using the process prescribed in American Society for Testing and Materials (ASTM) E 1093, identify potential petroleum contamination in the soil at the site. The ASTM E 1903 industry standard is a process used to conduct an ESA of a property with respect to substances included in the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This report reflects the observations, information, and data collected by SaLUT-TLB in April 17, 2017. Supporting documentation is provided in the appendices as follows:

- Appendix A Test Boring Location Plan
- Appendix B Boring Logs
- Appendix C Analytical Data

#### **1.2 DETAILED SCOPE OF SERVICES**

This Phase II ESA was performed in accordance with ASTM E 1903-11 (Standard Practice for ESAs: Phase II ESA Process) and consists of an intrusive survey of the subject property to assess whether there has been a release of any potentially hazardous substances. The site reconnaissance involved the identification of any RECs as defined by CERCLA.

#### **1.3 LIMITATIONS AND EXCEPTIONS**

The findings within this ESA utilized information that was practically reviewable per ASTM E 1903-11, meaning that only relevant data relating to the subject site has been incorporated into the findings, disregarding extraordinary analysis of irrelevant data. This ESA is not meant to supersede any relevant regulatory requirements.

The property was reasonably accessible at the time of the site reconnaissance. There were no accessibility limitations.

SaLUT-TLB does not warrant that there are no toxic or hazardous materials or contamination, nor does SaLUT-TLB accept any liability if such are found at some future time, or could have been found if additional sampling or additional studies were conducted. SaLUT-TLB does not assume responsibility for other environmental issues that may be associated with this subject site. The information included in this report is based on the limited data collected during this investigation and is limited to the scope of the investigation at the time it was conducted.

In view of the changing status of environmental laws, regulations, and guidelines, SaLUT-TLB cannot be responsible for changes in laws, regulations, or guidelines that occur after the study has been completed and that may affect the subject site.

#### 1.4 SPECIAL TERMS AND CONDITIONS

The findings of this ESA are limited and based on the completeness and accuracy of the data and condition of the site as of the dates of the onsite investigation and when publicly information was obtained as described within this report.

#### 1.5 USER RELIANCE

This report is for the use and benefit of, and may be relied upon by the owner and any of its affiliates, and third parties authorized in writing by the owner. Any third party agrees by accepting this report that any use or reliance on this report shall be limited by the exceptions and limitations in this report, and with the acknowledgment that actual site conditions may change with time, and that hidden conditions may exist at the property that were not discovered within the authorized scope of the assessment. Any use by or distribution of this report to third parties, without the express written consent of SaLUT-TLB or the owner, is at the sole risk and expense of such third party. SaLUT-TLB makes no other representation to any third party except that it has used the degree of care and skill ordinarily exercised by environmental consultants in the preparation of a report and in the assembling of data and information related thereto.

## 2. SITE DESCRIPTION

#### 2.1 LOCATION AND LEGAL DESCRIPTION

The subject site is hereby defined as a Montgomery County public park owned by the Maryland National Capitol Park and Planning Commission (M-NCPPC) that is scheduled for renovation. The subject property is located at 11720 Dewey Road, Silver Spring, Maryland. The latitude is 39°02'52.98" north and the longitude is 77°05'20.03" west. A figure showing the site is provided in Appendix A.

#### 2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The park is located 11720 Dewey Road, Veirs Mill, Maryland between Randolph Road and Beach Drive. The surrounding area is a recreational park and residential property.

#### 2.3 CURRENT USE OF THE PROPERTY

The property is currently being used as a playground, tennis court, and playing field. This survey was limited to the playground portion of the property.

#### 2.4 DESCRIPTION OF ONSITE STRUCTURES, ROADS, AND IMPROVEMENTS

The target property is a park area of roughly 175,000 square feet with the playground area accounting for roughly 45,000 square feet of the property. At present, no renovations have been

made to playground. There is a parking lot to the north of the playground and a service road to the west.

#### 2.5 CURRENT USE OF ADJOINING PROPERTIES

The adjoining properties consist of single family homes and undeveloped wooded area.

# 3. SITE ACTIVITIES AND SAMPLING

A total of six soil samples were collected from six locations around the playground. Detailed sampling methodology is described below.

#### 3.1 SAMPLE COLLECTION AND METHODOLOGY

The soil borings were installed by Odyssey Environmental, Inc. on April 17, 2017. Drilling was conducted using a mobile Geoprobe 7822 Direct Push Drill (DPD) rig. The augers were 2-inch diameter and were used to collect continuous cores in an acetate sleeve. Continuous core samples were collected from the horizons to document lithological conditions and potential residual contamination. Soil samples were field screened using a photoionization detector (PID). Impacted drill cutting and decontamination liquids were containerized in 55-gallon DOT- approved drums and disposed of in accordance with applicable Federal, state and local regulations. Soil boring locations were continuously protected from water surface infiltration and were sealed and abandoned immediately upon completion of sampling activities. The soil borings were backfilled and grouted with 2:1 bentonite and water slurry to ensure they did not create a pathway for surficial contamination to impact subsurface soils, or groundwater.

All drilling equipment that came into contact with samples and sampling surfaces were constructed of steel and were properly decontaminated between soil boring locations. A three-stage decontamination process was used to minimize the potential for cross contamination between the borings. All decontamination liquids were captured, stored in drums and disposed of offsite. The types of IDW generated during well installation typically include soil, impacted crushed stone, and decontamination fluids. Soil and decontamination fluids generated during drilling and decontamination were containerized in 55-gallon DOT-approved drums pending characterization and proper disposal/treatment. The management, handling, and disposal of these wastes complied with applicable Federal, state and local regulations and DC solid waste and hazardous waste management regulations.

A total of six soil boring were installed and soil samples were collected from each location. The drill string was advanced to an approximate depth of 12 feet at each location. The rig met refusal at a depth less than 12 feet at 3 locations. Sample locations can be found in Appendix A. Samples were placed into appropriate laboratory prepared containers and kept on ice.

The samples were sent to ALS Environmental in Middletown, Pennsylvania for analysis. Samples were analyzed for TPH-DRO, TPH-GRO, and VOC.

#### 3.2 **RESULTS OF SAMPLE ANALYSIS**

The analytical results of soil sampling are described below in tables 1 through 3. Complete

TABLE 1 – ANALYTICAL DATA – TPH DRO							
Sample Number	EPA Analysis	Reporting Limits	Results	MDE			
	Method	(mg/kg)	(mg/kg)	Residential Soil			
				Clean-Up			
				Standard			
				(mg/kg)			
Dewey SB-1	8015 B	12.6	90.6	230			
Dewey SB-2	8015 B	12.6	ND	230			
Dewey SB-3	8015 B	236	848	230			
Dewey SB-4	8015 B	119	278	230			
Dewey SB-5	8015 B	11.8	ND	230			
Dewey SB-6	8015 B	12.1	ND	230			

laboratory analytical results are presented in Appendix C.

