SITE INSPECTION REPORT
T & J SALVAGE
2647 STILLWELL AVENUE
BROOKLYN, NEW YORK

EPA ID No.: NYN000203544

EPA Contract No.: 68HE0319D0004
Document Control No.: SAT-V.6204.0055

December 2021

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:

Weston Solutions, Inc.
Edison, New Jersey 08837

SITE INSPECTION REPORT
T & J SALVAGE
2647 STILLWELL AVENUE
BROOKLYN, NEW YORK

EPA ID No.: NYN000203544

Prepared by:

Weston Solutions, Inc.
Edison, New Jersey

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EPA Contract No.: 68HE0319D0004
Document Control No.: SAT-V.6204.0055

December 2021

SUBMITTED BY:

Habib Bravo-Ruiz

Date 12/03/2021

Habib Bravo-Ruiz
Associate Geoscientist

Gerald V. Gilliland

Date 12/03/2021

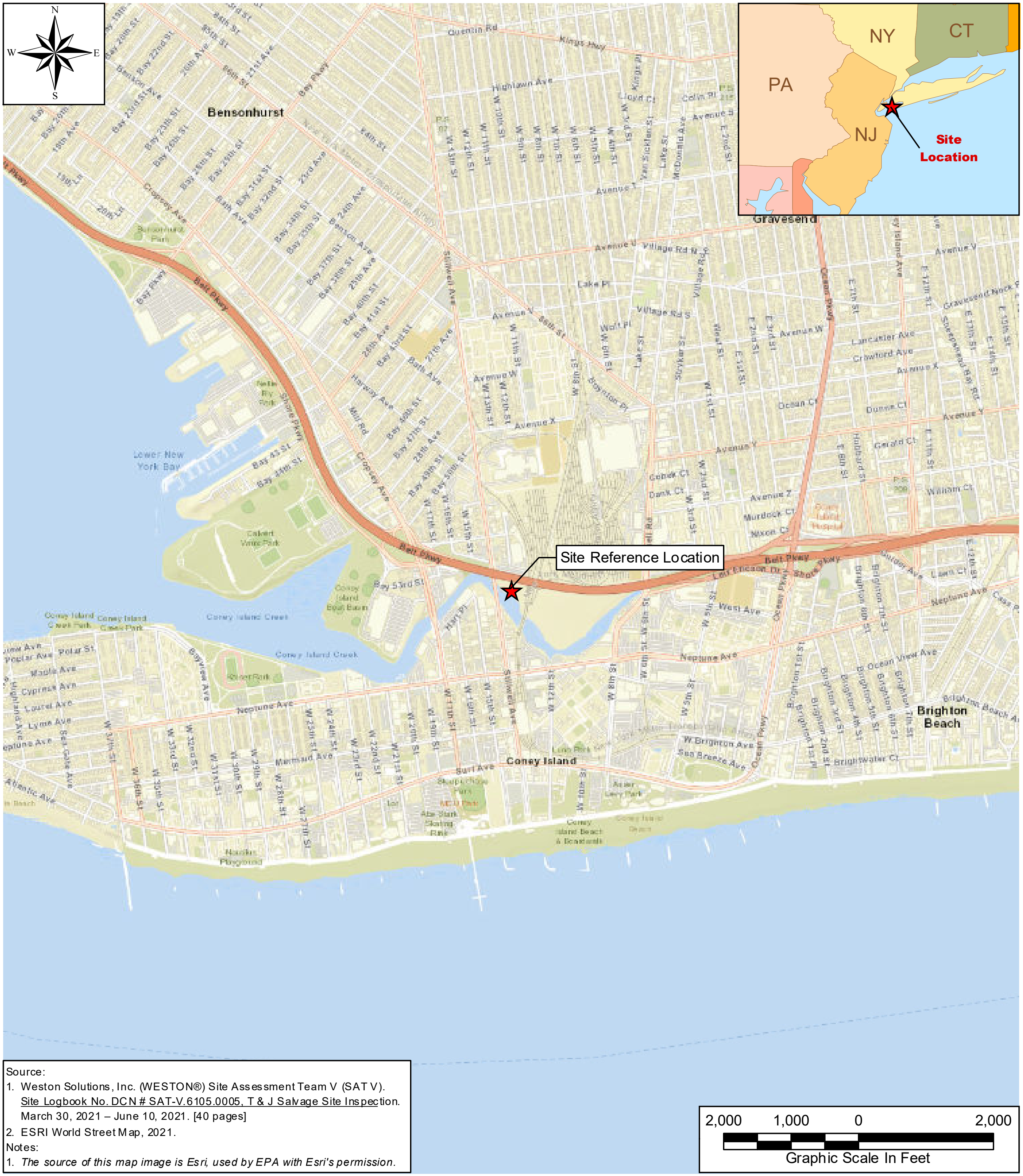
Gerald V. Gilliland, P.G.
Site Assessment Team (SAT) Lead

SITE SUMMARY

The T & J Salvage (T & J) site (U.S. Environmental Protection Agency [EPA] ID No. NYN000203544) consists of an automobile salvage operation along Coney Island Creek in Brooklyn, NY [Ref. 1, p. 1; 2, p. 1]. EPA discovery of the T & J site occurred in 2020 during the Site Discovery Initiative associated with the Coney Island Creek site [Ref. 3, pp. 5–9; 4, p. 1]. Available information indicates that the T & J subject property has been utilized for automobile salvage activities since at least 1940 [Ref. 5, pp. 35–36; 6, pp. 14–15; 7, p. 5]. The current occupant, T & J Auto Salvage, is a supplier of used auto parts that has operated on the site since 1980 [Ref. 2, p. 1]. The 2.9-acre property is located in a mostly commercial and industrial area of Brooklyn, NY, along the northern bank of Coney Island Creek [Ref. 40, Figure 2]. The site's shoreline along Coney Island Creek mostly consists of a steep, vegetated embankment, with a concrete block retaining wall evident along the southwestern corner of the property [Ref. 4, pp. 1, 18, 19]. The subject property is bound to the north by a parking lot that underlies the raised Belt Parkway; to the east by Metro Transit Authority (MTA) railroad tracks; to the south by Coney Island Creek; and to the west by a portion of Stillwell Avenue that traverses Coney Island Creek [Ref. 4, pp. 1, 13, 15, 17–18, 20]. **Figure 1** presents a Site Location Map.

A search of New York State environmental databases indicates that New York State Department of Environmental Conservation (NYSDEC) has inspected the facility on numerous occasions [Ref. 11, pp. 1–3; 12, p. 1; 13, pp. 12–14]. Observations indicated that there have been multiple discharges of automotive waste fluids identified throughout the property and an impact to Coney Island Creek is suspected [Ref. 11, p. 1; 12, p. 1; 13, p. 14]. The facility has been the subject of a joint investigation by the New York Police Department (NYPD) and NYSDEC's Division of Law Enforcement (DLE) [Ref. 12, p. 1; 13, p. 12]. In August 2003, during the execution of a search warrant, NYSDEC DLE observed surface spills and free product on standing water [Ref. 12, p. 1; 13, p. 12]. In April 2004, T & J received an Order on Consent issued by NYSDEC as a result of the automotive waste fluids identified throughout the property in August 2003 [Ref. 12, p. 1; 14, p. 1, 4]. The remedies under the Order on Consent included that T & J was required to submit plans to characterize and remediate releases of petroleum at the site [Ref. 14, p. 6].

In October 2004, T & J performed a subsurface investigation at the site under NYSDEC oversight [Ref. 11, p. 1; 13, p. 13–14]. Nineteen soil samples were collected from 17 direct-push boreholes advanced to 10 feet below ground surface (bgs) [Ref. 13, p. 14; 15, pp. 5–6, 8]. One groundwater sample was collected from each of two boreholes [Ref. 13, p. 14; 15, p. 5]. The subsurface beneath the site was characterized by construction debris and ash [Ref. 15, pp. 9–27]. Xylene (23 milligrams per kilogram [mg/kg]) and ethylbenzene (3.12 mg/kg) were detected in soil at one location, at a depth of 0 to 1 foot beneath an area covered with an 8-inch-thick concrete slab [Ref. 11, p. 2; 13, p. 14; 15, p. 6]. Cadmium (1.86 mg/kg), chromium (24.4 mg/kg), lead (438 mg/kg), mercury (0.271 mg/kg), and vanadium (47.3 mg/kg) were detected in soil at one location [Ref. 15, p. 129]. According to T & J's report, with the exception of the soil sample collected beneath the 8-inch thick concrete slab near where fluids are drained from engines, no contamination was detected in soil or groundwater [Ref. 15, p. 6]. However, NYSDEC noted several deficiencies with T & J's sampling procedures, including a nonworking photoionization detector (PID), samples not kept on ice in a cooler, cross-contamination of samples by sampler's field knife, and direct-push sleeves left cut open for long periods prior to sample collection [Ref. 11, p. 1; 13, p. 13]. T & J's environmental investigation did not evaluate the site's impact to Coney Island Creek [Ref. 15, pp. 4–6].



Source:

1. Weston Solutions, Inc. (WESTON®) Site Assessment Team V (SAT V). Site Logbook No. DCN # SAT-V.6105.0005, T & J Salvage Site Inspection. March 30, 2021 – June 10, 2021. [40 pages]
2. ESRI World Street Map, 2021.

Notes:

1. *The source of this map image is Esri, used by EPA with Esri's permission.*

LEGEND:

★ Site Reference Location — Lat: +40.582620° Long: -73.981731°

TITLE:

SITE LOCATION MAP
T & J SALVAGE
BROOKLYN, KINGS COUNTY, NY

PROJECT: T & J Salvage SI

CLIENT NAME: EPA

WESTON SOLUTIONS

DATE: December 2021

FIGURE #: 1

Vehicle Dismantling Facility Annual Reports submitted to NYSDEC from 2013 to 2019 indicate that T & J received 2,142 end-of-life vehicles (ELV); crushed 1,818 ELVs; and stored up to 510 ELVs [Ref. 16, p. 1]. Fluids recovered from the ELVs included 4,400 gallons of used oil (i.e., engine oil, transmission fluid, axle fluid, hydraulic fluid, power steering fluid, brake fluid, etc.); 2,171 gallons of engine coolant; and 680 pounds of refrigerant [Ref. 16, p. 1]. These fluids were either sold/recycled or disposed off-site [Ref. 16, p. 1]. A total of 1,466 lead-acid batteries and 575 mercury switches were collected from the ELVs [Ref. 16, p. 1]. The lead-acid batteries and mercury switches were sold/recycled [Ref. 16, p. 1]. The approximate area used for the storage of ELVs was reported to vary between 1 and 2.75 acres [Ref. 16, p. 1].

The T & J facility operates under National Pollutant Discharge Elimination System (NPDES) Permit No. NYR00D555; permit information indicates that stormwater runoff from the facility discharges to Coney Island Creek, the nearest waterbody [Ref. 18, p. 1; 19, pp. 1, 12, 28]. The facility has one discharge monitoring point (Outfall 001) located at the site entrance [Ref. 19, p. 1; 20, p. 5]. Discharge Monitoring Reports (DMR) from 2009 to 2017 show detections of toluene (18.4 micrograms per liter [μg/L]), benzene (1.4 μg/L), ethylbenzene (3.6 μg/L), xylene (19 μg/L), iron (350 μg/L), aluminum (230 μg/L), and lead (8 μg/L) at the discharge monitoring point [Ref. 21, pp. 1–17]. EPA's ECHO on-line database notes that the facility was cited for violations of the NPDES permit in 2018, 2019, 2020, and 2021; violations included late submittals and failure to submit DMRs [Ref. 18, p. 2]. State Pollutant Discharge Elimination System (SPDES) Notice of Intent forms for the T & J facility indicate that site runoff enters the New York City Municipal Separate Stormwater Sewer System (MS4) (i.e., roadside drains, swales, ditches, culverts, etc.) and discharges into Coney Island Creek [Ref. 19, pp. 1, 12, 28].

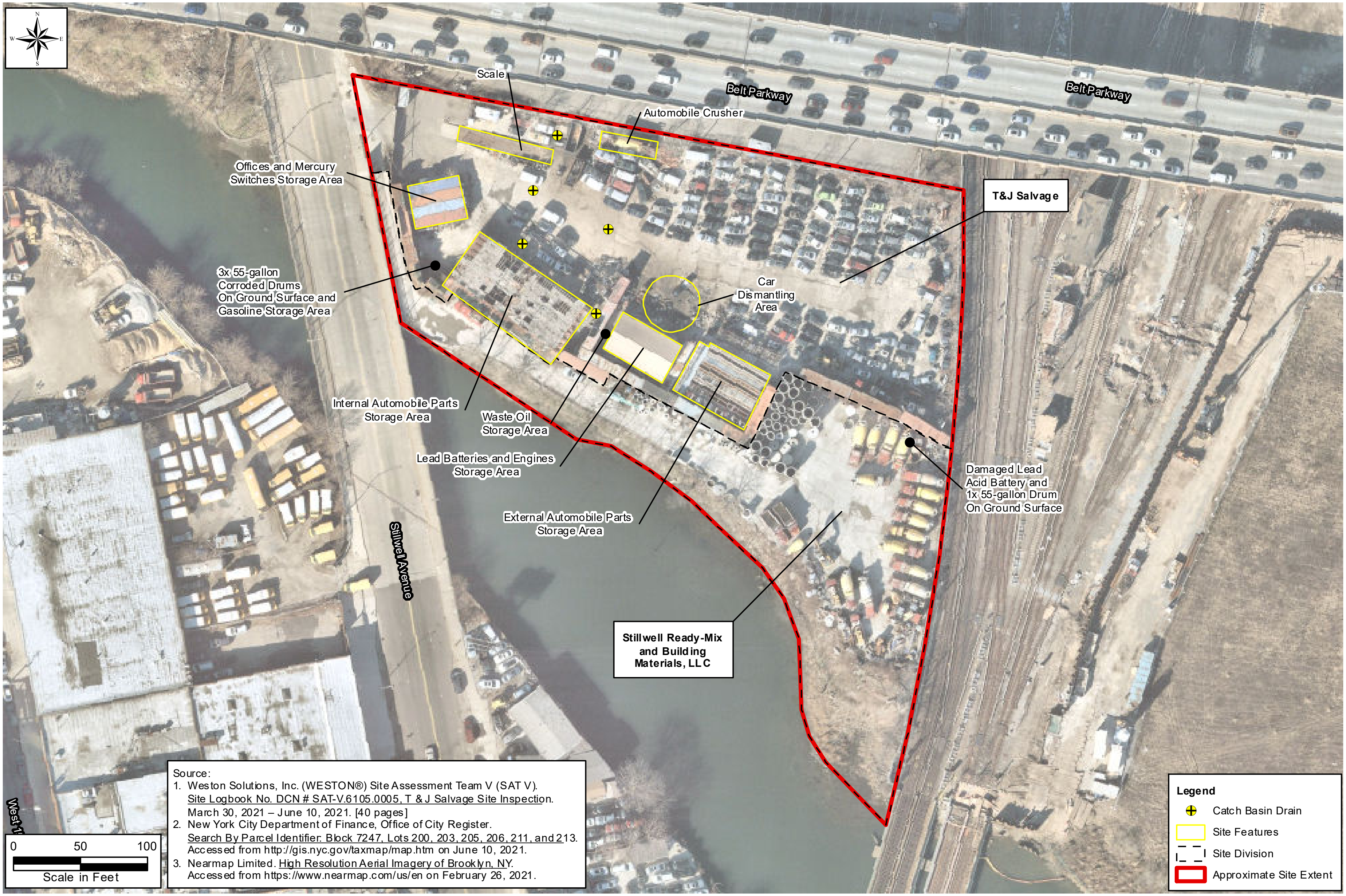
Coney Island Creek receives approximately 290 million gallons of discharges per year through permitted combined sewer overflow (CSO) outfalls and 1,487 million gallons of stormwater runoff per year [Ref. 22, p. 2]. Environmental characterizations of Coney Island Creek indicate that creek sediments are contaminated with polycyclic aromatic hydrocarbons (PAH), BTEX compounds (i.e., benzene, toluene, ethylbenzene, and xylene), and inorganic constituents [Ref. 23, p. 1], all of which are also associated with the T & J site. PAHs and BTEX compounds are known to be constituents of automotive fluids, including used oils [Ref. 50, p. 15; 51, p. 22; 54, p. 20]. Inorganic constituents may be released through the corrosion of metal automobile parts and improper handling and storage of vehicle components, such as lead-acid batteries and mercury switches [Ref. 66, pp. 1–2]. As stated previously, T & J is known to have collected thousands of gallons of used oil, as well as many lead-acid batteries and mercury switches at the facility [Ref. 16, p. 1].