TABLE 2 – ANALYTICAL DATA – TPH GRO								
Sample Number	EPA Analysis	Reporting Limits	Results	MDE				
	Method	(mg/kg)	(mg/kg)	Residential Soil				
				Clean-Up				
				Standard				
				(mg/kg)				
Dewey SB-1	8015 B	8.66	ND	230				
Dewey SB-2	8015 B	9.04	ND	230				
Dewey SB-3	8015 B	9.42	15.4	230				
Dewey SB-4	8015 B	8.51	13.3	230				
Dewey SB-5	8015 B	8.43	ND	230				
Dewey SB-6	8015 B	9.46	ND	230				

TABLE 3 – ANALYTICAL DATA – VOC								
Sample	EPA Analysis	Parameters	Reporting	Results	MDE			
Number	Method	Found	Limits	(mg/kg)	Residential			
			(mg/kg)		Soil Clean-Up			
					Standard			
					(mg/kg)			
Dewey SB-1	8260 B	Acetone	0.0084	0.0304	7000			
Dewey SB-2	8260 B	None	NA	NA	NA			
Dewey SB-3	8260 B	Acetone	0.0087	0.0504	7000			
		Carbon	0.0017	0.0039	780			
		Disulfide						
Dewey SB-4	8260 B	Acetone	0.0092	0.0509	7000			
		Methyl	0.0018	0.0038	NA			
		acetate						
		Methyl	0.0018	0.0050	NA			
		cyclohexane						
Dewey SB-5	8260 B	Acetone	0.0082	0.0102	7000			
Dewey SB-6	8260 B	None	NA	NA	NA			

### 4. CONCLUSIONS

There are detectable levels of TPH-DRO observed in three locations and TPH-GRO at two locations, see Appendix A. The analytical results indicate detectable levels of petroleum constituents in three of the six borings at relatively low concentrations. The soil underlying site at a depth of 4-5' are impacted by a petroleum release. An examination of the current conditions of the site and surroundings did not identify an obvious source for the contaminants. The current Generic Numeric Cleanup Standards (NCS) for Groundwater and Soil adopted by the Maryland Department of the Environment indicate a Total Petroleum Hydrocarbon – Diesel Range Organics (TPH-DRO) for Residential Soil is 230 Parts Per Million (ppm). These samples were collected from 4-5 feet below local grade. The analytical results indicate that SB-3 has a THP-DRO concentration of 848 ppm and the sample from SB-4 has a TPH-DRO concentration of 278 ppm and these are above the NCS.

## 5. **RECOMMENDATIONS**

The concentrations are above the cleanup standard and are not associated with any known activity at the site and the source is not known. The impacted soil is located 4-5 feet below ground surface and if it is impacted during construction of the new playground it should be; managed as a petroleum contaminated waste; properly characterized; and disposed of at a local facility licensed to accept the waste. If activities are planned that will impact this soil we recommend an environmental professional equipped with Photo-Ionization Detector (PID) be onsite to screen the soil during soil disturbing activities. Should impacted soil be disturbed we recommend it be stockpiled on 6-mil polyethylene sheeting onsite and covered with the same material pending final characterization and disposal in accordance with applicable Federal, state and local regulations.

# 6. SIGNATURE(S) OF THE ENVIRONMENTAL PROFESSIONAL(S)

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312. We have performed a Phase II environmental site assessment at the property at 11720 Dewey Road in Veirs Mill, MD 20906 in conformance with the scope and limitation of ASTM Practice E 1903-11 and for the following objectives: an intrusive survey of the subject property to assess whether there has been a release of petroleum products and VOCs.

Sincerely,

Carl Kollmeyer Program Manager

APPENDIX A: Test Boring Location Plan



APPENDIX B: Boring Logs

Project: Dewev	Loca	ıl Pai	rk		Pro 17-	iject Number: 017	Client:	Bori SB-	ng No. 1
Address	s, Cit	y, Stev Ro	tate bad. Sil	ver Sp	rina	. MD	Rig Type: Probe 7822		
Logged Patrick	By: Rusł	n/Lai	uren Ke	sslak		Started: 4/17/2017 9:20	Bit Type:	Diar 2"	neter:
Drill Cre	W:	.,			Date	Completed: 4/17/2017 9:40	Hammer Type: Direct Push		
USA Tic NA	ket	Num	ber:			Backfilled: Enviro Plug	Hammer Weight: NA	Han NA	nmer Drop:
					Gro	oundwater Depth: NA	Elevation: 259'	Tota 7.5'	al Depth of Boring:
Depth (feet)	Sample Type	Sample Number	Blow Counts (blows/foot)	Graphic Log	Litl Soil size Roc bedo	hology <u>Group Name:</u> modifier, color , other descriptors <u>k Description:</u> modifierm colo ding and joint characteristics,	, moisture, density/consistency, gr or, hardness/degree of concentrati solutions, void conditions.	ain on,	VOC
0-2					Ove	erburden and fill, top so	il		0 ppm
2 - 3 3 - 3.5					Asp	ohalt back fill artz gravel			1.5 ppm 0 ppm
3.5 - <u>5.5</u> 5 —	6	1			Tar	nish brown clay loam			0 ppm
5.5	Э	I			Thi	n layer of ashpalt			0 ppm
5.5 - 6					Tar				
6 - 7.5 7.5					Gra Ref	ayish brown silty clay loa fusal	am		0 ppm
_						Non-native fills fu	ll depth of boring		
10 —									

Project: Dewev	Loca	al Pa	rk		Pro 17-	ject Number: 017	Client:	Bori SB-2	ng No. 2
Address 11720 E	s, Cit	ity, State Drilling Contractor: Drill Rig Type vev Road, Silver Spring, MD Odyssev Environmental GeoProbe 78						Rig Type: Probe 7822	
Logged Patrick	By: Rusł	) n/Lau	uren Ke	sslak	Started: Bit Type: Diameter:			neter:	
Drill Cre	W:				Date	Completed: 4/17/2017 10:10	Hammer Type: Direct Push		
USA Tic NA	ket	Num	ber:			Backfilled: Enviro Plug	Hammer Weight: NA	Han NA	nmer Drop:
					Gro	oundwater Depth: NA	Elevation: 258'	Tota 12.0	al Depth of Boring: '
Depth (feet)	Sample Type	Sample Number	Blow Counts (blows/foot)	Graphic Log	Litl Soil size <u>Roc</u> bed	<b>DOOGY</b> <u>Group Name:</u> modifier, color, , other descriptors <u>k Description:</u> modifierm colo ding and joint characteristics, s	moisture, density/consistency, gr r, hardness/degree of concentrati solutions, void conditions.	ain on,	VOC
0-2					Ove	erburden and fill, top soi	l		0 ppm
2 - 3.5					Bro	wn red loam			0 ppm
35					aer	shalt fill			0 ppm
3.5 - <u>4.0</u>					Bro	wn red sandy loam			0 ppm
4.0 - 5 5 - 6	S	2			ash	plat and fill			0 ppm
6 0					0.00				
0-0					Gla	ayish brown siny clay loa	411		
8 - 12					Gra	ay silty clay			0 ppm
						Non-native fills	full depth of boring		
10 —									
12					dril	ling stopped			0 ppm