On September 3, 2020, Weston Solutions, Inc. (WESTON®) Region 2 Site Assessment Team (SAT) performed an off-site reconnaissance at T & J in support of an Abbreviate Preliminary Assessment (APA) [Ref. 4, pp. 1–3, 13–21]. The facility was confirmed to be an active automobile scrap yard [Ref. 4, pp. 2, 13, 16– 17, 20]. Site conditions appeared to be similar to descriptions in the available background information and aerial imagery regarding poor housekeeping at the facility [Ref. 4, pp. 2, 12–20; 6, pp. 3–6; 11, p. 1; 12, p. 1]. The reconnaissance confirmed that fishing for human consumption occurs in the western portion of the creek at the Kaiser Park fishing pier; fishing is also known to occur in other parts of the creek [Ref. 4, pp. 2, 14, 21; 67, pp. 1–2].

On March 30, 2021, Region 2 Site Assessment Team V (SAT V) personnel conducted pre-sampling reconnaissance activities at and in the vicinity of the T & J site [Ref. 8, pp. 3–5]. The objective of the reconnaissance was to observe current site conditions and to select potential on- and off-site SI sample locations [Ref. 8, pp. 3–5]. Based on observations made during the reconnaissance, the facility comprises one covered garage, two open-air storage sheds, and conjoined Conex boxes that serve as offices and storage areas. ELVs are stored in the eastern portion of the subject property [Ref. 8, pp. 4, 15]. The southern portion of the property is leased by Stillwell Ready-Mix and Building Materials, LLC, and it is used for the storage of concrete mixing trucks and large-diameter concrete piping [Ref. 8, p. 3]. The ground surface of the property consists mostly of concrete pavement, bordered by narrow strips of vegetated land in some areas [Ref. 8, p. 5]. The concrete is impermeable; however, it is weathered in several places. No exposed soil was observed by Region 2 SAT V in the weathered areas [Ref. 8, p. 15]. **Figure 2** presents a Site Features Map.

Housekeeping at the salvage facility is poor [Ref. 8, pp. 3, 16–21]. ELVs are stored on the concrete with no secondary containment [Ref. 8, p. 16]. Internal automobile parts are stored by type in Conex boxes throughout the site [Ref. 8, pp. 3, 16]. External automobile parts are stored by type on open-air storage racks [Ref. 8, pp. 3, 17]. Moderate to severe staining was observed near the automobile crusher located along the northern portion of the property and the automobile dismantling area located near the center of the property [Ref. 8, pp. 4, 17]. Automobile engines and lead-acid batteries are stored on racks in the covered garage near the center of the site [Ref. 8, pp. 3–4, 18]. At the time of the reconnaissance, there were approximately 49 lead-acid batteries in the garage [Ref. 8, p. 3]. Moderate staining was observed on the floor of the garage, specifically below engines [Ref. 8, pp. 4, 18]. Oil and antifreeze wastes were stored in two 275-gallon totes in an alleyway east of the covered garage [Ref. 8, pp. 4, 19]. The two totes are on concrete with no secondary containment [Ref. 8, p. 4]. Three 55-gallon corroded drums were observed on the concrete in the western portion of the site [Ref. 8, pp. 3, 19]. The labels on the drums were unreadable [Ref. 8, p. 3]. The site representative indicated that the drums contain waste from an environmental investigation previously conducted at the site (year unknown but estimated to be greater than five years old) [Ref. 8, p. 5]. An approximately 75-gallon gasoline tank was observed adjacent to the three corroded drums [Ref. 8, pp. 3, 19]. The gasoline tank and the three corroded drums were on concrete with no secondary containment [Ref. 8, p. 3]. Mercury switches are stored in approved containers in the main office [Ref. 8, p. 4]. Trash, mostly consisting of broken plastic automobile parts, was observed along the eastern and northern edges of the site [Ref. 8, pp. 3, 20]. A damaged lead-acid battery and an unlabeled and corroded drum were observed on the ground in the southeastern portion of the property [Ref. 8, pp. 5, 21].

According to a T & J representative, no stormwater runoff leaves the site [Ref. 20, p. 1]. The on-site stormwater runoff is captured by five catch basins located near the center of the site [Ref. 8, pp. 4, 20; 20, p. 5]. These catch basins are concrete-lined pits and the stormwater captured by them evaporates through time after rainfall events [Ref. 20, p. 1]. Two of the on-site catch basins were observed to be nearly full to capacity of stagnant stormwater during the reconnaissance [Ref. 8, pp. 4, 20]. A slight sheen was noticeable on the stagnant stormwater [Ref. 8, pp. 5, 20]. Based on the reconnaissance observations and the finite volume of the catch basins, it is possible for the stormwater in the catch basins to overflow to the surrounding areas during rainfall events;



Source:

1. Weston Solutions, Inc. (WESTON®) Site Assessment Team V (SAT V). Site Logbook No. DCN # SAT-V.6105.0005, T & J Salvage Site Inspection. March 30, 2021 – June 10, 2021. [40 pages]
2. New York City Department of Finance, Office of City Register. Search By Parcel Identifier: Block 7247, Lots 200, 203, 205, 206, 211, and 213. Accessed from http://gis.nyc.gov/taxmap/map.htm on June 10, 2021.
3. Nearmap Limited. High Resolution Aerial Imagery of Brooklyn, NY. Accessed from https://www.nearmap.com/us/en on February 26, 2021.

WESTON SOLUTIONS

DATE: December 2021

FIGURE #: 2

PROJECT: T & J Salvage SI

CLIENT NAME: EPA

TITLE:

SITE FEATURES MAP
T & J SALVAGE
BROOKLYN, KINGS COUNTY, NY

however, no drainage channels from the facility to Coney Island Creek were observed during the March 2021 reconnaissance [Ref. 8, pp. 4–5].

In April 2021, Region 2 SAT V personnel collected surface water and sediment samples as part of the Site Inspection (SI) evaluation of the Coney Island Creek site [Ref. 59, p. 1]. Region 2 SAT V collected a total of 12 surface water and 63 sediment samples [Ref. 59, pp. 1, 4, 6]. All surface water and sediment samples were analyzed for Organic Target Analyte List (TAL) Volatile Organic Compounds (VOC), Semivolatile Organic Compounds (SVOC), Pesticides, and Aroclors; and Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES) 11+ Metals (including mercury and cyanide) through the EPA Contract Laboratory Program (CLP) [Ref. 59, p. 1]. The following contaminants were detected in creek sediments at concentrations greater than or equal to three times (3x) the maximum background concentrations, or greater than the highest reporting detection limit (RDL) when all background results were non-detect: the VOC 1,2,4-trimethylbenzene; SVOCs phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, bis(2-ethylhexyl)phthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benzo(g,h,i)perylene; pesticides 4,4’-DDE, 4,4’-DDD, 4,4’-DDT, cis-chlordane, trans-chlordane; and metals barium, cadmium, calcium, chromium, cyanide, lead, silver, and zinc [Ref. 59, pp. 2, 6]. One of the sediment samples that exhibited detections of some of the above analytes (i.e., phenanthrene, fluoranthene, pyrene, and benzo(b)fluoranthene) was collected immediately south of the T & J site [Ref. 59, p. 6]. Iron was detected at a concentration greater than the highest background RDL in a surface water sample collected at the same location (all background results for iron were non-detect) [Ref. 59, p. 6].

On June 2 and 3, 2021, Region 2 SAT V personnel collected soil, groundwater, and stormwater samples as part of the SI evaluation of the T & J site. Region 2 SAT V collected a total of 21 soil samples (including two environmental duplicates), three groundwater samples (including one environmental duplicate), and one stormwater sample from the T & J site [Ref. 8, pp. 10 –21; 24, pp. 3, 5–11]. **Figure 3** presents the T & J Site Sample Location Map.

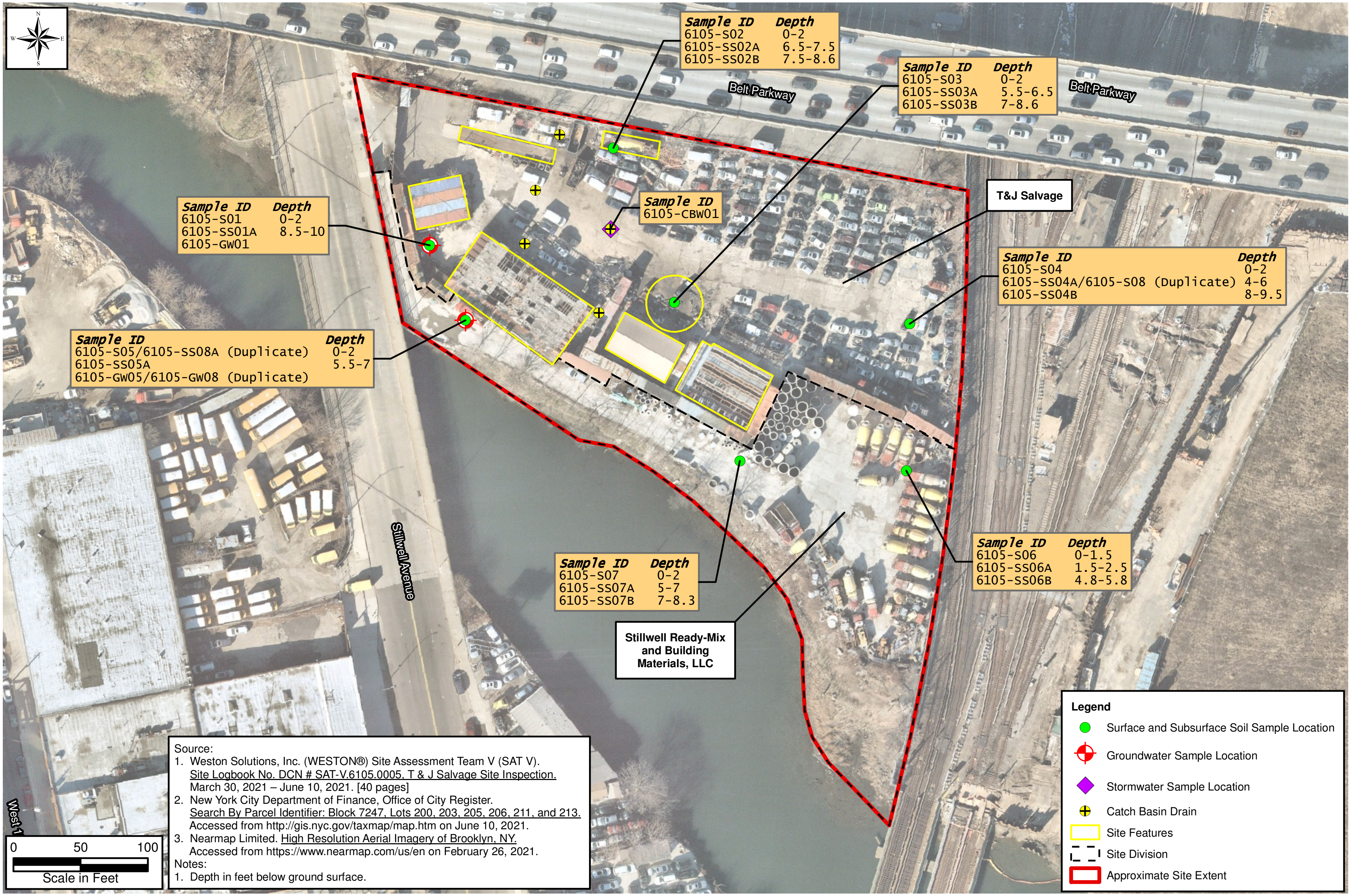
On June 7 and 8, 2021, Region 2 SAT V personnel collected background soil and groundwater samples associated with the SI evaluation of the T & J site. Region 2 SAT V collected a total of seven soil samples (including one environmental duplicate) and two groundwater samples (including one environmental duplicate) from a grass area just north of the Belt Parkway Exit 6N. The location is considered to represent background conditions for the SI evaluation because it is believed to be unaffected by activities or possible releases at the T & J site [Ref. 25, pp. 3, 5–8; 34, pp. 2–4; 35, p. 2]. **Figure 4** presents the Background Sample Location Map. All samples collected in support of the T & J Salvage site SI evaluation were analyzed by CLP laboratories for TAL VOCs, SVOCs, Pesticides, and Aroclors; and ICP-AES 11+ Metals (including mercury) [Ref. 24, p. 4; 25, p. 4].

Analytical results for on-site soil and stormwater samples document the presence of CERCLA-eligible waste sources at the site. Contaminants (maximum concentrations) detected at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, in on-site soil include the VOCs chloroform (45 J- [estimated, possible low bias] micrograms per kilogram [µg/kg]), cyclohexane (140 J+ [estimated, possible high bias] µg/kg), trichloroethylene (TCE) (25 µg/kg), methylcyclohexane (8,200 µg/kg), m,p-xylene (16 µg/kg), isopropylbenzene (11,000 µg/kg), 1,2,4-trimethylbenzene (11,000 µg/kg), and 1,3,5-trimethylbenzene (14 µg/kg); the SVOCs naphthalene (2,000 µg/kg), 1-methylnaphthalene (2,400 µg/kg), 2-methylnaphthalene (4,700 µg/kg), dimethylphthalate (1,200 µg/kg), fluorene (260 µg/kg), phenanthrene (4,700 µg/kg), anthracene (1,300 µg/kg), di-n-butylphthalate (4,100 µg/kg), fluoranthene (9,000 µg/kg), benzo(a)anthracene (5,000 µg/kg), chrysene (4,300 µg/kg), bis(2-ethylhexyl)phthalate (12,000 J [estimated] µg/kg), benzo(b)fluoranthene (4,700 µg/kg), benzo(k)-fluoranthene (1,700 µg/kg), and dibenzo(a,h)anthracene (600 µg/kg); the pesticides endosulfan II (270 µg/kg), 4,4'-DDD (7.6 J µg/kg), 4,4'-DDT (40 µg/kg), cis-chlordane (34 µg/kg), and trans-chlordane (46 µg/kg); the PCB Aroclor-1260 (90 µg/kg); and the metals antimony (10 mg/kg), barium (5,300 mg/kg), cadmium (7.0 mg/kg), iron (60,000 mg/kg), lead (5,900 mg/kg), silver (3.2 mg/kg), zinc (3,000 mg/kg), and mercury (2.5 mg/kg). Contaminants detected above RDLs in on-site stormwater include the VOCs cyclohexane (5.7 µg/L), methylcyclohexane (5.0 µg/L), toluene (23 µg/L), ethylbenzene (8.2 µg/L), o-xylene (26 µg/L), m,p-xylene (64 µg/L), 1,2,4-trimethylbenzene (41 µg/L), 1,3,5-trimethylbenzene (11 µg/L), copper (39 µg/L), iron (380 µg/L), and manganese (26 µg/L). Analytical results for groundwater samples collected in support of the T & J Salvage SI do not document an observed release to the Ground Water Migration Pathway.

Analytical results for samples collected in support of the Coney Island Creek SI document an observed release of site-related contaminants to the Surface Water Migration Pathway. Some of the creek contaminants (phenanthrene, fluoranthene, and benzo(b)fluoranthene in sediment, and iron in surface water) were detected at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, just south of the T & J facility as follows [Ref. 59, pp. 4, 6]:

Hazardous Substance	**Highest Background Level (Shell Bank Creek)**	**Release Concentration (Coney Island Creek, south of T & J)**
Phenanthrene (sediment)	650 U µg/kg (not detected)	810 µg/kg
Fluoranthene (sediment)	650 U µg/kg (not detected)	1,300 µg/kg
Benzo(b)fluoranthene (sediment)	650 U µg/kg (not detected)	690 µg/kg
Iron (surface water)	500 U µg/L (not detected)	600 µg/L

The 2021 SI sampling analytical results for the T & J and Coney Island Creek sites are discussed in detail in **Part III**. The release documented at T & J results in actual contamination of the NY-NJ Harbor Estuary, which is a sensitive environment identified under the National Estuary Program that encompasses all of Coney Island Creek [Ref. 40, Figure 7; 41, pp. 4–5, 99–100]. There is a downstream fishery at Kaiser Park that is subject to potential contamination [Ref. 4, pp. 2, 14, 21; 59, p. 6].



Source:
1. Weston Solutions, Inc. (WESTON®) Site Assessment Team V (SAT V). Site Logbook No. DCN # SAT-V.6105.0005, T & J Salvage Site Inspection. March 30, 2021 – June 10, 2021. [40 pages]
2. New York City Department of Finance, Office of City Register. Search By Parcel Identifier: Block 7247, Lots 200, 203, 205, 206, 211, and 213. Accessed from http://gis.nyc.gov/taxmap/map.htm on June 10, 2021.
3. Nearmap Limited. High Resolution Aerial Imagery of Brooklyn, NY. Accessed from https://www.nearmap.com/us/en on February 26, 2021.

Notes:
1. Depth in feet below ground surface.

WESTON SOLUTIONS

DATE: December 2021

FIGURE #: 3

PROJECT: T & J Salvage SI

CLIENT NAME: EPA

TITLE: SITE SAMPLE LOCATION MAP
T & J SALVAGE
BROOKLYN, KINGS COUNTY, NY

Sources:

1. Weston Solutions, Inc. (WESTON®) Site Assessment Team V (SAT V). Site Logbook No. 1 of 2, DCN # SAT-V.6100.0001, Coney Island Creek Site Inspection. May 28, 2021 – June 7, 2021. [8 pages]
2. WESTON SAT V. Site Logbook No. 2 of 2, DCN # SAT-V.6100.0056, Coney Island Creek Site Inspection. June 8, 2021. [4 pages]
3. ESRI World Imagery, 2021.

Notes:

1. *The source of this map image is Esri, used by EPA with Esri's permission.*
2. Depth in feet below ground surface (ft bgs).

LEGEND:

- Upland Site Location
- Surface and Subsurface Soil Sample Location
- Groundwater Sample Location
- Coney Island Creek Area

TITLE:

BACKGROUND SAMPLE LOCATION MAP
BROOKLYN, KINGS COUNTY, NY

PROJECT: T & J Salvage SI

CLIENT NAME: EPA

WESTON SOLUTIONS

DATE: December 2021

FIGURE #: 4

Path: P:\SAT2\ConeyIslandCreek\MXD\TJ_Auto\SI\27108_CI_Creek6105_TJ_Auto_Soil_Background_SI.mxd

SITE INSPECTION REPORT

PART I: SITE INFORMATION

1. Site Name/Alias T & J Salvage

   Street 2647 Stillwell Avenue

   City Brooklyn State New York Zip 11223

2. County Kings County Code 047 Cong. Dist. 11^{th}

3. EPA ID No. NYN000203544

4. Block No. 7247 Lot Nos. 200, 203, 205, 206, 211, and 213*

   * The T & J salvage yard also extends north into Lots 210, 216, and the Belt Parkway right-of-way.

5. Latitude* +40.582620º Longitude* -73.981731º

   * The latitude and longitude values are an update for the EPA database, based on the SI sampling results. These coordinates correspond to location 6105-S03 on the subject property. The coordinates were recorded using GPS technology on June 2, 2021. The coordinate system is WGS 1984 [Ref. 24, p. 4; 25, p. 4].

   USGS Quad(s) Coney Island

6. Approximate size of site 2.9 acres

7. Owner M.A.A.T.T. LLC

   Site Contact Thomas Paolino Telephone No. (718) 946-6200

   Address 2647 Stillwell Avenue, Brooklyn, NY 11223

8. Operator T & J Auto Salvage

   Site Contact Angelo Paolino Telephone No. (718) 967-0293

   Address 2647 Stillwell Avenue, Brooklyn, NY 11223

9. Type of Ownership

_X_ Private ___ Federal ___ State

___ County ___ Municipal ___ Unknown ___ Other________

10. Owner/Operator Notification on File

___ RCRA 3010 Date_________ ___ CERCLA 103c Date_________

_X_None ___ Unknown

11. Permit Information

Permit Type	Permit No.	Expiration Date	Reference(s)
Vehicle Dismantling Facility Registration	24V50008	February 13, 2025	28, p. 1
National Pollutant Discharge Elimination System	NYR00D555	February 28, 2023	18, p. 1

12. Site Status

_X_ Active ___ Inactive ___ Unknown

13. Years of Operation: 1940-present

The subject property is owned by M.A.A.T.T. LLC. It consists of six conjoined tax lots (i.e., Block 7247; Lots 200, 203, 205, 206, 211, and 213). Historical city directories indicate that the subject property has been utilized as an automobile wrecking facility since at least 1940 by the following companies:

Year	Facility Listing
1940	Hub Auto Wrecking
1949	Johnsons Auto Glass Co
1976	City Wide Auto Salvage Ltd
1985	T & J Salvage Corp
1992	Midtown Enterprises and T & J Salvage Corp
1997	T & J Salvage Corp
2000	NECDET GUL and T & J Salvage Corp
2005	T & J 3 Salvage Corp

14. Identify the types of waste sources (e.g., landfill, surface impoundment, piles, stained soil, above- or below-ground tanks or containers, land treatment, etc.) on site. Initiate as many waste unit numbers as needed to identify all waste sources on site.

a) Waste Sources

Waste Unit No.	Waste Source Type	Facility Name for Unit
1	Contaminated Soil	N/A
2	Tanks/Containers	Catch Basin Stormwater

b) Other Areas of Concern

No other areas of concern have been identified.

Ref. 1, p. 1; 2, p. 1; 7, p. 5; 9, pp. 1–2, 8; 10, pp. 1–12; 14, p. 4; 26, p. 1; 27, p. 1; 40, Figure 5.

15. Describe the regulatory history of the site, including the scope and objectives of any previous response actions, investigations and litigation by State, Local and Federal agencies (indicate type, affiliation, date of investigations).

- **Spill Report, NYSDEC, June 2003 –** Spill at the T & J site was reported to NYSDEC by the NYPD. Report indicates that multiple discharges of automotive waste fluids were identified throughout the property and impact to Coney Island Creek is suspected. An environmental investigation was requested to determine off-site impacts [Ref. 11, p. 1].

- **Joint Investigation, NYPD/NYSDEC DLE, August 2003 –** A search warrant was executed at the T & J site by the NYPD and NYSDEC DLE. NYSDEC DLE observed surface spills and free product on standing water and directed the responsible party (i.e., T & J) to immediately contain and recover the product [Ref. 12, p. 1].

- **Order on Consent, NYSDEC, April 2004 –** T & J received an Order on Consent issued by NYSDEC as a result of the automotive waste fluids identified throughout the property in August 2003. The remedies under the Order on Consent included that T & J were required to cleanup and remove any release of petroleum at the site [Ref. 14, pp, 1–2, 6].

- **Subsurface Investigation, Key Environmental on behalf of T & J, October 2004 –** T & J conducted a subsurface environmental investigation at the site under NYSDEC oversight. Nineteen soil samples were collected from 17 direct-push boreholes advanced to 10 feet bgs. One groundwater sample was collected from each of two boreholes. All soil samples were analyzed for VOCs and SVOCs via analytical methods 8260B and 8270C, respectively. Only two soil samples were analyzed for metals via analytical method 6020. The two groundwater samples were analyzed for only SVOCs via analytical method 8270C. NYSDEC noted several deficiencies with T & J's sampling procedures, including a nonworking photoionization detector (PID), samples not kept on ice in a cooler, cross-contamination of samples by sampler's field knife, and direct-push sleeves left cut open for long periods prior to sample collection. Analytical results are discussed in **Part III** [Ref. 11, p. 1; 13, p. 13; 15, pp. 5–6, 8, 134–137].

- **Remedial Investigation Report (RIR), Key Environmental on behalf of T & J, February 2005 –** The RIR indicates that xylene (23 mg/kg) and ethylbenzene (3.12 mg/kg) were detected in soil at one location, at a depth of 0 to 1 foot beneath an area covered with an 8-inch-thick concrete slab near where fluids are drained from engines; and that all other soil and groundwater samples only contain trace concentrations of VOCs and/or SVOCs. Analytical data shows that cadmium (1.86 mg/kg), chromium (24.4 mg/kg), lead (438 mg/kg), mercury (0.271 mg/kg), and vanadium (47.3 mg/kg) were detected in soil at one location (near the present-day lead batteries and engines storage area); however, there is no discussion of metals in soil in the report. The RIR concluded that, with the exception of the soil sample collected beneath the 8-inch-thick concrete slab near where fluids are drained from engines, no contamination was detected in soil or groundwater; and recommended to remove the T & J facility from the NYSDEC Spill List. In April 2010, NYSDEC removed T & J from the Spill List based on the RIR and subsequent site visits [Ref. 11, pp. 2–3; 15, pp. 5–6, 127–129].

- **Tidal Wetlands Adjacent Area Jurisdiction Determination, AKRF on behalf of T & J, June 2015 –** T & J submitted a letter to NYSDEC requesting a Tidal Wetlands Adjacent Area Jurisdictional Determination regarding wetlands along the site's southern shoreline and Coney Island Creek. In August 2015, NYSDEC issued a Notice of Incomplete Application with regard to the jurisdictional determination request. In September 2016, NYSDEC inspected the T & J facility and subsequently issued a Notice of Violation (NOV) to property owner M.A.A.T.T. LLC for placement of fill in tidal wetlands, paving over the adjacent area without a permit, and construction of a commercial accessory structure without a permit [Ref. 29, pp. 1–4; 30, p. 1; 31, p. 1].

- **Notice of Violation, NYSDEC, May 2019 –** NOV for failure to submit the 2018 Annual Certification Report (ACR) to comply with the terms and conditions of the facility's SPDES permit [Ref. 32, p. 1].

- **Off-site Reconnaissance, WESTON SAT, September 2020 –** Off-site reconnaissance of T & J in support of an APA. Region 2 SAT V did not collect samples associated with the APA. The facility was confirmed to be an active automobile scrap yard. Site conditions appeared to be similar to descriptions in the available background information and aerial imagery regarding poor housekeeping at the facility [Ref. 4, pp. 1–5, 14, 12–21; 6, pp. 3–6; 11, p. 1; 12, p. 1].

- **On-site Reconnaissance, WESTON SAT V, March 2021 –** On-site reconnaissance to observe current site conditions in support of the SI, and to select potential SI sampling locations. Region 2 SAT V observed poor housekeeping at the T & J facility. ELVs are stored on the concrete with no secondary containment or run-on/runoff control measures. Moderate to severe staining was observed near the automobile crusher located along the northern portion of the property and the automobile dismantling area located near the center of the property. Used oil and antifreeze waste were stored in two 275-gallon totes with no secondary containment. Three 55-gallon corroded drums with waste from a previous environmental investigation conducted at the site and an approximately 75-gallon gasoline tank were observed in an area with no secondary containment. A damaged lead-acid battery and an unlabeled and corroded drum were observed on the ground in the southeastern portion of the facility. No drainage channels from the facility to Coney Island Creek were observed during the reconnaissance [Ref. 8, pp. 3–5, 15–21].

- **SI Sampling, WESTON SAT V, June 2021 –** In support of the SI evaluation, Region 2 SAT V collected a total of 21 soil samples, three groundwater samples, and one stormwater sample from the T & J site; and seven soil samples and two groundwater samples from a grass area just north of the Belt Parkway Exit 6N considered to represent background conditions for the SI evaluation. All samples were analyzed for Organic TAL VOCs, SVOCs, Pesticides, and Aroclors; and ICP-AES 11+ Metals (including Hg), by CLP laboratories [Ref. 8, pp. 22–30; 24, pp. 3, 5–11; 25, pp. 3, 5–8]. Sample analytical results are discussed in **Part III**.

a) Is the site or any waste source subject to Petroleum Exclusion? Identify petroleum products and by products that justify this decision.

The Petroleum Exclusion would apply to the two 275-gallon waste fluids (i.e., engine oil, transmission fluid, axle fluid, hydraulic fluid, power steering fluid, brake fluid, etc.) storage totes and the approximately 75-gallon waste gasoline tank, which is occasionally used to refuel the site vehicles. The two waste fluids storage totes and the gasoline tank have no secondary containment. As discussed in **Part III**, the 2021 SI sampling presented detections of cyclohexane, methylcyclohexane, m,p-xylene, isopropylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and naphthalene in soil. These analytes are known constituents of used oils and fuels (i.e., gasoline and diesel).

Ref. 8, pp. 3, 18; 47, pp. 50, 52, 56, 58, 84, 96, 118; 50, p. 15.

b) Has normal farming application of pesticides registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) occurred at the site? Have pesticides been produced or stored at the site? Have there been any leaks or spills of pesticides on site?

Available background information does not indicate that agricultural activities have been conducted on site. It is unknown if pesticides regulated under FIFRA were applied to the subject site. Pesticides are not known to have been produced or stored at the site, and there are no records of leaks or spills of pesticides on-site.

As discussed in **Part III**, the June 2021 SI sampling showed detections of the following pesticides at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, in soil at the T & J site: endosulfan II, 4,4'-DDD, 4,4'-DDT, cis-chlordane, and trans-chlordane in soil. The subject site has been utilized for automobile salvage operations since at least 1940. Historical aerial photos indicate that automobile salvage operations were conducted on exposed soil until at least 1966. Pesticides are not directly related to historical or current operations. Automobile salvage, which involves depositing a variety of junk vehicles and other scrap on the site, has been the main use of the property since development.

Ref. 5, pp. 11–38; 6, pp. 3–15; 7, pp. 4–8; 47, pp. 41, 47, 67, 81, 87, 99, 105, 117, 179, 199, 215.

c) Is the site or any waste source subject to Resource Conservation and Recovery Act (RCRA) Subtitle C (briefly explain)?

The facility sells/recycles the petroleum-related waste fluids recovered (i.e., engine oil, transmission fluid, axle fluid, hydraulic fluid, power steering fluid, brake fluid, etc.) and scrap metal (i.e., lead-acid batteries and mercury switches). Therefore, neither the site nor any waste source is subject to RCRA Subtitle C.

Ref. 16, p. 1; 33, p. 1.

d) Is the site or any waste source maintained under the authority of the Nuclear Regulatory Commission (NRC)?

The subject site has been utilized for automobile salvage activities since at least 1940 and is not known to have handled radiological materials. Prior to 1940, residences and streets occupied the site. Neither the site nor any waste source is maintained under the authority of the NRC.

Ref. 5, pp. 11–36; 6, pp. 3–15; 7, p. 5.

16. Do any conditions exist on site which would warrant immediate or emergency action?

No conditions were noted which would warrant immediate or emergency action during the March 2021 site reconnaissance or the June 2021 SI sampling.

Ref. 4, pp. 3–12.

17. Information available from:

Contact: Denise Zeno Agency: EPA Region 2 Tel. No.: (212) 637-4319

Preparer: Habib Bravo-Ruiz Agency: Region 2 START V Date: December 2021

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following items.

Waste Unit __1__ – Contaminated Soil

Source Type

________	Landfill	___X___	Contaminated Soil
________	Surface Impoundment	________	Pile
________	Drums	________	Land Treatment
________	Tanks/Containers	________	Other

Description:

1. Describe the types of containers, impoundments, or other storage systems (i.e., concrete - lined surface impoundments) and any labels that may be present.

   On June 2 and 3, 2021, Region 2 SAT V personnel collected soil samples from seven boreholes advanced throughout the T & J site using Geoprobe direct-push technology. Region 2 SAT V collected a total of 21 soil samples (including two environmental duplicates). Soil borings were screened using a PID in 6-inch intervals. PID readings above background were noted in the soil cores from locations 6105-S02, 6105-S03, 6105-S04, and 6105-S05. In borings where no PID readings above background were noted, soil samples were collected in intervals approximately at the surface, mid-point, and bottom of the borehole. All samples collected in support of the T & J site SI evaluation were analyzed by CLP laboratories for TAL VOCs, SVOCs, Pesticides, and Aroclors; and ICP-AES 11+ Metals (including mercury).

   Soil sample analytical results document the presence of a contaminated soil source at the site consisting of the VOCs chloroform, cyclohexane, TCE, methylcyclohexane, m,p-xylene, isopropylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene; the SVOCs naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, dimethylphthalate, fluorene, phenanthrene, anthracene, di-n-butylphthalate, fluoranthene, benzo(a)anthracene, chrysene, bis(2-ethylhexyl)phthalate, benzo(b)fluoranthene, benzo(k)-fluoranthene, and dibenzo(a,h)anthracene; the pesticides endosulfan II, 4,4'-DDD, 4,4'-DDT, cis-chlordane, and trans-chlordane; the PCB Aroclor-1260; and the metals antimony, barium, cadmium, iron, lead, silver, zinc, and mercury. The majority of the detections greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, were associated with soil samples collected from the northern, central, and eastern portions of the site, including 6102-S02 (i.e., Borehole 2), which was collected near the automobile crusher; 6102-S03 (i.e., Borehole 3), which was collected in the automobile dismantling area; 6102-S04 (i.e., Borehole 4), which was collected in the ELVs storage area; and 6102-S06 (i.e., Borehole 6), which was collected adjacent to a damaged lead-acid battery and an unlabeled 55-gallon drum.