Project: Dewey L	.002	l Pai	rk		Pro 17-	iject Number: 017	Client:	Bori SB-3	ng No. 3
Address 11720 D	Address, City, State Drilling Contractor: Drill Rig 11720 Dewey Road, Silver Spring, MD Odyssey Environmental GeoProt					Rig Type: Probe 7822			
Logged I Patrick F	By: Rusł	n/Lau	uren Ke	sslak		Started: 4/17/2017 10:20	Bit Type:	Diar 2"	neter:
Drill Crev	W:				Date	Completed: 4/17/2017 10:40	Hammer Type: Direct Push		
USA Ticl NA	ket	Num	ber:			Backfilled: Enviro Plug	Hammer Weight: NA	Harr NA	nmer Drop:
					Gro	oundwater Depth: NA	Elevation: 256'	Tota 6.0'	I Depth of Boring:
Depth (feet)	Sample Type	Sample Number	Blow Counts (blows/foot)	Graphic Log	Litl Soil size <u>Roc</u> bedo	hology <u>Group Name:</u> modifier, color, , other descriptors <u>k Description:</u> modifierm colo ding and joint characteristics, s	moisture, density/consistency, gr r, hardness/degree of concentration olutions, void conditions.	ain on,	VOC
0 - 1.5					Ove	erburden and fill			0 ppm
1.5 - <u>2.5</u>					Tar	n sandy loam			0 ppm
2.5 - <u>3.0</u> 3.0 - 5.0					Qua Bro	artz gravel wn silt loam with ashpal	t and fill		0 ppm 0 ppm
5 - 6	S	3			Gra	ayish brown silty clay loa	ım		0 ppm
6					Ref	fusal			0 ppm
						Non-native fills f	ull depth of boring		
10 —									

Project: Dewey Local Park	Project Number:	Client:	Boring No.
Address, City, State	, City, State	Drill Rig Type:	
Logged By:	By: Started:	Bit Type:	Diameter:
Patrick Rush/Lauren Kesslak	Rush/Lauren Kesslak 4/17/2017 10:	45	2"
Drill Crew:	א: ⊉ Completed: □ 4/17/2017 11:	Hammer Type: 04 Direct Push	
USA Ticket Number:	ket Number: Backfilled:	Hammer Weight:	Hammer Drop:
	Groundwater Depth:	Elevation:	Total Depth of Boring:
Depth (feet) Sample Type Sample Number	ad base Lithology   ad Soil Group Name: modifier, considered of the size, other descriptors   ad Base Rock Description: modifierm of bedding and joint characteristic	258 blor, moisture, density/consistency, g color, hardness/degree of concentrat cs, solutions, void conditions.	rain OS
3.5 - <u>4.0</u> 4.0 - 6.5 S 4	S 4	loam with asphalt gravel	0 ppm 0 ppm 0 ppm 9.7 ppm
6.5- <u>12</u>	Grayish brown silty clay	loam	0.5 ppm 1.0 ppm

Project: Dewey L	oject: wey Local Park dress, City, State 720 Dewey Road, Silve				Pro 17-	ject Number: 017	Client:	Boring No. SB-5		
Address 11720 D	, Cit	y, St y Ro	tate bad, Silv	ver Sp	ring	, MD	Drilling Contractor: Odyssey Environmental	Drill Geo	Rig Type: Probe 7822	
Logged Patrick F	By: Rusł	ı/Lau	uren Ke	sslak		Started: 4/17/2017 11:10	Bit Type:	Diar 2"	neter:	
Drill Crev	ck Rush/Lauren Kessl Crew: Ticket Number:				Date	Completed: 4/17/2017 11:25	Hammer Type: Direct Push			
USA Tic NA	ISA Ticket Number: IA					Backfilled: Enviro Plug	Harr NA	nmer Drop:		
					Gro	oundwater Depth: NA	Tota 12.0	al Depth of Boring: )'		
Depth (feet)	Sample Type	Sample Number			Litl Soil size <u>Roc</u> bedo	<b>DOOGY</b> <u>Group Name:</u> modifier, color, , other descriptors <u>k Description:</u> modifierm colo ding and joint characteristics, s	moisture, density/consistency, gr r, hardness/degree of concentration colutions, void conditions.	ain on,	VOC	
0 - 1.5					Ove	erburden and fill			0 ppm	
1.5-2 <u>.0</u> 2.0 - 5.5					Qua Tar	artz gravel n sandy loam			0 ppm 0 ppm	
	S	5							0 ppm	
5.5 - <u>12</u>   10					Gra	ayish brown silty clay loa Non-native fills fu	am Ill depth of boring		0 ppm	

Project: Dewey Local Park Address, City, State					Pro 17-	ject Number: 017	Client: E		ng No. ô	
Address	, Cit	y, Si	tate	/or Sn	rina	MD	Drilling Contractor:	Drill	Rig Type: Probe 7822	
Logged Patrick F	By: Rusł	n/Lau	uren Kes	sslak		Started: 4/17/2017 11:30	Bit Type:	Diar 2"	neter:	
Drill Cre	Drill Crew: JSA Ticket Number: IA					Completed: 4/17/2017 11:45	Hammer Type: Direct Push			
USA Tic NA	JSA Ticket Number: NA					Backfilled: Enviro Plug	Hammer Weight: NA	Hammer Drop: NA		
					Gro	oundwater Depth: NA	Tota 5.5'	I Depth of Boring:		
Depth (feet)	Sample Type	Sample Number			Litl Soil size <u>Roc</u> bedo	<b>hology</b> <u>Group Name:</u> modifier, color, , other descriptors <u>k Description:</u> modifierm colo ding and joint characteristics, s	moisture, density/consistency, gr r, hardness/degree of concentrati solutions, void conditions.	ain on,	voc	
0 - 4.0  4.0 - 5.5  5.5   10	S	6				erburden, fill, and top so ayish brown silty clay loa usal Non-native fills fu	am		0 ppm 0 ppm 0 ppm	

APPENDIX C: Analytical Results





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

May 3, 2017

Mr. Patrick Rush Global Consulting Inc 1818 New York Ave Washington, DC 20002

# **Certificate of Analysis**

Project Name:	Various Testing	Workorder:	2223632
Purchase Order:		Workorder ID:	17-017 Dewy Park Pll

Dear Mr. Rush:

Enclosed are the analytical results for samples received by the laboratory on Wednesday, April 19, 2017.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Susan J Scherer (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Environmental.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Mr. Jeevan Yoganathan , Mr. Carl Kohlmeyer

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Scharo

Ms. Susan J Scherer Project Coordinator

ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### SAMPLE SUMMARY

Workorder: 2223632 17-017 Dewy Park PII

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
2223632001	Dewey-SB1	Solid	4/17/2017 09:55	4/19/2017 08:42	Mr. Patrick Rush
2223632002	Dewey-SB2	Solid	4/17/2017 09:55	4/19/2017 08:42	Mr. Patrick Rush
2223632003	Dewey-SB3	Solid	4/17/2017 10:25	4/19/2017 08:42	Mr. Patrick Rush
2223632004	Dewey-SB4	Solid	4/17/2017 10:47	4/19/2017 08:42	Mr. Patrick Rush
2223632005	Dewey-SB5	Solid	4/17/2017 11:07	4/19/2017 08:42	Mr. Patrick Rush
2223632006	Dewey-SB6	Solid	4/17/2017 11:28	4/19/2017 08:42	Mr. Patrick Rush

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### SAMPLE SUMMARY

Workorder: 2223632 17-017 Dewy Park PII

#### Notes

- -- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 Field Services Sampling Plan).
- -- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
- -- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
- -- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
- -- The Chain of Custody document is included as part of this report.
- -- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- -- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- -- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97)
- refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- -- For microbiological analyses, the "Prepared" value is the date/time into the incurbator and the "Analyzed" value is the date/time out the incubator.