The T & J subject property has been utilized for automobile salvage activities since at least 1940. Historical aerial photos indicate that automobile salvage operations were conducted on exposed soil until at least 1966. Therefore, the presence of the previously mentioned contaminants in soil are considered to be directly related to facility operations as discussed below:

- Chloroform is a man-made by-product formed when chlorine is used to disinfect water. It is used as a solvent for lacquers, floor polishes, resins, adhesives, alkaloids, fats, oil, and rubber. Xylene (m,p-xylene) is a BTEX compound and known constituent in fuel (i.e., gasoline and diesel) and used oil, together with cyclohexane, methylcyclohexane, isopropylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene. TCE is a documented constituent in degreasers and used oil. Naphthalene, 1-methylnaphthalene, 2-methylnaphtalene, fluorene, phenanthrene, anthracene, fluoranthene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)-fluoranthene, and dibenzo(a,h)anthracene are PAHs, which can accumulate in used oil primarily as the result of incomplete combustion of fuel. The phthalates bis(2-ethylhexyl)phthalate, dimethylphthalate, and di-n-butylphthalate are manufactured chemicals. They are used as plasticizers in order to make plastic soft and flexible, and can be found in automobile upholstery and numerous other products. T & J is known to have processed thousands of ELVs at the facility; collecting a substantial amount of plastic automobile components and more than 4,400 gallons of used oil in the process.

- The pesticides endosulfan II, 4,4’-DDD, 4,4’-DDT, cis-chlordane, and trans-chlordane could have been used or spilled at the site before it was paved. According to historical aerial photos, automobile salvage operations seem to have been conducted on exposed soil until at least 1966, prior to the banning of commercial pesticides.

- PCBs (including Aroclor-1260) were manufactured between 1929 and 1979 and used extensively in many applications. The use of PCBs was banned by the EPA Toxic Substances Control Act (TSCA) in 1979; however, PCBs may still be present in products and materials produced before 1979 (including oil used in motors and hydraulic systems).

- The ELV salvaging process at the T & J facility generated tons of scrap metal as well as thousands of lead-acid batteries and hundreds of mercury switches from 2013 to 2019 (i.e., a period of 7 years). There is no documentation for ELVs processed nor lead-acid batteries/mercury switches recovered prior to 2013; however, the long history of automobile salvage operations at the facility dates back to 1940 (i.e., a period of more than 80 years). Therefore, the detections of the metals antimony, barium, cadmium, iron, lead, silver, zinc, and mercury in on-site soil are considered to be site-related.

Ref. 6, pp. 9–14; 8, pp. 3, 16; 16, p. 1; 24, pp. 2–9; 40, Figure 5; 49, p. 1; 50, p. 15; 51, pp. 22, 24–25; 52, p. 1; 54, pp. 19–20; 55, p. 2; 57, p. 1.

2. Describe the physical condition of the containers or storage systems (i.e., rusted and/or bulging drums).

   Presently, T & J conducts automobile salvage operations in the northern portion of the subject property; however, review of historical aerial photos (i.e., 1954, 1961, 1966, and 1984) indicate that automobile salvage operations have been conducted throughout the whole 126,324 square-foot (ft^2) subject property. The historical aerial photos also indicate that automobile salvage operations were conducted on exposed soil until at least 1966. Currently, the ground surface of the subject property consists mostly of concrete pavement, bordered by narrow strips of vegetated land in some areas. The concrete is old, and in some areas, damaged and cracked. Site topography slightly slopes to five stormwater runoff catch basins near the center of the site. During the June 2021 SI sampling event, direct-push cores were collected and logged. The average concrete pavement thickness was 6.1 inches. The predominant type of soil observed at subsurface depths (i.e., greater than 2 feet bgs) were fine to coarse sand and gravel.

   Ref. 6, pp. 9–14; 8, pp. 5, 15, 32–38; 24, pp. 5–9; 40, Figure 2.

3. Describe any secondary containment that may be present (e.g., drums on concrete pad in building or aboveground tank surrounded by berm).

   There is no secondary containment associated with the on-site contaminated soil.

   Ref. 8, p. 15–21; 40, Figure 5.

Hazardous Waste Quantity

An area of contaminated soil at the site is delineated by sampling locations that indicate the presence of hazardous substances at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, and the area lying between these locations. The area of contaminated soil is estimated to be 35,365 ft^2.

Ref. 40, Figure 5.

Hazardous Substances/Physical State

The following hazardous substances and maximum concentrations are present in on-site contaminated soil:

Chloroform	45 J- µg/kg
Cyclohexane	140 J+ µg/kg (adjusted concentration 14 µg/kg)
Trichloroethylene	25 µg/kg
Methylcyclohexane	8,200 µg/kg

m,p-Xylene	16 µg/kg
Isopropylbenzene	11,000 µg/kg
1,2,4-Trimethylbenzene	11,000 µg/kg
1,3,5-Trimethylbenzene	14 µg/kg
Naphthalene	2,000 µg/kg
1-Methylnaphthalene	2,400 µg/kg
2-Methylnaphthalene	4,700 µg/kg
Dimethylphthalate	1,200 µg/kg
Fluorene	260 µg/kg
Phenanthrene	4,700 µg/kg
Anthracene	1,300 µg/kg
Di-n-butylphthalate	4,100 µg/kg
Fluoranthene	9,000 µg/kg
Benzo(a)anthracene	5,000 µg/kg
Chrysene	4,300 µg/kg
Bis(2-ethylhexyl)phthalate	12,000 J µg/kg
Benzo(b)fluoranthene	4,700 µg/kg
Benzo(k)fluoranthene	1,700 µg/kg
Dibenzo(a,h)anthracene	600 µg/kg
Endosulfan II	270 µg/kg
4,4'-DDD	7.6 J µg/kg
4,4'-DDT	40 µg/kg
Cis-chlordane	34 µg/kg
Trans-chlordane	46 µg/kg
Aroclor-1260	90 µg/kg
Antimony	10 mg/kg
Barium	5,300 mg/kg
Cadmium	7.0 mg/kg
Iron	60,000 mg/kg
Lead	5,900 mg/kg
Silver	3.2 mg/kg
Zinc	3,000 mg/kg
Mercury	2.5 mg/kg

Summaries of the soil sample analytical results, including comparisons to background concentrations and reference citations, are presented in **Part III**. The physical state of the contaminated soil is solid.

Ref. 40, Figure 5; 47, pp. 42, 50, 56, 58, 67, 90, 96, 105–107, 110, 113, 118, 199, 201, 207; 48, pp. 23–24, 28, 36.

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following items.

Waste Unit _2_ – Catch Basin Stormwater

Source Type

_________ Landfill	_________ Contaminated Soil
_________ Surface Impoundment	_________ Pile
_________ Drums	_________ Land Treatment
____X____ Tanks/Containers	_________ Other

Description:

1. Describe the types of containers, impoundments, or other storage systems (i.e., concrete - lined surface impoundments) and any labels that may be present.

   The on-site stormwater runoff is captured by five catch basins located near the center of the site. The catch basins are concrete-lined pits. According to facility information, the stormwater captured by the basins evaporates over time and there is no known connection between the catch basins and the creek. However, Region 2 SAT V observed two of the catch basins to be nearly full of stagnant stormwater with a noticeable sheen during the March 2021 site reconnaissance. Based on the reconnaissance observations and the finite volume of the catch basins, it is possible for the stormwater in the catch basins to overflow to the surrounding areas during significant rainfall events. According to a site representative, no stormwater runoff leaves the site; however, SPDES Notice of Intent forms submitted by T & J to NYSDEC indicate that site stormwater runoff enters the New York City Municipal Separate Stormwater Sewer System (i.e., roadside drains, swales, ditches, culverts, etc.) and discharges into Coney Island Creek.

   Ref. 8, pp. 4, 20; 19, p. 1; 20, pp. 1, 5; 40, Figure 2.

2. Describe the physical condition of the containers or storage systems (i.e., rusted and/or bulging drums).

   During the March 2021 site reconnaissance, Region 2 SAT V observed two of the catch basins to be nearly full to capacity of stagnant stormwater. A slight sheen was noticeable on the stagnant stormwater. Based on the reconnaissance observations and the finite volume of the catch basins, it is possible for the stormwater in the catch basins to overflow to the surrounding areas during significant rainfall events. According to a site representative, no stormwater runoff leaves the site; however, SPDES Notice of Intent forms submitted by T & J to NYSDEC indicate that site stormwater runoff enters the New York City Municipal Separate Stormwater

Sewer System (i.e., roadside drains, swales, ditches, culverts, etc.) and discharges into Coney Island Creek.

Ref. 8, pp. 4–5; 20; 19, p. 1; 40, Figure 2.

3. Describe any secondary containment that may be present (e.g., drums on concrete pad in building or aboveground tank surrounded by berm).

   There is no secondary containment associated with the catch basins.

   Ref. 20, p. 1.

Hazardous Waste Quantity

The total capacity of the catch basins is estimated to be 10,000 gallons; therefore, the hazardous waste quantity used for the purpose of this report is 10,000 gallons.

Ref. 20, p. 1.

Hazardous Substances/Physical State

The following hazardous substances and maximum are present in the catch basin stormwater:

Cyclohexane	5.7 μg/L
Methylcyclohexane	5.0 μg/L
Toluene	23 μg/L
Ethylbenzene	8.2 μg/L
o-Xylene	26 μg/L
m,p-Xylene	64 μg/L
1,2,4-Trimethylbenzene	41 μg/L
1,3,5-Trimethylbenzene	11 μg/L
Copper	39 μg/L
Iron	380 μg/L
Manganese	26 μg/L

Summaries of the stormwater sample analytical results, including reference citations, are presented in **Part III**. The physical state of the contaminated stormwater is liquid.

Ref. 47, p. 248; 48, p. 98.

PART III. SAMPLING RESULTS

EXISTING ANALYTICAL DATA

Key Environmental Subsurface Investigation, October 2004 – Key Environmental, on behalf of T & J, conducted a subsurface environmental investigation at the site under NYSDEC oversight [Ref. 11, p. 1; 15, pp. 4–5]. They collected 19 soil and 2 groundwater samples from 17 direct-push boreholes advanced to 10 feet bgs [Ref. 15, pp. 5–6; 8]. All soil samples were analyzed for VOCs and SVOCs via analytical methods 8260B and 8270C, respectively [Ref. 15, pp. 134–137]. Two soil samples were analyzed for metals via analytical method 6020 [Ref. 15, pp. 135–137]. The two groundwater samples were only analyzed for SVOCs via analytical method 8270C [Ref. 15, pp. 136–137].

VOC analysis for soil sample SB-11, collected from a borehole advanced inside the automobile parts storage building, reported detections of xylene (124 mg/kg), toluene (2.70 mg/kg), and ethylbenzene (0.84 mg/kg) [Ref. 15, pp. 8, 68]. Analysis of soil sample SB-12, which was collected from a borehole advanced near the present-day lead batteries and engines storage area, indicated detections of benzene (0.645 mg/kg), toluene (2.16 mg/kg), ethylbenzene (1.15 mg/kg), and xylene (3.03 mg/kg) [Ref. 15, pp. 8, 68]. Analysis of soil sample SB-16A, which was collected from a borehole advanced in an area covered with an 8-inch-thick concrete slab near where fluids are drained from engines, indicated detections of xylene (23 mg/kg), toluene (0.323 mg/kg), and ethylbenzene (3.12 mg/kg) [Ref. 15, pp. 8, 36]. All other soil samples, including two deeper soil samples acquired from the same boring as SB-16A, indicated non-detect or trace concentrations of VOCs, including BTEX compounds [Ref. 15, pp. 8, 36, 38, 64, 66, 68, 72].

SVOC analysis indicated that the highest concentrations of benzo[b]fluoranthene (7.48 mg/kg), benzo[k]fluoranthene (4.99 mg/kg), benzo[a]pyrene (7.36 mg/kg), chrysene (8.73 mg/kg), indeno[1,2,3-c,d]pyrene (3.77 mg/kg), and dibenz(a,h)anthracene (1.91 mg/kg) were reported for soil sample SB-15, which was collected near the center of the site [Ref. 15, pp. 8, 37]. The highest concentration of benzo[a]anthracene (6.71 mg/kg) was detected in SB-8, collected adjacent to stacked ELVs [Ref. 15, pp. 8, 67]. Analytical results for soil sample SB-11 showed a detection of bis(2-ethylhexyl)phthalate (19.9 mg/kg) [Ref. 15, pp. 8, 69].

Analytical results for metals indicated the presence of arsenic (4.28 mg/kg), barium (296 mg/kg), cadmium (1.86 mg/kg), chromium (24.4 mg/kg), cobalt (4.11 mg/kg), iron (18,100 mg/kg), lead (438 mg/kg), mercury (0.271 mg/kg), nickel (21.4 mg/kg), vanadium (43.7 mg/kg), and zinc (402 mg/kg) in soil sample SB-12 [Ref. 15, p. 71]. This sample was collected from a borehole advanced near the present-day lead batteries and engines storage area [Ref. 15, p. 8]. Arsenic (4.03 mg/kg), chromium (24.4 mg/kg), cobalt (5.61 mg/kg), iron (19,800 mg/kg), lead (88.3 mg/kg), mercury (0.108 mg/kg), vanadium (38.5 mg/kg), and zinc (134 mg/kg) were also detected in soil sample SB-14, which was collected from a borehole advanced in the southern portion of the property [Ref. 15, pp. 8, 74].

Key Environmental encountered groundwater at two borehole locations (SB-7 and SB-14) [Ref. 15, p. 8]. Analytical results for groundwater samples collected at the two borehole locations showed maximum concentrations of the SVOCs naphthalene (35 µg/L), 2-methylnaphtalene (9.98

µg/L), benzo[a]anthracene (0.893 µg/L), chrysene (0.989 µg/L), benzo[b]fluoranthene (0.631 µg/L), and benzo[a]pyrene (0.714 µg/L) [Ref. 15, p. 63].

NYSDEC noted several deficiencies with T & J's (i.e., Key Environmental) sampling procedures during the subsurface investigation sampling, including a nonworking PID, samples not kept on ice in a cooler, cross-contamination of samples by sampler's field knife, and direct-push sleeves left cut open for long periods prior to sample collection [Ref. 11, p. 1].

REGION 2 SAT V CONEY ISLAND CREEK SAMPLING RESULTS, APRIL 2021

In April 2021, Region 2 SAT V personnel collected surface water and sediment samples as part of the SI evaluation of the Coney Island Creek site [Ref. 59, p. 1]. Region 2 SAT V collected a total of 12 surface water and 63 sediment samples [Ref. 59, p. 1]. Eight surface water samples (including one environmental duplicate) and 50 sediment samples (including three environmental duplicates) were collected from Coney Island Creek [Ref. 59, pp. 1–2, 4]. Four surface water samples and 13 sediment samples (including one environmental duplicate) were collected from Shell Bank Creek for evaluation of background conditions [Ref. 59, pp. 1–2, 6]. All surface water and sediment samples, as well as their respective QA/QC samples, were analyzed for Organic TAL VOCs, SVOCs, Pesticides, and Aroclors; and ICP-AES 11+ Metals (including mercury and cyanide) through EPA CLP [Ref. 59, p. 1].

The following analytes were detected at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, in the creek's sediment: the VOC 1,2,4-trimethylbenzene (190 micrograms per kilogram [µg/kg]); SVOCs phenanthrene (2,600 µg/kg), anthracene (700 µg/kg), fluoranthene (4,500 J µg/kg), pyrene (3,700 µg/kg), benzo(a)anthracene (2,100 µg/kg), chrysene (2,100 µg/kg), bis(2-ethylhexyl)phthalate (2,500 µg/kg), benzo(b)fluoranthene (2,900 µg/kg), benzo(k)fluoranthene (820 µg/kg), benzo(a)pyrene (2,300 µg/kg), indeno(1,2,3-cd)pyrene (1,200 µg/kg), benzo(g,h,i)perylene (1,300 µg/kg); pesticides 4,4'-DDE (23 J µg/kg), 4,4'-DDD (46 µg/kg), 4,4'-DDT (290 µg/kg), cis-chlordane (9.6 µg/kg), trans-chlordane (14 µg/kg); and metals barium (610 J mg/kg), cadmium (15 J mg/kg), calcium (25,000 J mg/kg), chromium (290 J mg/kg), cyanide (5.5mg/kg), lead (1,600 J mg/kg), silver (11 J mg/kg), and zinc (1,900 mg/kg) [Ref. 59, pp. 2, 6]. Iron (600 µg/L) and cyanide (40 J- µg/L) were the only substances detected above the highest background RDLs (all background results were non-detect) in the creek's surface water [Ref. 59, p. 6].

One of the sediment samples that exhibited detections of some of the above analytes (i.e., phenanthrene [810 µg/kg], fluoranthene [1,300 µg/kg], pyrene [1,100 µg/kg], and benzo(b)fluoranthene [690 µg/kg]) was collected immediately south of the T & J site [Ref. 59, p. 6]. Iron (600 µg/L) was detected in a surface water sample collected at the same location [Ref. 59, p. 6].

REGION 2 SAT V SAMPLING RESULTS, JUNE 2021

On June 2 and 3, 2021, Region 2 SAT V personnel collected soil, groundwater, and stormwater samples as part of the SI evaluation of the T & J site. Region 2 SAT V collected a total of 21 soil samples (including two environmental duplicates) and three groundwater samples (including one environmental duplicate) from seven Geoprobe® direct-push boreholes advanced throughout the site. Region 2 SAT V also collected a stormwater sample from one of the on-site catch basins [Ref. 8, pp. 6–12; 24, pp. 3, 5–11].

On June 7 and 8, 2021, Region 2 SAT V personnel collected background soil and groundwater samples associated with the SI evaluation of the T & J site. Region 2 SAT V collected a total of seven soil samples (including one environmental duplicate) and two groundwater samples (including one environmental duplicate) from two Geoprobe® direct-push boreholes advanced in a grass area just north of the Belt Parkway Exit 6N. The location is considered to represent background conditions for the SI evaluation because it is believed to be unaffected by activities or possible releases at the T & J site [Ref. 25, pp. 3, 5–8; 34, pp. 2–4; 35, p. 2].

The direct-push boreholes were advanced to a maximum depth of 10 feet. Up to three soil samples were collected from each borehole based on visual observation and field screening results using a PID [Ref. 24, p. 3; 25, p. 3]. The proposed on-site direct-push samples 6105-SS01B and 6105-SS05B were not collected due to poor soil recovery [Ref. 24, p. 3].

All samples were analyzed for Organic TAL VOCs, SVOCs, Pesticides, and Aroclors; and ICP-AES 11+ Metals (including Hg) by CLP laboratories (Chemtech Consulting Group [Organics] and Pace Analytical Services, LLC [Inorganics]) [Ref. 24, p. 2; 25, p. 2]. Organic TAL VOC soil sample fractions were collected with dedicated EnCore™ sampling devices directly from the soil core. All other CLP sample fractions, including the percent moisture fraction required in conjunction with EnCore™ sampling, were collected into 4-oz. glass jars after the sampling interval was homogenized using dedicated aluminum trays and disposable polyethylene scoops. Soil borings were screened using a PID in 6-inch intervals [Ref. 8, pp. 23–25; 24, p. 3; 25, p. 3]. PID readings above background were noted in the on-site soil cores from locations 6105-S02 (701.5 parts per million [ppm]), 6105-S03 (5.6 ppm), 6105-S04 (31.6 ppm), and 6105-S05 (2.8 ppm) [Ref. 8, p. 24; 24, pp. 3, 5–7]. In borings where no PID readings above background were noted, soil samples were collected in intervals approximately at the surface, mid-point, and bottom of the borehole [Ref. 24, p. 3; 25, p. 3].

Groundwater was encountered at on-site locations 6105-S01 and 6105-S05; and at background location 6100B-S01. Region 2 SAT V installed a 1-inch polyvinyl chloride (PVC) temporary well for groundwater sample collection at each of these three locations. The wells were purged using a peristaltic pump to remove as much suspended sediment as possible. Groundwater sample fractions designated for TAL VOC analysis was collected using a Teflon®-lined mini-bailer; the remaining sample fractions were collected using a peristatic pump. Groundwater sample fractions designated for ICP-AES 11+ Metals (including Hg) analysis were filtered in the field using dedicated 0.45-micron filters [Ref. 8, pp. 27–29; 24, p. 4, 25, p. 4].

A stormwater sample was collected from a catch basin near the center of the T & J site. The stormwater sample fraction designated for TAL VOC analysis was collected using a Teflon®-lined mini-bailer; the remaining sample fractions were collected using a peristatic pump. The stormwater sample fraction designated for ICP-AES 11+ Metals (including Hg) analysis was filtered in the field using a dedicated 0.45-micron filter [Ref. 8, pp. 29–30; 24, p. 4].

Samples collected for quality assurance/quality control (QA/QC) purposes at the T & J site included one aqueous and two soil environmental duplicate samples, one rinsate blank to demonstrate adequate decontamination of non-dedicated equipment (i.e., cutting shoe), and one trip blank to demonstrate there was no cross-contamination between sample containers and that atmospheric contaminants did not leak into sample containers. One groundwater and two soil on-site samples were designated for matrix spike/matrix spike duplicate (MS/MSD) analyses [Ref. 8, p. 25; 24, p. 4]. Samples collected for QA/QC purposes at the background location included one soil and one groundwater environmental duplicate sample, and one trip blank. One groundwater and one soil background sample were designated for MS/MSD analyses [Ref. 25, p. 4].

Region 2 SAT V logged sample locations electronically using GPS equipment and performed post-processing differential correction of the GPS data in accordance with EPA Region 2 GPS Standard Operating Procedures [Ref. 24, p. 4; 25, p. 4]. **Table 1** presents the sample location coordinates. **Figure 3** presents the Site Sample Location Map. **Figure 4** presents the Background Sample Location Map.

Soil analytical results document the presence of an on-site contaminated soil source consisting of the VOCs chloroform, cyclohexane, TCE, methylcyclohexane, m,p-xylene, isopropylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene; the SVOCs naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, dimethylphthalate, fluorene, phenanthrene, anthracene, di-n-butylphthalate, fluoranthene, benzo(a)anthracene, chrysene, bis(2-ethylhexyl)phthalate, benzo(b)fluoranthene, benzo(k)-fluoranthene, and dibenzo(a,h)anthracene; the pesticides endosulfan II, 4,4’-DDD, 4,4’-DDT, cis-chlordane, and trans-chlordane; the polychlorinated biphenyl (PCB) Aroclor-1260; and the metals antimony, barium, cadmium, iron, lead, silver, zinc, and mercury [Ref. 47, pp. 41, 46–48, 50, 52, 56, 58, 60, 66, 67, 81, 84, 87, 90, 94, 96, 99, 105–107, 110, 113, 117–118, 179, 184, 196, 198–199, 201; 48, pp. 22–24, 28–29, 34, 36, 42, 64]. Soil Analytical Results are presented in **Tables 2A through 2D**. Contaminant Levels at the T & J site are presented in **Figure 5**.

The VOCs cyclohexane, methylcyclohexane, isopropylbenzene, and 1,2,4-trimethylbenzene were detected in subsurface soil samples 6105-SS02A and 6105-SS02B at concentrations greater than the highest background reporting detection limit (RDL) [Ref. 47, pp. 50, 52, 58]. The maximum concentrations of cyclohexane, methylcyclohexane, isopropylbenzene, and 1,2,4-trimethylbenzene in these two soil samples were 140 (14) J+ μg/kg, 8,200 μg/kg, 11,000 μg/kg, and 11,000 μg/kg, respectively [Ref. 47, pp. 50, 52, 58]. 1,2,4-Trimethylbenzene (45 μg/kg) and 1,3,5-trimethylebenze (14 μg/kg) were detected in surface soil sample 6105-S04 and subsurface soil sample 6105-SS04B, collected in the eastern portion of the site, where the ELVs are stored [Ref. 47, pp. 84, 96]. Chloroform and TCE were detected at concentrations above the RDL in subsurface soil samples 6105-SS04A and 6105-SS04B (maximum concentrations of 45 J- μg/kg and 25 μg/kg, respectively) [Ref. 47, pp. 90, 96]. Chloroform was also detected above the RDL in surface soil sample 6105-S07 (33 J- μg/kg), collected south of the used oil, antifreeze, and refrigerant storage area [Ref. 47, p. 196]. Xylene (m,p-xylene) was detected at concentrations greater than the RDL in surface soil sample 6105-S04 (15 μg/kg) and subsurface soil sample 6105-SS02B (16 μg/kg) [Ref. 47, pp. 58, 84].

TABLE 1
SAMPLE LOCATION COORDINATES
T & J SALVAGE

Location Type	Location IDs	Sample IDs	Latitude	Longitude	Data Collection Type
Direct-push Soil and Groundwater	6105-S01	6105-S01	40.582763°	-73.982376°	GPS point collected in the field
		6105-SS01A			
		6105-GW01			
Direct-push Soil	6105-S02	6105-S02	40.582942°	-73.981872°	GPS point collected in the field
		6105-SS02A			
		6105-SS02B			
Direct-push Soil (New Site Reference Location)	6105-S03	6105-S03	40.582620°	-73.981731°	GPS point collected in the field
		6105-SS03A			
		6105-SS03B			
Direct-push Soil	6105-S04	6105-S04	40.582551°	-73.981105°	GPS point collected in the field
		6105-SS04A			
		6105-S08 (Duplicate of 6105-SS04A)			
		6105-SS04B			
Direct-push Soil and Groundwater	6105-S05	6105-S05	40.582606°	-73.982291°	GPS point collected in the field
		6105-SS08A (Duplicate of 6105-S05)			
		6105-SS05A			
		6105-GW05			
		6105-GW08 (Duplicate of 6105-GW05)			
Direct-push Soil	6105-S06	6105-S06	40.582252°	-73.981135°	GPS point collected in the field
		6105-SS06A			
		6105-SS06B			
Direct-push Soil	6105-S07	6105-S07	40.582290°	-73.981577°	GPS point collected in the field
		6105-SS07A			
		6105-SS07B			
Stormwater	6105-CBW01	6105-CBW01	40.582777°	-73.981891°	GPS point collected in the field
Direct-push Soil and Groundwater (Background)	6100B-S01	6100B-S01	40.584371°	-73.985065°	GPS point collected in the field
		6100B-SS01A			
		6100B-SS01B			
		6100B-GW01			
		6100B-GW03 (Duplicate of 6101B-GW01)			
Direct-push Soil (Background)	6100B-S02	6100B-S02	40.584201°	-73.985125°	GPS point collected in the field
		6100B-S03 (Duplicate of 6101B-S02)			
		6100B-SS02A			
		6100B-SS02B			

TABLE 2A
SOIL ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
T & J Salvage
Page 1 of 2

Sample Purpose:	Background Samples																							Source Samples																										
Field Sample ID:	6100B-S01			6100B-SS01A			6100B-SS01B			6100B-S02			6100B-S03			6100B-SS02A			6100B-SS02B			3x Maximum Background, or Highest Reporting Detection Limit		6105-S01			6105-SS01A			6105-S02			6105-SS02A			6105-SS02B			6105-S03			6105-SS03A			6105-SS03B		
CLP ID:	BG5H8			BG5J1			BG5J2			BG5H9			BG5J0			BG5J3			BG5J4					BG5P8			BG5P9			BG5Q1			BG5Q2			BG5Q3			BG5Q4			BG5Q5			BG5Q6		
Date:	6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021					6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021		
Depth Interval (ft bgs):	0 - 2			5 - 6.5			7 - 8.5			0 - 2			0 - 2			5 - 6			6 - 7.5					0 - 2			8.5 - 10			0 - 2			6.5 - 7.5			7.5 - 8.6			0 - 2			5.5 - 6.5			7 - 8.6		
Comments:													Duplicate of 6100B-S02																																					
Analyte	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Value	Q	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Dichlorodifluoromethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Chloromethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Vinyl chloride	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Bromomethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Chloroethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Trichlorofluoromethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
1,1-Dichloroethene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
1,1,2-Trichloro-1,2,2-trifluoroethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Acetone	11	U	11	14	U	14	16	U	16	12	U	12	10	U	10	15	U	15	19	U	*19*	19	U	9.0	U	9.0	10	U	10	26		10	170		10	68		16	41		8.9	76		12	56		11
Carbon disulfide	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Methyl Acetate	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Methylene chloride	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
trans-1,2-Dichloroethene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Methyl tert-butyl Ether	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	2.6	J	4.5	6.1	U	6.1	5.6	U	5.6
1,1-Dichloroethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
cis-1,2-Dichloroethene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
2-Butanone	11	U	11	14	U	14	16	U	16	12	U	12	10	U	10	15	U	15	19	U	*19*	19	U	9.0	U	9.0	10	U	10	9.0	J	10	10	U	10	22		16	8.3	J	8.9	18		12	16		11
Bromochloromethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Chloroform	5.6	U	5.6	*1.6*	J	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	9.7	4.8	J	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
1,1,1-Trichloroethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Cyclohexane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.6 (0.56)	J+	5.0	140 (14)	J+	5.2	15		8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Carbon tetrachloride	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Benzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	6.9		5.2	2.1	J	8.0	0.83	J	4.5	6.1	U	6.1	5.6	U	5.6
1,2-Dichloroethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Trichloroethene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Methylcyclohexane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	11 (1.1)	J+	5.0	8200		310	77		8.0	0.62	J	4.5	6.1	U	6.1	5.6	U	5.6
1,2-Dichloropropane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Bromodichloromethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
cis-1,3-Dichloropropene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
4-Methyl-2-pentanone	11	U	11	14	U	14	16	U	16	12	U	12	10	U	10	15	U	15	19	U	*19*	19	U	9.0	U	9.0	10	U	10	10	U	10	10	U	10	16	U	16	8.9	U	8.9	12	U	12	11	U	11
Toluene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	15 (9.2)	J+	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
trans-1,3-Dichloropropene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
1,1,2-Trichloroethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Tetrachloroethene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
2-Hexanone	11	U	11	14	U	14	16	U	16	12	U	12	10	U	10	15	U	15	19	U	*19*	19	U	9.0	U	9.0	10	U	10	10	U	10	10	U	10	16	U	16	8.9	U	8.9	12	U	12	11	U	11
Dibromochloromethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
1,2-Dibromoethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Chlorobenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	UJ	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Ethylbenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	51 (5.1)	J+	5.2	9.2		8.0	0.91	J	4.5	6.1	U	6.1	5.6	U	5.6
o-Xylene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	0.96	J	5.0	5.2	U	5.2	4.5	J	8.0	2.6	J	4.5	0.69	J	6.1	5.6	U	5.6
m,p-Xylene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	16		8.0	3.1	J	4.5	1.1	J	6.1	5.6	U	5.6
Styrene	*2.9*	J	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	8.7	J	9.7	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
Bromoform	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
Isopropylbenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	11000		310	170		8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
1,2,3-Trichloropropane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
1,1,2,2-Tetrachloroethane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	U	6.1	5.6	U	5.6
1,3-Dichlorobenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	UJ	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
1,4-Dichlorobenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	UJ	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
1,2-Dichlorobenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	UJ	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
1,2-Dibromo-3-chloropropane	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	U	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
1,2,4-Trimethylbenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	11000		310	36		8.0	4.9		4.5	1.2 (0.12)	J+	6.1	5.6	U	5.6
1,3,5-Trimethylbenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	25 (2.5)	J+	5.2	3.0	J	8.0	1.7	J	4.5	6.1	UJ	6.1	5.6	U	5.6
1,2,4-trichlorobenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	UJ	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
1,2,3-Trichlorobenzene	5.6	U	5.6	6.8	U	6.8	8.0	U	8.0	5.8	U	5.8	5.1	U	5.1	7.3	U	7.3	9.7	U	*9.7*	9.7	U	4.5	U	4.5	5.0	U	5.0	5.0	U	5.0	5.2	UJ	5.2	8.0	U	8.0	4.5	U	4.5	6.1	UJ	6.1	5.6	U	5.6
Reference	Ref. 61, pp. 25, 26, 110, 111			Ref. 61, pp. 63, 64, 112, 113			Ref. 61, pp. 69, 70, 113, 114			Ref. 61, pp. 50, 51, 111, 112			Ref. 61, pp. 57, 58, 112			Ref. 61, pp. 75, 76, 114, 115			Ref. 61, pp. 81, 82, 115					Ref. 47, pp. 28, 29, 281, 282			Ref. 47, pp. 38, 39, 282, 283			Ref. 47, pp. 44, 45, 283, 284			Ref. 47, pp. 50, 51, 284, 285			Ref. 47, pp. 58, 59, 286, 287			Ref. 47, pp. 64, 65, 288			Ref. 47, pp. 70, 71, 289			Ref. 47, pp. 78, 79, 290, 291		