#### Standard Acronyms/Flags

- J Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
- U Indicates that the analyte was Not Detected (ND)
- N Indicates presumptive evidence of the presence of a compound
- MDL Method Detection Limit
- PQL Practical Quantitation Limit
- RDL Reporting Detection Limit
- ND Not Detected indicates that the analyte was Not Detected at the RDL
- Cntr Analysis was performed using this container
- RegLmt Regulatory Limit
- LCS Laboratory Control Sample
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- DUP Sample Duplicate
- %Rec Percent Recovery
- RPD Relative Percent Difference
- LOD DoD Limit of Detection
- LOQ DoD Limit of Quantitation
- DL DoD Detection Limit
- I Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
- (S) Surrogate Compound
- NC Not Calculated
- \* Result outside of QC limits

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### **PROJECT SUMMARY**

Workorder: 2223632 17-017 Dewy Park PII

#### Sample Comments

Lab ID: 2223632003

Sample ID: Dewey-SB3

Sample ID: Dewey-SB4

Sample Type: SAMPLE

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to matrix. Reporting limits were adjusted accordingly. Surrogate recovery could not be evaluated as a result of the dilution.

Lab ID: 2223632004

Sample Type: SAMPLE

This sample was analyzed at a dilution in the 8015 diesel range organics analysis due to the level of analyte detected. Reporting limits were adjusted accordingly.

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: 222: Sample ID: Dew	3632001 vey-SB1					Date Collected: Date Received:	4/17/2017 09: 4/19/2017 08:4	55 12	Matrix: S	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
PETROLEUM HC's	5										
Diesel Range Organ C28	nics C10-	90.6		mg/kg	12.6	SW846 8015D	4/28/17 10:30	JTH	4/30/17 12:05	BS	D
Gasoline Range Or	ganics	ND		ug/kg	8660	SW846 8015D	4/17/17 09:55	DD	4/20/17 20:36	DD	С
Surrogate Recoveri	ies	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
o-Terphenyl (S)		74.3		%	38 - 118	SW846 8015D	4/28/17 10:30	JTH	4/30/17 12:05	BS	D
Surrogate Recoveri	ies	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
a,a,a-Trifluorotoluer	ne (S)	119		%	72 - 134	SW846 8015D	4/17/17 09:55	DD	4/20/17 20:36	DD	С
VOLATILE ORGAN	NICS										
Acetone		30.4		ug/kg	8.4	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Benzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Bromochlorometha	ne	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Bromodichlorometh	ane	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Bromoform		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Bromomethane		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
2-Butanone		ND		ug/kg	8.4	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Carbon Disulfide		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Carbon Tetrachlorid	le	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Chlorobenzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Chlorodibromometh	nane	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Chloroethane		ND		ug/kg	4.2	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Chloroform		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Chloromethane		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Cyclohexane		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,2-Dibromo-3- chloropropane		ND		ug/kg	4.2	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,2-Dibromoethane		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,2-Dichlorobenzen	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,3-Dichlorobenzen	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
1,4-Dichlorobenzen	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
Dichlorodifluoromet	hane	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,1-Dichloroethane		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,2-Dichloroethane		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,1-Dichloroethene		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
cis-1,2-Dichloroethe	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
trans-1,2-Dichloroet	thene	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,2-Dichloropropane	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632001 Dewey-SB1					Date Collected: Date Received:	4/17/2017 09: 4/19/2017 08:4	55 42	Matrix: So	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
cis-1,3-Dichlor	opropene	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
trans-1,3-Dichl	oropropene	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,4-Dioxane		ND		ug/kg	62.8	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Ethylbenzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Freon 113		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
2-Hexanone		ND		ug/kg	8.4	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Isopropylbenze	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Methyl acetate		ND	3	ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Methyl cyclohe	xane	ND	1,2	ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Methyl t-Butyl I	Ether	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
4-Methyl-2- Pentanone(MI	3K)	ND		ug/kg	8.4	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Methylene Chl	oride	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
Styrene		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,1,2,2-Tetrach	loroethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Tetrachloroethe	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
Toluene		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
Total Xylenes		ND		ug/kg	5.0	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
1,2,3-Trichlorol	benzene	ND		ug/kg	4.2	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,2,4-Trichlorol	benzene	ND		ug/kg	4.2	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
1,1,1-Trichloro	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
1,1,2-Trichloro	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
Trichloroethene	е	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Trichlorofluoror	methane	ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Vinyl Chloride		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
o-Xylene		ND		ug/kg	1.7	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
mp-Xylene		ND		ug/kg	3.4	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Surrogate Rec	overies	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	By	Cntr
1,2-Dichloroeth	nane-d4 (S)	84.7		%	56 - 124	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	A
4-Bromofluorol	penzene (S)	85.1		%	51 - 128	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Dibromofluoror	methane (S)	92.8		%	62 - 123	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
Toluene-d8 (S)		88.9		%	59 - 131	SW846 8260B	4/17/17 09:55	SYB	4/21/17 08:52	SYB	А
WET CHEMIS	TRY										
Moisture		17.9		%	0.1	S2540G-11			4/20/17 15:09	JLG	
Total Solids		82.1		%	0.1	S2540G-11			4/20/17 15:09	JLG	

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632001 Dewey-SB1					Date Collected: Date Received:	4/17/2017 09 4/19/2017 08	:55 :42	Matrix:	Solid		
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr	