All results are reported in micrograms per kilogram (µg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref 47, p. 2; 61, p. 2]
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref 47, p. 2; 61, p. 2]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed contamination.
J+ = The result is an estimated quantity, but the result may be biased high [Ref 47, p. 2; 61, p. 2]
UJ = The analyte was not detected at a level greater than or equal to the ACRQL. However, the reported ACRQL is approximate and may be innacurate or imprecise [Ref 47, p. 2; 61, p. 2]
Values in parentheses have been adjusted per EPA Fact Sheet *Using Quaified Data to Document an Observed Release and Observed Contamination* [Ref. 60, pp. 4-9]
ITALICS indicate the highest background detection for each analyte (or highest RDL if no detections)
YELLOW HIGHLIGHT indicates that the result meets observed release/observed contamination criteria (≥ 3x maximum background, or ≥ highest RDL if no background detections)

TABLE 2A
SOIL ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
T & J Salvage

Sample Purpose:	3x Maximum Background, or Highest Reporting Detection Limit		Source Samples																	
Field Sample ID:			6105-S04			6105-SS04A			6105-S08			6105-SS04B			6105-S05			6105-SS08A		
CLP ID:			BG5Q7			BG5Q8			BG5S5			BG5Q9			BG5R0			BG5S6		
Date:			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021		
Depth Interval (ft bgs):			0 - 2			4 - 6			4 - 6			8 - 9.5			0 - 2			0 - 2		
Comments:									Duplicate of 6105-SS04A									Duplicate of 6105-S05		
Analyte	**Value**	**Q**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**
Dichlorodifluoromethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Chloromethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Vinyl chloride	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Bromomethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Chloroethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Trichlorofluoromethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,1-Dichloroethene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,1,2-Trichloro-1,2,2-trifluoroethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Acetone	19	U	42		12	35		11	12	U	12	39		10	68		12	34		10
Carbon disulfide	9.7	U	6.0	U	6.0	0.96	J	5.4	5.8	U	5.8	1.5	J	5.2	5.8	U	5.8	5.1	U	5.1
Methyl Acetate	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Methylene chloride	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
trans-1,2-Dichloroethene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Methyl tert-butyl Ether	9.7	U	3.3	J	6.0	1.7	J	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,1-Dichloroethane	9.7	U	6.0	U	6.0	5.4	R	5.4	5.8	U	5.8	5.2	R	5.2	5.8	U	5.8	5.1	U	5.1
cis-1,2-Dichloroethene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
2-Butanone	19	U	13		12	11	U	11	12	U	12	5.3	J	10	23		12	12		10
Bromochloromethane	9.7	U	6.0	U	6.0	5.4	R	5.4	5.8	U	5.8	5.2	R	5.2	5.8	U	5.8	5.1	U	5.1
Chloroform	4.8	J	6.0	U	6.0	45	J-	5.4	5.8	U	5.8	42	J-	5.2	5.8	U	5.8	5.1	U	5.1
1,1,1-Trichloroethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Cyclohexane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Carbon tetrachloride	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Benzene	9.7	U	0.92	J	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,2-Dichloroethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Trichloroethene	9.7	U	6.0	U	6.0	25		5.4	5.8	U	5.8	10		5.2	5.8	U	5.8	5.1	U	5.1
Methylcyclohexane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,2-Dichloropropane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Bromodichloromethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
cis-1,3-Dichloropropene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
4-Methyl-2-pentanone	19	U	12	U	12	11	U	11	12	U	12	10	U	10	12	U	12	10	U	10
Toluene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
trans-1,3-Dichloropropene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,1,2-Trichloroethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Tetrachloroethene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
2-Hexanone	19	U	12	U	12	11	U	11	12	U	12	10	U	10	12	U	12	10	U	10
Dibromochloromethane	9.7	U	6.0	U	6.0	5.4	R	5.4	5.8	U	5.8	5.2	R	5.2	5.8	U	5.8	5.1	U	5.1
1,2-Dibromoethane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Chlorobenzene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Ethylbenzene	9.7	U	6.3		6.0	5.4	U	5.4	5.8	U	5.8	0.70	J	5.2	5.8	U	5.8	5.1	U	5.1
o-Xylene	9.7	U	2.6	J	6.0	5.4	U	5.4	5.8	U	5.8	0.72	J	5.2	5.8	U	5.8	5.1	U	5.1
m,p-Xylene	9.7	U	15		6.0	1.1	J	5.4	5.8	U	5.8	3.5	J	5.2	5.8	U	5.8	5.1	UJ	5.1
Styrene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	UJ	5.1
Bromoform	9.7	U	6.0	U	6.0	5.4	R	5.4	5.8	U	5.8	5.2	R	5.2	5.8	U	5.8	5.1	U	5.1
Isopropylbenzene	9.7	U	2.1	J	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,2,3-Trichloropropane	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,1,2,2-Tetrachloroethane	9.7	U	6.0	U	6.0	5.4	R	5.4	5.8	U	5.8	5.2	R	5.2	5.8	U	5.8	5.1	U	5.1
1,3-Dichlorobenzene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,4-Dichlorobenzene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,2-Dichlorobenzene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,2-Dibromo-3-chloropropane	9.7	U	6.0	U	6.0	5.4	R	5.4	5.8	U	5.8	5.2	R	5.2	5.8	U	5.8	5.1	U	5.1
1,2,4-Trimethylbenzene	9.7	U	37		6.0	9.1		5.4	5.8	U	5.8	45		5.2	5.8	U	5.8	5.1	U	5.1
1,3,5-Trimethylbenzene	9.7	U	13		6.0	2.9	J	5.4	5.8	U	5.8	14		5.2	5.8	U	5.8	5.1	U	5.1
1,2,4-trichlorobenzene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
1,2,3-Trichlorobenzene	9.7	U	6.0	U	6.0	5.4	U	5.4	5.8	U	5.8	5.2	U	5.2	5.8	U	5.8	5.1	U	5.1
Reference			Ref. 47, pp. 84, 85, 291, 292			Ref. 47, pp. 90, 91, 292, 293			Ref. 47, pp. 120, 121, 296, 297			Ref. 47, pp. 96, 97, 293, 294			Ref. 47, pp. 182, 183, 337, 338			Ref. 47, pp. 218, 219, 342, 343		

Sample Purpose:	Source Samples																				
Field Sample ID:	6105-SS05A			6105-S06			6105-SS06A			6105-SS06B			6105-S07			6105-SS07A			6105-SS07B		
CLP ID:	BG5R1			BG5R3			BG5R4			BG5R5			BG5R6			BG5R7			BG5R8		
Date:	6/3/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021			6/3/2021		
Depth Interval (ft bgs):	5.5 - 7			0 - 1.5			1.5 - 2.5			4.8 - 5.8			0 - 2			5 - 7			7 - 8.3		
Comments:																					
Analyte	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**
Dichlorodifluoromethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Chloromethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Vinyl chloride	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Bromomethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Chloroethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Trichlorofluoromethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,1-Dichloroethene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,1,2-Trichloro-1,2,2-trifluoroethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Acetone	32		9.6	32		9.2	8.9	U	8.9	12	U	12	10	U	10	12	U	12	11	U	11
Carbon disulfide	1.8	J	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Methyl Acetate	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Methylene chloride	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
trans-1,2-Dichloroethene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Methyl tert-butyl Ether	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,1-Dichloroethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	UJ	5.2	6.1	U	6.1	5.6	U	5.6
cis-1,2-Dichloroethene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
2-Butanone	9.7		9.6	6.8	J	9.2	8.9	U	8.9	12	U	12	10	U	10	12	U	12	11	U	11
Bromochloromethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	UJ	5.2	6.1	U	6.1	5.6	U	5.6
Chloroform	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	33	J-	5.2	6.1	U	6.1	5.6	U	5.6
1,1,1-Trichloroethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Cyclohexane	3.8 (0.38)	J+	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Carbon tetrachloride	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Benzene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,2-Dichloroethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Trichloroethene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	3.1	J	5.2	6.1	U	6.1	5.6	U	5.6
Methylcyclohexane	9.1 (0.91)	J+	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,2-Dichloropropane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Bromodichloromethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
cis-1,3-Dichloropropene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
4-Methyl-2-pentanone	9.6	U	9.6	9.2	U	9.2	8.9	U	8.9	12	U	12	10	U	10	12	U	12	11	U	11
Toluene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
trans-1,3-Dichloropropene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,1,2-Trichloroethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Tetrachloroethene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	0.79	J	5.6
2-Hexanone	9.6	U	9.6	9.2	U	9.2	8.9	U	8.9	12	U	12	10	U	10	12	U	12	11	U	11
Dibromochloromethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	UJ	5.2	6.1	U	6.1	5.6	U	5.6
1,2-Dibromoethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Chlorobenzene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Ethylbenzene	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
o-Xylene	2.2	J	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
m,p-Xylene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	UJ	6.1	5.6	U	5.6
Styrene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	UJ	6.1	5.6	U	5.6
Bromoform	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	UJ	5.2	6.1	U	6.1	5.6	U	5.6
Isopropylbenzene	8.9		4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,2,3-Trichloropropane	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,1,2,2-Tetrachloroethane	4.8	U	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	R	5.2	6.1	U	6.1	5.6	U	5.6
1,3-Dichlorobenzene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,4-Dichlorobenzene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,2-Dichlorobenzene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,2-Dibromo-3-chloropropane	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	R	5.2	6.1	U	6.1	5.6	U	5.6
1,2,4-Trimethylbenzene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,3,5-Trimethylbenzene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,2,4-trichlorobenzene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
1,2,3-Trichlorobenzene	4.8	UJ	4.8	4.6	U	4.6	4.4	U	4.4	6.2	U	6.2	5.2	U	5.2	6.1	U	6.1	5.6	U	5.6
Reference	Ref. 47, pp. 188, 189, 338, 339			Ref. 47, pp. 102, 103, 294			Ref. 47, pp. 108, 109, 294, 295			Ref. 47, pp. 114, 115, 295, 296			Ref. 47, pp. 196, 197, 340, 341			Ref. 47, pp. 202, 203, 341			Ref. 47, pp. 212, 213, 342		

All results are reported in micrograms per kilogram (µg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref. 47, pp. 2, 158]
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref. 47, pp. 2, 158]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or evaluation of observed contamination.
J+ = The result is an estimated quantity, but the result may be biased high [Ref. 47, pp. 2, 158]
J- = The result is an estimated quantity, but the result may be biased low [Ref. 47, pp. 2, 158]
UJ = The analyte was not detected at a level greater than or equal to the ACRQL. However, the reported ACRQL is approximate and may be innacurate or imprecise [Ref. 47, pp. 2, 158]
R = The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample [Ref. 47, pp. 2, 158]

Values in parentheses have been adjusted per EPA Fact Sheet *Using Quaified Data to Document an Observed Release and Observed Contamination* [Ref. 60, pp. 4-9]
YELLOW HIGHLIGHT indicates that the result meets observed release/observed contamination criteria (≥ 3x maximum background, or ≥ highest RDL if no background detections)

TABLE 2B
SOIL ANALYTICAL DATA - SEMIVOLATILE ORGANIC COMPOUNDS
T & J Salvage

Sample Purpose:	Background Samples																						
Field Sample ID:	6100B-S01			6100B-SS01A			6100B-SS01B			6100B-S02			6100B-S03			6100B-SS02A			6100B-SS02B			3x Maximum Background, or Highest Reporting Detection Limit	
CLP ID:	BG5H8			BG5J1			BG5J2			BG5H9			BG5J0			BG5J3			BG5J4				
Date:	6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021				
Depth Interval (ft bgs):	0 - 2			5 - 6.5			7 - 8.5			0 - 2			0 - 2			5 - 6			6 - 7.5				
Comments:													Duplicate of 6100B-S02										
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Value	Q
1,4-Dioxane	82	U	82	80	U	80	110	U	*110*	77	U	77	77	U	77	83	U	83	96	U	96	110	U
Benzaldehyde	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Phenol	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Bis(2-Chloroethyl)ether	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
2-Chlorophenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2-Methylphenol	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
2,2-oxybis(1-Chloropropane)	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Acetophenone	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
4-Methylphenol	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
N-Nitroso-di-n-propylamine	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Hexachloroethane	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Nitrobenzene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Isophorone	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2-Nitrophenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2,4-Dimethylphenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Bis(2-Chloroethoxy)methane	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2,4-Dichlorophenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Naphthalene	52	J	210	*110*	J	200	270	U	270	200	U	200	200	U	200	210	U	210	240	U	240	330	J
4-Chloroaniline	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Hexachlorobutadiene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Caprolactam	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
4-Chloro-3-methylphenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
1-Methylnaphthalene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2-Methylnaphthalene	210	U	210	*41*	J	200	270	U	270	200	U	200	200	U	200	210	U	210	240	U	240	123	J
Hexachlorocyclopentadiene	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
2,4,6-Trichlorophenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2,4,5-Trichlorophenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
1,1-Biphenyl	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2-Chloronaphthalene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
2-Nitroaniline	210	U	210	200	UJ	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Dimethylphthalate	230		210	200	U	200	270	U	270	*270*		200	200	U	200	210	U	210	240	U	240	810	
2,6-Dinitrotoluene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Acenaphthylene	*160*	J	210	200	U	200	270	U	270	52	J	200	43	J	200	210	U	210	240	U	240	480	J
3-Nitroaniline	410	U	410	400	UJ	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Acenaphthene	*50*	J	210	200	U	200	270	U	270	200	U	200	200	U	200	210	U	210	240	U	240	150	J
2,4-Dinitrophenol	410	U	410	400	UJ	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
4-Nitrophenol	410	U	410	400	UJ	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Dibenzofuran	71	J	210	*100*	J	200	270	U	270	200	U	200	200	U	200	210	U	210	240	U	240	300	J
2,4-Dinitrotoluene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Diethylphthalate	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Fluorene	*81*	J	210	200	U	200	270	U	270	200	U	200	200	U	200	210	U	210	240	U	240	243	J
4-Chlorophenyl-phenylether	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
4-Nitroaniline	410	U	410	400	UJ	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
4,6-Dinitro-2-methylphenol	410	U	410	400	UJ	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
N-Nitrosodiphenylamine	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
1,2,4,5-Tetrachlorobenzene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
4-Bromophenyl-phenylether	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Hexachlorobenzene	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Atrazine	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Pentachlorophenol	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Phenanthrene	*1100*		210	390		200	270	U	270	98	J	200	120	J	200	78	J	210	100	J	240	3300	
Anthracene	*250*		210	79	J	200	270	U	270	200	U	200	200	U	200	210	U	210	240	U	240	750	
Carbazole	*67*	J	410	400	U	400	530	U	530	380	U	380	380	U	380	410	U	410	470	U	470	201	J
Di-n-butylphthalate	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Fluoranthene	*2000*		210	560		200	270	U	270	260		200	280		200	210		210	120	J	240	6000	
Pyrene	*1500*		210	440		200	270	U	270	250		200	240		200	190	J	210	130	J	240	4500	
Butylbenzylphthalate	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
3,3-Dichlorobenzidine	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Benzo(a)anthracene	*1100*		210	290		200	270	U	270	190	J	200	180	J	200	130	J	210	77	J	240	3300	
Chrysene	*930*		210	280		200	270	U	270	190	J	200	170	J	200	130	J	210	74	J	240	2790	
Bis(2-ethylhexyl)phthalate	230		210	220		200	270	U	270	290		200	260		200	*320*		210	300		240	960	
Di-n-octyl phthalate	410	U	410	400	U	400	530	U	*530*	380	U	380	380	U	380	410	U	410	470	U	470	530	U
Benzo(b)fluoranthene	*1100*		210	330		200	270	U	270	280		200	240		200	170	J	210	72	J	240	3300	
Benzo(k)fluoranthene	*390*		210	100	J	200	270	U	270	89	J	200	77	J	200	66	J	210	240	U	240	1170	
Benzo(a)pyrene	*810*		210	250		200	270	U	270	220		200	190	J	200	140	J	210	67	J	240	2430	
Indeno(1,2,3-cd)pyrene	*410*		210	140	J	200	270	U	270	140	J	200	120	J	200	85	J	210	240	U	240	1230	
Dibenzo(a,h)anthracene	*140*	J	210	41	J	200	270	U	270	44	J	200	200	U	200	210	U	210	240	U	240	420	J
Benzo(g,h,i)perylene	*370*		210	140	J	200	270	U	270	150	J	200	120	J	200	89	J	210	240	U	240	1110	
2,3,4,6-Tetrachlorophenol	210	U	210	200	U	200	270	U	*270*	200	U	200	200	U	200	210	U	210	240	U	240	270	U
Reference	Ref. 61, pp. 23, 24, 121, 122, 123			Ref. 61, pp. 61, 62, 125, 126			Ref. 61, pp. 67, 68 , 126, 127			Ref. 61, pp. 49, 50, 123, 124			Ref. 61, pp. 55, 56, 124, 125			Ref. 61, pp. 73, 74, 127, 128			Ref. 61, pp. 79, 80, 128, 129				

Sample Purpose:	Source Samples																							
Field Sample ID:	6105-S01			6105-SS01A			6105-S02			6105-SS02A			6105-SS02B			6105-S03			6105-SS03A			6105-SS03B		
CLP ID:	BG5P8			BG5P9			BG5Q1			BG5Q2			BG5Q3			BG5Q4			BG5Q5			BG5Q6		
Date:	6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021		
Depth Interval (ft bgs):	0 - 2			8.5 - 10			0 - 2			6.5 - 7.5			7.5 - 8.6			0 - 2			5.5 - 6.5			7 - 8.6		
Comments:																								
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
1,4-Dioxane	75	UJ	75	84	UJ	84	78	UJ	78	80	UJ	80	100	U	100	73	UJ	73	76	UJ	76	84	UJ	84
Benzaldehyde	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Phenol	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Bis(2-Chloroethyl)ether	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
2-Chlorophenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2-Methylphenol	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
2,2-oxybis(1-Chloropropane)	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Acetophenone	370	U	370	52	J	410	86	J	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
4-Methylphenol	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
N-Nitroso-di-n-propylamine	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Hexachloroethane	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Nitrobenzene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Isophorone	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2-Nitrophenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2,4-Dimethylphenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Bis(2-Chloroethoxy)methane	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2,4-Dichlorophenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Naphthalene	80	J	190	130	J	210	200	U	200	200	U	200	2000		260	120	J	190	190	U	190	120	J	210
4-Chloroaniline	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Hexachlorobutadiene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Caprolactam	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
4-Chloro-3-methylphenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
1-Methylnaphthalene	190	U	190	69	J	210	140	J	200	200	U	200	780		260	45	J	190	190	U	190	99	J	210
2-Methylnaphthalene	47	J	190	82	J	210	110	J	200	200	U	200	1800		260	80	J	190	190	U	190	200	J	210
Hexachlorocyclopentadiene	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
2,4,6-Trichlorophenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2,4,5-Trichlorophenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
1,1-Biphenyl	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2-Chloronaphthalene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2-Nitroaniline	190	U	190	210	UJ	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Dimethylphthalate	190	U	190	210	U	210	1200		200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2,6-Dinitrotoluene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Acenaphthylene	200		190	110	J	210	40	J	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
3-Nitroaniline	370	U	370	410	UJ	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Acenaphthene	66	J	190	160	J	210	54	J	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2,4-Dinitrophenol	370	U	370	410	UJ	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
4-Nitrophenol	370	U	370	410	UJ	410	390	UJ	390	390	UJ	390	500	U	500	360	UJ	360	380	UJ	380	410	UJ	410
Dibenzofuran	88	J	190	110	J	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2,4-Dinitrotoluene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Diethylphthalate	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Fluorene	140	J	190	180	J	210	69	J	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
4-Chlorophenyl-phenylether	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
4-Nitroaniline	370	U	370	410	UJ	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
4,6-Dinitro-2-methylphenol	370	U	370	410	UJ	410	390	U	390	390	U	390	500	U	500	360	UJ	360	380	U	380	410	U	410
N-Nitrosodiphenylamine	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
1,2,4,5-Tetrachlorobenzene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
4-Bromophenyl-phenylether	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Hexachlorobenzene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Atrazine	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Pentachlorophenol	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Phenanthrene	1300		190	1500		210	230		200	100	J	200	150	J	260	300		190	320		190	310		210
Anthracene	250		190	290		210	200	U	200	200	U	200	260	U	260	84	J	190	72	J	190	71	J	210
Carbazole	100	J	370	120	J	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Di-n-butylphthalate	190	U	190	63	J	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Fluoranthene	1700		190	1500		210	280		200	180	J	200	380		260	450		190	460		190	360		210
Pyrene	940		190	720		210	310		200	150	J	200	300		260	310		190	260		190	250		210
Butylbenzylphthalate	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	46	J	190	42	J	190	210	U	210
3,3-Dichlorobenzidine	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Benzo(a)anthracene	920		190	710		210	250		200	120	J	200	410		260	280		190	290		190	210		210
Chrysene	880		190	730		210	250		200	120	J	200	370		260	260		190	290		190	200	J	210
Bis(2-ethylhexyl)phthalate	81	J	190	230	J	210	410	J	200	120	J	200	140	J	260	340	J	190	300	J	190	190	J	210
Di-n-octyl phthalate	370	U	370	410	U	410	390	U	390	390	U	390	500	U	500	360	U	360	380	U	380	410	U	410
Benzo(b)fluoranthene	1000		190	830		210	320		200	140	J	200	550		260	300		190	320		190	230		210
Benzo(k)fluoranthene	340		190	270		210	120	J	200	50	J	200	160	J	260	110	J	190	100	J	190	85	J	210
Benzo(a)pyrene	320		190	180	J	210	160	J	200	69	J	200	220	J	260	100	J	190	86	J	190	96	J	210
Indeno(1,2,3-cd)pyrene	260		190	170	J	210	120	J	200	58	J	200	190	J	260	84	J	190	72	J	190	75	J	210
Dibenzo(a,h)anthracene	140	J	190	100	J	210	45	J	200	200	U	200	87	J	260	42	J	190	44	J	190	210	U	210
Benzo(g,h,i)perylene	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
2,3,4,6-Tetrachlorophenol	190	U	190	210	U	210	200	U	200	200	U	200	260	U	260	190	U	190	190	U	190	210	U	210
Reference	Ref. 47, pp. 26, 27, 304, 305			Ref. 47, pp. 36, 37, 305, 306			Ref. 47, pp. 42, 43, 306, 307			Ref. 47, pp. 48, 49, 308, 309			Ref. 47, pp. 56, 57, 309, 310			Ref. 47, pp. 62, 63, 310, 311			Ref. 47, pp. 68, 69, 312			Ref. 47, pp. 76, 77, 313, 314		

All results are reported in micrograms per kilogram (µg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref.47, p. 2; 61, p. 2]
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref. 47, p. 2; 61, p. 2]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed contamination.
ITALICS indicate the highest background detection for each analyte (or highest RDL if no background detections)
YELLOW HIGHLIGHT indicates that the result meets observed release/observed contamination criteria (≥ 3x maximum background, or ≥ highest RDL if no background detections)

TABLE 2B
SOIL ANALYTICAL DATA - SEMIVOLATILE ORGANIC COMPOUNDS
T & J Salvage

Sample Purpose:			Source Samples																																						
Field Sample ID:	3x Maximum Background, or Highest Reporting Detection Limit		6105-S04			6105-SS04A			6105-S08			6105-SS04B			6105-S05			6105-SS08A			6105-SS05A			6105-S06			6105-SS06A			6105-SS06B			6105-S07			6105-SS07A			6105-SS07B		
CLP ID:			BG5Q7			BG5Q8			BG5S5			BG5Q9			BG5R0			BG5S6			BG5R1			BG5R3			BG5R4			BG5R5			BG5R6			BG5R7			BG5R8		
Date:			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021			6/3/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021			6/3/2021		
Depth Interval (ft bgs):			0 - 2			4 - 6			4 - 6			8 - 9.5			0 - 2			0 - 2			5.5 - 7			0 - 1.5			1.5 - 2.5			4.8 - 5.8			0 - 2			5 - 7			7 - 8.3		
Comments:									Duplicate of 6105-SS04A									Duplicate of 6105-S05																							
	Value	Q	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
1,4-Dioxane	110	U	79	UJ	79	78	UJ	78	78	UJ	78	77	UJ	77	80	U	80	78	U	78	79	U	79	77	UJ	77	75	UJ	75	81	UJ	81	74	U	74	81	U	81	87	U	87
Benzaldehyde	530	U	390	U	390	390	U	390	390	U	390	110	J	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Phenol	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Bis(2-Chloroethyl)ether	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	UJ	430
2-Chlorophenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2-Methylphenol	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
2,2-oxybis(1-Chloropropane)	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Acetophenone	530	U	390	U	390	390	U	390	390	U	390	160	J	380	110	J	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	46	J	400	430	U	430
4-Methylphenol	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
N-Nitroso-di-n-propylamine	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Hexachloroethane	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Nitrobenzene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Isophorone	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2-Nitrophenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2,4-Dimethylphenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Bis(2-Chloroethoxy)methane	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	UJ	220
2,4-Dichlorophenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Naphthalene	330	U	310		200	150	J	200	1900		200	64	J	200	200	U	200	200	U	200	200	U	200	200	U	200	47	J	190	100	J	210	190	U	190	210	U	210	220	U	220
4-Chloroaniline	530	J	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Hexachlorobutadiene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Caprolactam	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
4-Chloro-3-methylphenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
1-Methylnaphthalene	270	U	190	J	200	86	J	200	2400		200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	65	J	210	190	U	190	210	U	210	220	U	220
2-Methylnaphthalene	123	J	370		200	140	J	200	4700		1000	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	70	J	210	190	U	190	210	U	210	220	U	220
Hexachlorocyclopentadiene	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
2,4,6-Trichlorophenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2,4,5-Trichlorophenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
1,1-Biphenyl	270	U	200	U	200	200	U	200	75	J	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2-Chloronaphthalene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2-Nitroaniline	270	U	200	U	200	200	UJ	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Dimethylphthalate	810		200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2,6-Dinitrotoluene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Acenaphthylene	480	J	200	U	200	150	J	200	130	J	200	200	U	200	200	U	200	200	U	200	200	U	200	44	J	200	330		190	60	J	210	190	U	190	210	U	210	220	U	220
3-Nitroaniline	530	U	390	U	390	390	UJ	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Acenaphthene	150	J	180	J	200	91	J	200	66	J	200	150	J	200	200	U	200	200	U	200	200	U	200	200	U	200	170	J	190	170	J	210	190	U	190	210	U	210	220	U	220
2,4-Dinitrophenol	530	U	390	U	390	390	UJ	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
4-Nitrophenol	530	U	390	UJ	390	390	UJ	390	390	UJ	390	380	UJ	380	390	U	390	390	U	390	390	U	390	380	UJ	380	370	UJ	370	400	UJ	400	370	U	370	400	U	400	430	U	430
Dibenzofuran	300	J	100	J	200	86	J	200	57	J	200	96	J	200	200	U	200	200	U	200	200	U	200	200	U	200	99	J	190	89	J	210	190	U	190	210	U	210	220	U	220
2,4-Dinitrotoluene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Diethylphthalate	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Fluorene	243	J	140	J	200	140	J	200	170	J	200	210		200	200	U	200	200	U	200	200	U	200	200	U	200	260		190	180	J	210	190	U	190	210	U	210	220	U	220
4-Chlorophenyl-phenylether	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
4-Nitroaniline	530	U	390	U	390	390	UJ	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
4,6-Dinitro-2-methylphenol	530	U	390	U	390	390	UJ	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
N-Nitrosodiphenylamine	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
1,2,4,5-Tetrachlorobenzene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
4-Bromophenyl-phenylether	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Hexachlorobenzene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Atrazine	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Pentachlorophenol	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Phenanthrene	3300		1200		200	1500		200	570		200	2800		200	67	J	200	130	J	200	200	U	200	330		200	4700		960	1700		210	80	J	190	88	J	210	130	J	220
Anthracene	750		280		200	310		200	130	J	200	980		200	200	U	200	200	U	200	200	U	200	100	J	200	1300		190	390		210	190	U	190	210	U	210	220	U	220
Carbazole	201		82	J	390	88	J	390	43	J	390	65	J	380	390	U	390	390	U	390	390	U	390	380	U	380	170	J	370	140	J	400	370	U	370	400	U	400	430	U	430
Di-n-butylphthalate	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	670		190	4100		410	190	U	190	50	J	210	220	U	220
Fluoranthene	6000		1100		200	1500		200	510		200	4200		390	110	J	200	290		200	56	J	200	500		200	9000		960	1900		210	130	J	190	130	J	210	170	J	220
Pyrene	4500		560		200	760		200	340		200	2500		200	110	J	200	240		200	53	J	200	310		200	4300		960	1400		210	120	J	190	140	J	210	140	J	220
Butylbenzylphthalate	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	UJ	200	49	J	200	62	J	190	210	U	210	65	J	190	210	U	210	220	U	220
3,3-Dichlorobenzidine	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Benzo(a)anthracene	3300		560		200	950		200	310		200	2700		200	54	J	200	110	J	200	200	U	200	320		200	5000		960	1000		210	57	J	190	64	J	210	70	J	220
Chrysene	2790		480		200	880		200	310		200	2200		200	53	J	200	120	J	200	200	U	200	350		200	4300		960	960		210	69	J	190	73	J	210	68	J	220
Bis(2-ethylhexyl)phthalate	960		280	J	200	260	J	200	560	J	200	110	J	200	110	J	200	250		200	55	J	200	330	J	200	440	J	190	340	J	210	86	J	190	12000	J	1000	220	U	220
Di-n-octyl phthalate	530	U	390	U	390	390	U	390	390	U	390	380	U	380	390	U	390	390	U	390	390	U	390	380	U	380	370	U	370	400	U	400	370	U	370	400	U	400	430	U	430
Benzo(b)fluoranthene	3300		520		200	890		200	440		200	2300		200	57	J	200	130	J	200	200	U	200	390		200	4700		960	1000		210	100	J	190	66	J	210	66	J	220
Benzo(k)fluoranthene	1170		210		200	330		200	150	J	200	870		200	200	U	200	47	J	200	200	U	200	130	J	200	1700		190	400		210	190	U	190	210	U	210	220	U	220
Benzo(a)pyrene	2430		130	J	200	190	J	200	150	J	200	850		200	51	J	200	87	J	200	200	U	200	87	J	200	1000		190	450		210	72	J	190	66	J	210	60	J	220
Indeno(1,2,3-cd)pyrene	1230		120	J	200	170	J	200	140	J	200	550		200	200	U	200	40	J	200	200	U	200	81	J	200	870		190	320		210	44	J	190	210	U	210	220	U	220
Dibenzo(a,h)anthracene	420	J	70	J	200	130	J	200	75	J	200	320		200	200	U	200	200	U	200	200	U	200	57	J	200	600		190	150	J	210	190	U	190	210	U	210	220	U	220
Benzo(g,h,i)perylene	1110		200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
2,3,4,6-Tetrachlorophenol	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Reference			Ref. 47, pp. 82, 83, 314, 315			Ref. 47, pp. 88, 89, 315, 316			Ref. 47, pp. 118, 119, 322, 323			Ref. 47, pp. 94, 95, 317			Ref. 47, pp. 180, 181, 353, 354			Ref. 47, pp. 216, 217, 359, 360			Ref. 47, pp. 186, 187, 354, 355			Ref. 47, pp. 100, 101, 318, 319			Ref. 47, pp. 106, 107, 319, 320			Ref. 47, pp. 112, 113, 321			Ref. 47, pp. 194, 195, 355, 356			Ref. 47, pp. 200, 201, 357			Ref. 47, pp. 210, 211, 358		