Susand. Schare

Ms. Susan J Scherer Project Coordinator

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632002 Dewey-SB2					Date Collected: Date Received:	4/17/2017 09: 4/19/2017 08:4	55 42	Matrix: S	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
PETROLEUM	HC's										
Diesel Range C28	Organics C10-	ND		mg/kg	12.6	SW846 8015D	4/28/17 10:30	JTH	4/30/17 12:41	BS	D
Gasoline Rang	ge Organics	ND		ug/kg	9040	SW846 8015D	4/17/17 09:55	DD	4/20/17 18:22	DD	С
Surrogate Rec	coveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
o-Terphenyl (S	5)	72.9		%	38 - 118	SW846 8015D	4/28/17 10:30	JTH	4/30/17 12:41	BS	D
Surrogate Red	coveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
a,a,a-Trifluorot	toluene (S)	120		%	72 - 134	SW846 8015D	4/17/17 09:55	DD	4/20/17 18:22	DD	С
VOLATILE OF	RGANICS										
Acetone		ND		ug/kg	8.1	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Benzene		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Bromochlorom	nethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Bromodichloro	methane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Bromoform		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Bromomethan	е	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
2-Butanone		ND		ug/kg	8.1	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Carbon Disulfi	de	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Carbon Tetrac	hloride	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Chlorobenzen	e	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Chlorodibromo	omethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Chloroethane		ND		ug/kg	4.0	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Chloroform		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Chloromethan	е	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Cyclohexane		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,2-Dibromo-3 chloropropane	}- 9	ND		ug/kg	4.0	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,2-Dibromoet	hane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
1,2-Dichlorobe	enzene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
1,3-Dichlorobe	enzene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
1,4-Dichlorobe	enzene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Dichlorodifluor	omethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,1-Dichloroet	hane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,2-Dichloroet	hane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,1-Dichloroet	hene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
cis-1,2-Dichlor	oethene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
trans-1,2-Dich	loroethene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,2-Dichloropr	opane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632002 Dewey-SB2					Date Collected: Date Received:	4/17/2017 09:5 4/19/2017 08:4	55 12	Matrix: So	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
cis-1,3-Dichlor	opropene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
trans-1,3-Dichl	oropropene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,4-Dioxane		ND		ug/kg	60.5	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Ethylbenzene		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Freon 113		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
2-Hexanone		ND		ug/kg	8.1	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Isopropylbenze	ene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Methyl acetate	•	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Methyl cyclohe	exane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Methyl t-Butyl	Ether	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
4-Methyl-2- Pentanone(MII	BK)	ND		ug/kg	8.1	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
Methylene Chl	oride	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Styrene		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,1,2,2-Tetrach	nloroethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Tetrachloroeth	ene	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Toluene		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
Total Xylenes		ND		ug/kg	4.8	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,2,3-Trichloro	benzene	ND		ug/kg	4.0	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,2,4-Trichloro	benzene	ND		ug/kg	4.0	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,1,1-Trichloro	ethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
1,1,2-Trichloro	ethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
Trichloroethen	e	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Trichlorofluoro	methane	ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Vinyl Chloride		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
o-Xylene		ND		ug/kg	1.6	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
mp-Xylene		ND		ug/kg	3.2	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Surrogate Rec	overies	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroeth	nane-d4 (S)	88.8		%	56 - 124	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
4-Bromofluorol	benzene (S)	88		%	51 - 128	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	A
Dibromofluoro	methane (S)	93.6		%	62 - 123	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
Toluene-d8 (S)	)	87.8		%	59 - 131	SW846 8260B	4/17/17 09:55	SYB	4/20/17 07:40	SYB	А
WET CHEMIS	TRY										
Moisture		16.5		%	0.1	S2540G-11			4/20/17 15:09	JLG	
Total Solids		83.5		%	0.1	S2540G-11			4/20/17 15:09	JLG	

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632002 Dewey-SB2					Date Collected: Date Received:	4/17/2017 09 4/19/2017 08	:55 :42	Matrix:	Solid		
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr	

Susand. Schare

Ms. Susan J Scherer Project Coordinator

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632003 Dewey-SB3					Date Collected: Date Received:	4/17/2017 10:2 4/19/2017 08:4	25 42	Matrix: So	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr
PETROLEUM	HC's										
Diesel Range C28	Organics C10-	848		mg/kg	236	SW846 8015D	4/28/17 10:30	JTH	5/2/17 13:49	BS	D
Gasoline Rang	ge Organics	15400		ug/kg	9420	SW846 8015D	4/17/17 10:25	DD	4/20/17 18:55	DD	С
Surrogate Red	coveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
a,a,a-Trifluorot	toluene (S)	103		%	72 - 134	SW846 8015D	4/17/17 10:25	DD	4/20/17 18:55	DD	С
VOLATILE OF	RGANICS										
Acetone		51.5		ug/kg	8.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Benzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Bromochlorom	lethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Bromodichloro	methane	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Bromoform		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Bromomethan	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
2-Butanone		ND		ug/kg	8.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Carbon Disulfi	de	3.9		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Carbon Tetracl	hloride	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Chlorobenzene	е	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Chlorodibromo	methane	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Chloroethane		ND		ug/kg	4.3	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Chloroform		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Chloromethan	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Cyclohexane		ND	3,4	ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
1,2-Dibromo-3	-	ND		ug/kg	4.3	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
chloropropane	hana				4 7	CIM046 0260D	4/47/47 40.05	OVD	4/20/47 00:04	CVD	٨
1,2-Dibromoet	nane			ug/kg	1.7	SW840 8260B	4/17/17 10:25	SID	4/20/17 08:04	OVD	A
1,2-Dichlorobe	enzene			ug/kg	1.7	SW840 8260B	4/17/17 10:25	SID	4/20/17 08:04	OVD	A
1,3-Dichlorobe	enzene			ug/kg	1.7	SVV846 8260B	4/17/17 10:25	SIB	4/20/17 08:04	SIB	A
1,4-Dicniorobe	enzene			ug/kg	1.7	SVV846 8260B	4/17/17 10:25	SIB	4/20/17 08:04	SIB	A
	omethane			ug/kg	1.7	SVV846 8260B	4/17/17 10:25	SIB	4/20/17 08:04	SIB	A
1,1-Dichloroeti	nane			ug/kg	1.7	SVV846 8260B	4/17/17 10:25	SIB	4/20/17 08:04	SIB	A
1,2-Dichloroeti	nane			ug/kg	1.7	SVV846 8260B	4/17/17 10:25	SIB	4/20/17 08:04	SIB	A
1,1-Dicnioroeti	nene	ND		ug/kg	1.7	SVV846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	A
cis-1,2-Dichior	oetnene	ND		ug/kg	1.7	SVV846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	A
uans-1,2-Dich	loroetnene			ug/kg	1./	SVV840 8260B	4/17/17 10:25	SIR	4/20/17 08:04	SIR	A
1,2-Dichloropro	opane			ug/kg	1./	SVV846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	A
cis-1,3-Dichlor	opropene	ND		ug/kg	1.7	SVV846 8260B	4/1//1/ 10:25	SYB	4/20/17 08:04	SYB	A
trans-1,3-Dich	loropropene			ug/kg	1./	SVV846 8260B	4/17/17 10:25	SIR	4/20/17 08:04	SYB	A
1,4-Dioxane		ND		ug/kg	65.0	2008 200B	4/17/17 10:25	SIR	4/20/17 08:04	21R	А

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632003 Dewey-SB3					Date Collected: Date Received:	4/17/2017 10:2 4/19/2017 08:4	25 42	Matrix: S	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
Ethylbenzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	Α
Freon 113		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
2-Hexanone		ND		ug/kg	8.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Isopropylbenz	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Methyl acetate	•	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Methyl cyclohe	exane	3.0	1,2	ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Methyl t-Butyl	Ether	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
4-Methyl-2- Pentanone(MI	BK)	ND		ug/kg	8.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Methylene Chl	oride	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Styrene		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
1,1,2,2-Tetrach	nloroethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Tetrachloroeth	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Toluene		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Total Xylenes		ND		ug/kg	5.2	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
1,2,3-Trichloro	benzene	ND		ug/kg	4.3	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
1,2,4-Trichloro	benzene	ND		ug/kg	4.3	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
1,1,1-Trichloro	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
1,1,2-Trichloro	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Trichloroethen	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Trichlorofluoro	methane	ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Vinyl Chloride		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
o-Xylene		ND		ug/kg	1.7	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
mp-Xylene		ND		ug/kg	3.5	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Surrogate Rec	coveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroet	hane-d4 (S)	87.5		%	56 - 124	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	Α
4-Bromofluoro	benzene (S)	90.2		%	51 - 128	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	A
Dibromofluoro	methane (S)	93.8		%	62 - 123	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
Toluene-d8 (S)	)	88.2		%	59 - 131	SW846 8260B	4/17/17 10:25	SYB	4/20/17 08:04	SYB	А
WET CHEMIS	TRY										
Moisture		12.0		%	0.1	S2540G-11			4/20/17 15:09	JLG	
Total Solids		88.0		%	0.1	S2540G-11			4/20/17 15:09	JLG	

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632003 Dewey-SB3					Date Collected: Date Received:	4/17/2017 10 4/19/2017 08	:25 :42	Matrix:	Solid		
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr	

Susand. Schare

Ms. Susan J Scherer Project Coordinator

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632004 Dewey-SB4					Date Collected: Date Received:	4/17/2017 10:4 4/19/2017 08:4	47 42	Matrix: So	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
PETROLEUM	HC's										
Diesel Range C28	Organics C10-	278		mg/kg	119	SW846 8015D	4/28/17 10:30	JTH	5/1/17 14:43	BS	D
Gasoline Rang	ge Organics	13300		ug/kg	8510	SW846 8015D	4/17/17 10:47	DD	4/20/17 21:09	DD	С
Surrogate Rec	coveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
o-Terphenyl (S	5)	106		%	38 - 118	SW846 8015D	4/28/17 10:30	JTH	5/1/17 14:43	BS	D
Surrogate Red	coveries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
a,a,a-Trifluorot	toluene (S)	112		%	72 - 134	SW846 8015D	4/17/17 10:47	DD	4/20/17 21:09	DD	С
VOLATILE OF	RGANICS										
Acetone		50.9		ug/kg	9.2	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Benzene		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Bromochlorom	nethane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Bromodichloro	methane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Bromoform		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Bromomethan	e	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
2-Butanone		ND		ug/kg	9.2	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Carbon Disulfi	de	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Carbon Tetrac	hloride	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Chlorobenzen	е	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Chlorodibromo	omethane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Chloroethane		ND		ug/kg	4.6	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Chloroform		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Chloromethan	е	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Cyclohexane		ND	4,5	ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,2-Dibromo-3 chloropropane	-	ND		ug/kg	4.6	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,2-Dibromoet	hane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	Α
1,2-Dichlorobe	enzene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,3-Dichlorobe	enzene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	A
1,4-Dichlorobe	enzene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	A
Dichlorodifluor	omethane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,1-Dichloroet	hane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,2-Dichloroet	hane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,1-Dichloroet	hene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
cis-1,2-Dichlor	oethene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
trans-1,2-Dich	loroethene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,2-Dichloropr	opane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632004 Dewey-SB4					Date Collected: Date Received:	4/17/2017 10:4 4/19/2017 08:4	47 42	Matrix: So	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
cis-1,3-Dichloro	opropene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
trans-1,3-Dichle	oropropene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,4-Dioxane		ND		ug/kg	68.7	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Ethylbenzene		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Freon 113		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
2-Hexanone		ND		ug/kg	9.2	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Isopropylbenze	ene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Methyl acetate		3.8	3	ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Methyl cyclohe	xane	5.0	1,2	ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Methyl t-Butyl E	Ether	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
4-Methyl-2- Pentanone(MIE	3K)	ND		ug/kg	9.2	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Methylene Chlo	oride	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Styrene		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,1,2,2-Tetrach	loroethane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	A
Tetrachloroethe	ene	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Toluene		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	A
Total Xylenes		ND		ug/kg	5.5	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,2,3-Trichlorol	benzene	ND		ug/kg	4.6	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,2,4-Trichlorol	benzene	ND		ug/kg	4.6	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,1,1-Trichloroe	ethane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
1,1,2-Trichloroe	ethane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Trichloroethene	е	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Trichlorofluoror	methane	ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Vinyl Chloride		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
o-Xylene		ND		ug/kg	1.8	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
mp-Xylene		ND		ug/kg	3.7	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Surrogate Rec	overies	Results	Flag	Units	Limits	Method	Prepared	Ву	Analyzed	By	Cntr
1,2-Dichloroeth	nane-d4 (S)	85		%	56 - 124	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	Α
4-Bromofluorob	penzene (S)	87.2		%	51 - 128	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	A
Dibromofluoror	methane (S)	92.6		%	62 - 123	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
Toluene-d8 (S)		87.1		%	59 - 131	SW846 8260B	4/17/17 10:47	SYB	4/21/17 09:16	SYB	А
WET CHEMIS	TRY										
Moisture		14.1		%	0.1	S2540G-11			4/20/17 15:09	JLG	
Total Solids		85.9		%	0.1	S2540G-11			4/20/17 15:09	JLG	

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632004 Dewey-SB4					Date Collected: Date Received:	4/17/2017 10 4/19/2017 08	:47 :42	Matrix:	Solid		
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	By	Cntr	

Susand. Schare

Ms. Susan J Scherer Project Coordinator

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: 222 Sample ID: De	23632005 ewey-SB5					Date Collected: Date Received:	4/17/2017 11:( 4/19/2017 08:4	)7 42	Matrix: S	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
PETROLEUM HC	:'s										
Diesel Range Orga C28	anics C10-	ND		mg/kg	11.8	SW846 8015D	4/28/17 10:30	JTH	4/30/17 15:40	BS	D
Gasoline Range C	Organics	ND		ug/kg	8430	SW846 8015D	4/17/17 11:07	DD	4/20/17 19:29	DD	С
Surrogate Recove	eries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
o-Terphenyl (S)		71.3		%	38 - 118	SW846 8015D	4/28/17 10:30	JTH	4/30/17 15:40	BS	D
Surrogate Recove	eries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
a,a,a-Trifluorotolue	ene (S)	119		%	72 - 134	SW846 8015D	4/17/17 11:07	DD	4/20/17 19:29	DD	С
VOLATILE ORGA	NICS										
Acetone		10.2		ug/kg	8.2	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Benzene		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Bromochlorometha	ane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Bromodichloromet	thane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Bromoform		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Bromomethane		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
2-Butanone		ND		ug/kg	8.2	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Carbon Disulfide		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Carbon Tetrachlori	ide	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Chlorobenzene		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Chlorodibromomet	thane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Chloroethane		ND		ug/kg	4.1	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Chloroform		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Chloromethane		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Cyclohexane		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,2-Dibromo-3- chloropropane		ND		ug/kg	4.1	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,2-Dibromoethan	e	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,2-Dichlorobenze	ene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,3-Dichlorobenze	ene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,4-Dichlorobenze	ene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Dichlorodifluorome	ethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,1-Dichloroethane	е	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,2-Dichloroethane	е	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,1-Dichloroethene	е	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
cis-1,2-Dichloroeth	hene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
trans-1,2-Dichloro	ethene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,2-Dichloropropa	ine	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632005 Dewey-SB5					Date Collected: Date Received:	4/17/2017 11:0 4/19/2017 08:4	)7 42	Matrix: So	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
cis-1,3-Dichlor	opropene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
trans-1,3-Dichl	oropropene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,4-Dioxane		ND		ug/kg	61.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Ethylbenzene		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Freon 113		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
2-Hexanone		ND		ug/kg	8.2	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Isopropylbenze	ene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Methyl acetate	•	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Methyl cyclohe	exane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Methyl t-Butyl	Ether	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
4-Methyl-2- Pentanone(MI	BK)	ND		ug/kg	8.2	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Methylene Chl	oride	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Styrene		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
1,1,2,2-Tetrach	nloroethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Tetrachloroeth	ene	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Toluene		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Total Xylenes		ND		ug/kg	4.9	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
1,2,3-Trichloro	benzene	ND		ug/kg	4.1	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
1,2,4-Trichloro	benzene	ND		ug/kg	4.1	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
1,1,1-Trichloro	ethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
1,1,2-Trichloro	ethane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Trichloroethen	e	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Trichlorofluoro	methane	ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Vinyl Chloride		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
o-Xylene		ND		ug/kg	1.6	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
mp-Xylene		ND		ug/kg	3.3	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Surrogate Rec	overies	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroeth	nane-d4 (S)	89.8		%	56 - 124	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
4-Bromofluoro	benzene (S)	85.8		%	51 - 128	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	A
Dibromofluoro	methane (S)	93.4		%	62 - 123	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
Toluene-d8 (S)	)	87.4		%	59 - 131	SW846 8260B	4/17/17 11:07	SYB	4/20/17 08:27	SYB	А
WET CHEMIS	TRY										
Moisture		11.7		%	0.1	S2540G-11			4/20/17 15:09	JLG	
Total Solids		88.3		%	0.1	S2540G-11			4/20/17 15:09	JLG	

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632005 Dewey-SB5					Date Collected: Date Received:	4/17/2017 11: 4/19/2017 08	.07 :42	Matrix:	Solid		
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr	

Susand. Schare

Ms. Susan J Scherer Project Coordinator

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: 22: Sample ID: De	23632006 ewey-SB6					Date Collected: Date Received:	4/17/2017 11:2 4/19/2017 08:4	28 42	Matrix: S	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
PETROLEUM HC	c's										
Diesel Range Org C28	anics C10-	ND		mg/kg	12.1	SW846 8015D	4/28/17 10:30	JTH	4/30/17 16:16	BS	D
Gasoline Range C	Organics	ND		ug/kg	9460	SW846 8015D	4/17/17 11:28	DD	4/20/17 20:02	DD	С
Surrogate Recove	eries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
o-Terphenyl (S)		73.5		%	38 - 118	SW846 8015D	4/28/17 10:30	JTH	4/30/17 16:16	BS	D
Surrogate Recove	eries	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
a,a,a-Trifluorotolue	ene (S)	118		%	72 - 134	SW846 8015D	4/17/17 11:28	DD	4/20/17 20:02	DD	С
VOLATILE ORGA	ANICS										
Acetone		ND		ug/kg	8.5	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Benzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Bromochlorometha	ane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Bromodichloromet	thane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Bromoform		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Bromomethane		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
2-Butanone		ND		ug/kg	8.5	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Carbon Disulfide		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Carbon Tetrachlor	ride	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Chlorobenzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Chlorodibromome	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Chloroethane		ND		ug/kg	4.2	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Chloroform		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Chloromethane		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Cyclohexane		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,2-Dibromo-3- chloropropane		ND		ug/kg	4.2	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,2-Dibromoethan	ne	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,2-Dichlorobenze	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,3-Dichlorobenze	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,4-Dichlorobenze	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Dichlorodifluorome	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,1-Dichloroethan	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,2-Dichloroethan	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,1-Dichloroethen	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
cis-1,2-Dichloroeth	hene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
trans-1,2-Dichloro	bethene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,2-Dichloropropa	ine	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632006 Dewey-SB6					Date Collected: Date Received:	4/17/2017 11:2 4/19/2017 08:4	28 42	Matrix: S	olid	
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr
cis-1,3-Dichlor	opropene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
trans-1,3-Dichl	oropropene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
1,4-Dioxane		ND		ug/kg	63.5	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Ethylbenzene		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Freon 113		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
2-Hexanone		ND		ug/kg	8.5	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Isopropylbenze	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Methyl acetate		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Methyl cyclohe	exane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Methyl t-Butyl I	Ether	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
4-Methyl-2- Pentanone(MI	3K)	ND		ug/kg	8.5	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Methylene Chl	oride	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Styrene		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
1,1,2,2-Tetrach	loroethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Tetrachloroethe	ene	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Toluene		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Total Xylenes		ND		ug/kg	5.1	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
1,2,3-Trichloro	benzene	ND		ug/kg	4.2	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
1,2,4-Trichloro	benzene	ND		ug/kg	4.2	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
1,1,1-Trichloro	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
1,1,2-Trichloro	ethane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Trichloroethen	e	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Trichlorofluoro	methane	ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
Vinyl Chloride		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
o-Xylene		ND		ug/kg	1.7	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
mp-Xylene		ND		ug/kg	3.4	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Surrogate Rec	overies	Results	Flag	Units	Limits	Method	Prepared	By	Analyzed	By	Cntr
1,2-Dichloroeth	nane-d4 (S)	87.9		%	56 - 124	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	A
4-Bromofluorol	penzene (S)	86.5		%	51 - 128	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Dibromofluoror	methane (S)	93.5		%	62 - 123	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
Toluene-d8 (S)		88.5		%	59 - 131	SW846 8260B	4/17/17 11:28	SYB	4/20/17 08:50	SYB	А
WET CHEMIS	TRY										
Moisture		13.8		%	0.1	S2540G-11			4/20/17 15:09	JLG	
Total Solids		86.2		%	0.1	S2540G-11			4/20/17 15:09	JLG	

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### ANALYTICAL RESULTS

Workorder: 2223632 17-017 Dewy Park PII

Lab ID: Sample ID:	2223632006 Dewey-SB6					Date Collected: Date Received:	4/17/2017 11: 4/19/2017 08	28 :42	Matrix:	Solid		
Parameters		Results	Flag	Units	RDL	Method	Prepared	Ву	Analyzed	Ву	Cntr	

Susand. Schare

Ms. Susan J Scherer Project Coordinator

#### ALS Environmental Laboratory Locations Across North America





NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: A2LA 0818.01 State Certifications: DE ID 11 , MA PA0102 , MD 128 , VA 460157 , WV 343

#### PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
2223632001	1	Dewey-SB1	SW846 8260B	Methyl cyclohexane
The QC sample type reported as 192 and	LCS fo the con	r method SW846 8260B was outside trol limits were 70 to 130.	the control limits for the analyte Methy	l cyclohexane. The % Recovery was
2223632001	2	Dewey-SB1	SW846 8260B	Methyl cyclohexane
The QC sample type reported as 194 and	LCSD the con	for method SW846 8260B was outsid trol limits were 70 to 130.	e the control limits for the analyte Meth	nyl cyclohexane. The % Recovery was
2223632001	3	Dewey-SB1	SW846 8260B	Methyl acetate
The QC sample type reported as 165 and	LCSD the con	for method SW846 8260B was outsid trol limits were 70 to 130.	e the control limits for the analyte Meth	nyl acetate. The % Recovery was
2223632003	1	Dewey-SB3	SW846 8260B	Methyl cyclohexane
The QC sample type reported as 185 and	LCS fo the con	r method SW846 8260B was outside trol limits were 70 to 130.	the control limits for the analyte Methy	I cyclohexane. The % Recovery was
2223632003	2	Dewey-SB3	SW846 8260B	Methyl cyclohexane
The QC sample type reported as 188 and	LCSD the con	for method SW846 8260B was outsid trol limits were 70 to 130.	e the control limits for the analyte Meth	nyl cyclohexane. The % Recovery was
2223632003	3	Dewey-SB3	SW846 8260B	Cyclohexane
The QC sample type as 170 and the control	LCS fo ol limits	r method SW846 8260B was outside were 62 to 143.	the control limits for the analyte Cyclol	hexane. The % Recovery was reported
2223632003	4	Dewey-SB3	SW846 8260B	Cyclohexane
The QC sample type as 175 and the control	LCSD f	for method SW846 8260B was outsid were 62 to 143.	e the control limits for the analyte Cycl	ohexane. The % Recovery was reported
2223632004	1	Dewey-SB4	SW846 8260B	Methyl cyclohexane
The QC sample type reported as 192 and	LCS fo the con	r method SW846 8260B was outside trol limits were 70 to 130.	the control limits for the analyte Methy	I cyclohexane. The % Recovery was
2223632004	2	Dewey-SB4	SW846 8260B	Methyl cyclohexane
The QC sample type reported as 194 and	LCSD the con	for method SW846 8260B was outsid trol limits were 70 to 130.	e the control limits for the analyte Meth	nyl cyclohexane. The % Recovery was
2223632004	3	Dewey-SB4	SW846 8260B	Methyl acetate
The QC sample type reported as 165 and	LCSD the con	for method SW846 8260B was outsid trol limits were 70 to 130.	e the control limits for the analyte Meth	nyl acetate. The % Recovery was
2223632004	4	Dewey-SB4	SW846 8260B	Cyclohexane
The QC sample type as 180 and the control	LCS fo ol limits	r method SW846 8260B was outside were 62 to 143.	the control limits for the analyte Cyclol	hexane. The % Recovery was reported
2223632004	5	Dewey-SB4	SW846 8260B	Cyclohexane
The QC sample type as 179 and the control	LCSD to limits	for method SW846 8260B was outsid were 62 to 143.	e the control limits for the analyte Cycl	ohexane. The % Recovery was reported

#### ALS Environmental Laboratory Locations Across North America

1

1

# Community Meeting- Dewey Local Park Playground Redesign and Court Renovations

#### Park Staff Attendees:

Linda Komes, Brian Lewandowski, Patricia McManus, Stephen Chandlee, Alex Girr-Borrayo, Joan Honeyman- Consultant

#### Attendance: 11 (see sign in sheet)

#### Summary

#### **Playground Renovation**

- Staff worked with Veirs Mill ES students to develop playground theme of ropes and bridges
- Design uses existing topography to create a hill in the center of the 5-12 year old play area which helps define space and create a sense of place. The hill will have a hill slide with the equipment arranged in a continuous circuit. There is also a group swing and a "Super Nova" mini merry-go-round which children love
- Seat wall used for seating and as a barrier to define edge of playground
- Picnic shelter with picnic tables
- Play area designed for 2-5yr olds contains an area with swings, spinners, teeter totter, and appropriate play equipment
- Partially fenced
- Benches provided for seating

#### **Existing Court Renovation/Repurposing**

- Located overtop of an existing WSSC facility, basketball and tennis courts are in very poor condition
- Two of the four tennis courts do not have nets and are currently being used as an informal dogpark. The basketball court has been closed for many years.
- Staff requested ideas from the community for facilities that could be located on existing court area. Staff ideas include:
  - -Outdoor fitness area/gym -Pickleball -Skate park -Street Hockey -Dog Park -Futsal

# Community Meeting- Dewey Local Park Playground Redesign and Court Renovations

#### **Community Comments**

- Courts should be available for all to use (without a Permit).
- Park uses should be geared towards this neighborhood
- Include a mix of uses that appeal to different age groups
- There needs to be enough parking to support the new facilities
- Would like to see the park used and also serve the community
- Community plays soccer a lot. Futsal would probably be very well used. Maybe provide two Futsal courts.
- Maybe the street hockey court could also be striped to be used as a 2<sup>nd</sup> futsal Court.
- This is a dog-heavy neighborhood and a dog park would be of value and very useful for this community. Dogs like agility equipment it requires them to think which can be as good and exhausting for a dog as physical exercise.
- Maintenance and upkeep of dog park is very important.
- Water and shade is very important in a dog park.
- Outdoor fitness equipment is very appealing to adults, especially those not participating in court sports.
- Equipment should be designed to be used by older children and adults.
- The participants responded favorably to the images shown for fitness, which showed a concentrated fitness area (not just 1-2 pieces).
- Randolph Hills tennis courts are beautiful.
- Don't build new tennis courts at Dewey since there are new courts very nearby. Maybe Randolph Hills tennis courts could be restriped to include Pickle Ball.
- Fitness equipment could be located near playground so Adults could work out while watching their kids on the playground.
- Skateboarders use the tennis courts.
- Make sure there is adequate Parking.
- Parents need to have visual contact with children on the playground at all times. Parents benches need to be accessible to the playground.
- Provide shade in the playground. Plant more trees on the west side.
- Don't disturb trees along trail during court renovation.
- Would like accessible bathroom or porta potty.
- Make a loop path for scooters and tricycles around playground like at East Norbeck.
- Include bike racks in park.
- Preserve trees and add more shade at playground.
- Think about placement of bleachers and seating so they don't face the afternoon sun.
- Recommendation to renovate to basketball courts at Randolph Hills
- Think about how pedestrians and cyclists get to the park. Consider providing a trail and bridge across ravine in abandoned Dewey Road right-of-way to the south of Dewey Local Park. (Community connector).
- Improving the park and bringing new people into the community is a positive thing which could eventually lead to increased property values.

June 26, 2016

# Community Meeting- Dewey Local Park Playground Redesign and Court Renovations

June 26, 2016

Each attendee was given 5 dots and asked to vote for the facilities they felt were the most important to be included in the park. They were instructed that they could place all five dots on one type of facility or distribute them as they wanted.

The tally is as follows:

Outdoor Gym15Dog Park13Futsal10Street Hockey5Pickleball2

The attendees were asked to contact Linda Komes, Project Manager with any additional ideas, comments or questions at linda.komes@montgomeryparks.org

## Park Equity Analysis Map



Miles

COMMISSIONERS

Fausto R. Bayonet, Chair Chris Lawson, Vice Chair Omar M. Boulware Howard A. Denis T. Eloise Foster

Thomasina V. Rogers



14501 Sweitzer Lane 
Laurel, Maryland 20707-5901

GENERAL MANAGER Carla A. Reid

June 23, 2017

Mr. Michael Ma Park Development Division Chief Maryland-National Capital Park and Planning Commission 6611 Kenilworth Avenue Riverdale, MD 20737

#### Re: Dewey Local Park Renovations

Dear Mr. Ma,

We understand that the Park and Planning Commission is beginning to renovate the Dewey Local Park recreational facilities built by WSSC as part of its agreement to build a sewage storage facility sharing the site. WSSC understands that the Commission has need of this renovation in order to keep the Park relevant to its users and concurs with the Commission's decision. WSSC stands ready to facilitate the Commission's actions, where feasible. As long as the construction by the Commission does not negate WSSC's ability to operate or repair, if and when necessary, its associated storage facility, there should be little issues to coordinate. We are prepared to work with the Commission on any necessary scheduling issues, should they arise. Perhaps there is a need to create a shared-use agreement for future operations, maintenance and replacement of shared-site facilities to make this process easier and more discernable for future activities.

Sincerely,

Joseph Mantua Deputy General Manager-Operations

Washington Suburban Sanitary Commission