All results are reported in micrograms per kilogram (µg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref. 47, pp. 2, 158]
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref. 47, pp. 2, 158]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed contamination.
UJ = The analyte was not detected at a level greater than or equal to the ACRQL. However, the reported ACRQL is approximate and may be innacurate or imprecise [Ref. 47, pp. 158]
YELLOW HIGHLIGHT indicates that the result meets observed release/observed contamination criteria (≥ 3x maximum background, or ≥ highest RDL if no background detections)

TABLE 2C
SOIL ANALYTICAL DATA - PESTICIDES AND AROCLORS
T & J Salvage

Sample Purpose:	Background Samples																				
Field Sample ID:	6100B-S01			6100B-SS01A			6100B-SS01B			6100B-S02			6100B-S03			6100B-SS02A			6100B-SS02B		
CLP ID:	BG5H8			BG5J1			BG5J2			BG5H9			BG5J0			BG5J3			BG5J4		
Date:	6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021		
Depth Interval (ft bgs):	0 - 2			5 - 6.5			7 - 8.5			0 - 2			0 - 2			5 - 6			6 - 7.5		
Comments:													Duplicate of 6100B-S02								
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
alpha-BHC	2.1	U	2.1	2.0	U	2.0	2.7	U	*2.7*	2.0	UJ	2.0	2.0	U	2.0	2.1	U	2.1	2.4	U	2.4
beta-BHC	2.1	U	2.1	2.0	U	2.0	2.7	U	*2.7*	2.0	UJ	2.0	2.0	U	2.0	2.1	U	2.1	2.4	U	2.4
delta-BHC	0.47	J	2.1	2.0	U	2.0	2.7	U	2.7	2.0	UJ	2.0	*0.55*	J	2.0	2.1	U	2.1	2.4	U	2.4
gamma-BHC (Lindane)	*2.9*	J	2.1	1.8	J	2.0	2.7	U	2.7	2.0	UJ	2.0	1.3	J	2.0	2.1	U	2.1	2.4	U	2.4
Heptachlor	2.1	U	2.1	2.0	U	2.0	2.7	U	*2.7*	2.0	UJ	2.0	2.0	U	2.0	2.1	U	2.1	2.4	U	2.4
Aldrin	*0.59*	J	2.1	0.23	J	2.0	2.7	U	2.7	2.0	UJ	2.0	0.39	J	2.0	2.1	U	2.1	2.4	U	2.4
Heptachlor epoxide	2.1	U	2.1	2.0	U	2.0	2.7	U	2.7	*0.30 (3.0)*	J-	2.0	0.56	J	2.0	0.38	J	2.1	0.63	J	2.4
Endosulfan I	2.1	U	2.1	2.0	U	2.0	2.7	U	*2.7*	2.0	UJ	2.0	2.0	U	2.0	2.1	U	2.1	2.4	U	2.4
Dieldrin	40	J	4.1	11	J	3.9	5.3	U	5.3	*12 (143)*	J-	3.8	37		3.8	7.1		4.1	0.29	NJ	4.7
4,4'-DDE	4.1	U	4.1	0.79	J	3.9	5.3	U	5.3	*0.19 (1.9)*	J-	3.8	0.37	J	3.8	4.1	U	4.1	4.7	U	4.7
Endrin	*2.6*	J	4.1	3.9	U	3.9	5.3	U	5.3	3.8	UJ	3.8	3.8	U	3.8	4.1	U	4.1	4.7	U	4.7
Endosulfan II	4.1	U	4.1	3.9	U	3.9	5.3	U	5.3	*0.38 (3.8)*	J-	3.8	3.8	U	3.8	0.36	J	4.1	0.51	J	4.7
4,4'-DDD	0.38	NJ	4.1	*1.1*	J	3.9	5.3	U	*5.3*	3.8	UJ	3.8	1.0	NJ	3.8	0.25	NJ	4.1	4.7	U	4.7
Endosulfan Sulfate	4.1	U	4.1	3.9	U	3.9	5.3	U	5.3	*0.24 (2.4)*	J-	3.8	3.8	U	3.8	4.1	U	4.1	4.7	U	4.7
4,4'-DDT	4.1	U	4.1	3.9	U	3.9	5.3	U	5.3	*0.30 (3.8)*	J-	3.8	0.68	J	3.8	4.1	U	4.1	4.7	U	4.7
Methoxychlor	21	U	21	20	U	20	27	U	*27*	20	UJ	20	20	U	20	21	U	21	24	U	24
Endrin ketone	4.1	U	4.1	3.9	U	3.9	5.3	U	*5.3*	3.8	UJ	3.8	3.8	U	3.8	4.1	U	4.1	4.7	U	4.7
Endrin Aldehyde	1.5	J	4.1	3.9	U	3.9	5.3	U	5.3	*0.22 (2.2)*	J-	3.8	3.8	U	3.8	4.1	U	4.1	4.7	U	4.7
cis-Chlordane	2.1	U	2.1	2.0	U	2.0	2.7	U	*2.7*	2.0	UJ	2.0	2.0	U	2.0	2.1	U	2.1	2.4	U	2.4
trans-Chlordane	2.1	U	2.1	2.0	U	2.0	2.7	U	*2.7*	2.0	UJ	2.0	2.0	U	2.0	2.1	U	2.1	0.29	NJ	2.4
Toxaphene	210	U	210	200	U	200	270	U	*270*	200	UJ	200	200	U	200	210	U	210	240	U	240
Reference	Ref. 61, pp. 22, 133, 134			Ref. 61, pp. 60, 134, 135			Ref. 61, pp. 66, 135			Ref. 61, pp. 48, 134			Ref. 61, pp.54, 134			Ref. 61, pp. 72, 135			Ref. 61, pp. 78, 135		

Sample Purpose:	3x Maximum Background, or Highest Reporting Detection Limit		Source Samples																					
Field Sample ID:			6105-S01			6105-SS01A			6105-S02			6105-SS02A			6105-SS02B			6105-S03			6105-SS03A			6105-SS03B		
CLP ID:			BG5P8			BG5P9			BG5Q1			BG5Q2			BG5Q3			BG5Q4			BG5Q5			BG5Q6		
Date:			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021		
Depth Interval (ft bgs):			0 - 2			8.5 - 10			0 - 2			6.5 - 7.5			7.5 - 8.6			0 - 2			5.5 - 6.5			7 - 8.6		
	Value	Q	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
alpha-BHC	2.7	U	1.9	U	1.9	2.1	UJ	2.1	2.0	U	2.0	2.0	U	2.0	2.6	U	2.6	1.9	U	1.9	2.0	U	2.0	2.1	UJ	2.1
beta-BHC	2.7	U	1.9	U	1.9	2.1	UJ	2.1	2.0	U	2.0	2.0	U	2.0	2.6	U	2.6	1.9	U	1.9	2.0	U	2.0	2.1	UJ	2.1
delta-BHC	1.65	J	0.33	J	1.9	0.28	J-	2.1	2.0	U	2.0	0.26	J	2.0	2.6	U	2.6	1.9	U	1.9	0.33	J	2.0	0.51	J-	2.1
gamma-BHC (Lindane)	8.7	J	0.63	J	1.9	1.7	J-	2.1	0.65	J	2.0	0.39	J	2.0	0.64	J	2.6	0.38	J	1.9	4.3	J	2.0	6.6	J-	2.1
Heptachlor	2.7	U	1.9	U	1.9	2.1	UJ	2.1	2.0	U	2.0	2.0	U	2.0	2.6	U	2.6	1.9	U	1.9	2.0	U	2.0	2.1	UJ	2.1
Aldrin	1.77	J	1.9	U	1.9	2.1	UJ	2.1	0.35	J	2.0	0.49	J	2.0	2.6	U	2.6	1.9	U	1.9	0.68	J	2.0	0.55	J-	2.1
Heptachlor epoxide	9.0	J	1.9	U	1.9	0.31	J-	2.1	0.61	J	2.0	0.47	J	2.0	0.83	J	2.6	0.44	J	1.9	0.57	J	2.0	1.2	J-	2.1
Endosulfan I	2.7	U	1.9	U	1.9	2.1	UJ	2.1	2.0	U	2.0	2.0	U	2.0	2.6	U	2.6	1.9	U	1.9	2.0	U	2.0	2.1	UJ	2.1
Dieldrin	429	J	0.60	NJ	3.7	0.47	NJ	4.2	1.4	J	3.9	1.8	J	3.9	0.98	J	5.0	0.44	NJ	3.6	0.68	NJ	3.8	5.1	J-	4.1
4,4'-DDE	5.7	J	0.54	J	3.7	0.56	J-	4.2	4.8		3.9	0.84	J	3.9	5.0	U	5.0	0.40	NJ	3.6	0.96	J	3.8	1.3	J-	4.1
Endrin	7.8	J	0.90	J	3.7	4.2	UJ	4.2	3.9	U	3.9	3.9	U	3.9	5.0	U	5.0	0.64	J	3.6	3.8	U	3.8	4.1	UJ	4.1
Endosulfan II	11.4	J	0.81	NJ	3.7	1.1	J-	4.2	0.85	J	3.9	0.60	J	3.9	1.2	J	5.0	2.8	J	3.6	1.2	J	3.8	4.1	UJ	4.1
4,4'-DDD	3.3	J	1.4	J	3.7	0.68	J-	4.2	4.3	J	3.9	1.9	J	3.9	0.33	NJ	5.0	1.1	J	3.6	7.6	J	3.8	1.5	NJ	4.1
Endosulfan Sulfate	7.2	J	3.7	U	3.7	4.2	UJ	4.2	3.9	U	3.9	0.91	J	3.9	5.0	U	5.0	3.6	U	3.6	2.3	J	3.8	3.3	NJ	4.1
4,4'-DDT	11.4	J	1.1	J	3.7	4.2	UJ	4.2	1.1	J	3.9	1.9	J	3.9	5.0	U	5.0	3.6	U	3.6	1.5	J	3.8	4.1	UJ	4.1
Methoxychlor	27	U	19	U	19	21	UJ	21	20	U	20	0.90	NJ	20	26	U	26	1.0	NJ	19	5.3	J	20	21	UJ	21
Endrin ketone	5.3	U	3.7	U	3.7	4.2	UJ	4.2	3.9	U	3.9	3.9	U	3.9	5.0	U	5.0	3.6	U	3.6	3.8	U	3.8	4.1	UJ	4.1
Endrin Aldehyde	6.6	J	3.7	U	3.7	4.2	UJ	4.2	0.39	J	3.9	3.9	U	3.9	5.0	U	5.0	3.6	U	3.6	3.8	U	3.8	4.1	UJ	4.1
cis-Chlordane	2.7	U	0.66	J	1.9	2.1	UJ	2.1	2.1	J	2.0	3.1		2.0	0.39	J	2.6	0.31	J	1.9	0.13	NJ	2.0	1.0	J-	2.1
trans-Chlordane	2.7	U	0.81	NJ	1.9	0.19	NJ	2.1	1.9	J	2.0	3.5		2.0	0.90	J	2.6	0.44	NJ	1.9	2.6	NJ	2.0	0.57	NJ	2.1
Toxaphene	270	U	190	U	190	210	UJ	210	200	U	200	200	U	200	260	U	260	190	U	190	200	U	200	210	UJ	210
Reference			Ref. 47, pp. 25, 327, 328			Ref. 47, pp. 35, 328			Ref. 47, pp. 41, 328			Ref. 47, pp. 47, 328, 329			Ref. 47, pp. 55, 329			Ref. 47, pp. 61, 329			Ref. 47, pp. 67, 329			Ref. 47, pp. 75, 329, 330		

Sample Purpose:	Background Samples																				
Field Sample ID:	6100B-S01			6100B-SS01A			6100B-SS01B			6100B-S02			6100B-S03			6100B-SS02A			6100B-SS02B		
CLP ID:	BG5H8			BG5J1			BG5J2			BG5H9			BG5J0			BG5J3			BG5J4		
Date (ft bgs):	6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021		
Depth Interval:																					
Comments:																					
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aroclor-1016	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Aroclor-1221	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Aroclor-1232	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Aroclor-1242	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Aroclor-1248	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Aroclor-1254	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Aroclor-1260	7.2	J	41	39	U	39	53	U	53	38	UJ	38	*7.6*	J	38	42	U	42	47	U	47
Aroclor-1262	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Aroclor-1268	41	U	41	39	U	39	53	U	*53*	38	UJ	38	38	U	38	42	U	42	47	U	47
Reference	Ref. 61, pp. 21, 138			Ref. 61, pp. 59, 138, 139			Ref. 61, pp. 65, 139			Ref. 61, pp. 47, 138			Ref. 61, pp. 53, 138			Ref. 61, pp. 71, 139			Ref. 61, pp. 77, 139		

Sample Purpose:	3x Maximum Background, or Highest Reporting Detection Limit		Source Samples																					
Field Sample ID:			6105-S01			6105-SS01A			6105-S02			6105-SS02A			6105-SS02B			6105-S03			6105-SS03A			6105-SS03B		
CLP ID:			BG5P8			BG5P9			BG5Q1			BG5Q2			BG5Q2ME			BG5Q3			BG5Q4			BG5Q6		
Date (ft bgs):			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021		
Depth Interval:			0 - 2			8.5 - 10			0 - 2			6.5 - 7.5			7.5 - 8.6			0 - 2			5.5 - 6.5			7 - 8.6		
	Value	Q	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aroclor-1016	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	36	U	36	38	U	38	41	U	41
Aroclor-1221	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	36	U	36	38	U	38	41	U	41
Aroclor-1232	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	36	U	36	38	U	38	41	U	41
Aroclor-1242	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	36	U	36	38	U	38	41	U	41
Aroclor-1248	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	36	U	36	38	U	38	41	U	41
Aroclor-1254	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	26	J	36	38	U	38	41	U	41
Aroclor-1260	22.8	J	22	J	37	42	U	42	39	U	39	53	J	39	50	U	50	33	J	36	74	J	38	41	U	41
Aroclor-1262	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	36	U	36	38	U	38	41	U	41
Aroclor-1268	53	U	37	U	37	42	U	42	39	U	39	39	U	39	50	U	50	36	U	36	38	U	38	41	U	41
Reference			Ref. 47, pp. 24, 334			Ref. 47, pp. 34, 334			Ref. 47, pp. 40, 334			Ref. 47, pp. 46, 334			Ref. 47, pp. 54, 334			Ref. 47, pp. 60, 334			Ref. 47, pp. 66, 334, 335			Ref. 47, pp. 74, 335		

All results are reported in micrograms per kilogram (µg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref. 47, p. 2; 61, p. 2]

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref. 47, p. 2; 61, p. 2]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed contamination.

J- = The result is an estimated quantity, but the result may be biased low [Ref. 47, p. 2; 61, p. 2]

UJ = The analyte was not detected at a level greater than or equal to the ACRQL. However, the reported ACRQL is approximate and may be innacurate or imprecise [Ref. 47, p. 2; 61, p. 2]

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified' and the associated numerical value represents its approximate concentration [Ref. 47, p. 2; 61, p. 2]

Values in parentheses have been adjusted per EPA Fact Sheet *Using Quaified Data to Document an Observed Release and Observed Contamination* [Ref. 60, pp. 7-9]
ITALICS indicate the highest background detection for each analyte (or highest RDL if no detections)
YELLOW HIGHLIGHT indicates that the result meets observed release/observed contamination criteria (≥ 3x maximum background, or ≥ highest RDL if no background detections)

TABLE 2C
SOIL ANALYTICAL DATA - PESTICIDES AND AROCLORS
T & J Salvage

Sample Purpose:			Source Samples																	
Field Sample ID:	3x Maximum		6105-S04			6105-SS04A			6105-S08			6105-SS04B			6105-S05			6105-SS08A		
CLP ID:	Background, or		BG5Q7			BG5Q8			BG5S5			BG5Q9			BG5R0			BG5S6		
Date:	Highest Reporting		6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021		
Depth Interval (ft bgs):	Detection Limit		0 - 2			4 - 6			4 - 6			8 - 9.5			0 - 2			0 - 2		
Comments:									Duplicate of 6105-SS04A									Duplicate of 6105-S05		
	Value	Q	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
alpha-BHC	2.7	U	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
beta-BHC	2.7	U	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
delta-BHC	1.65	J	0.47	J	2.0	0.30	J	2.0	0.34	J	2.0	0.37	NJ	2.0	0.23	NJ	2.0	0.83	J	2.0
gamma-BHC (Lindane)	8.7	J	0.76	J	2.0	1.0	J	2.0	1.2	J	2.0	4.5	J	2.0	1.3	J	2.0	0.65	J	2.0
Heptachlor	2.7	U	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	0.14	NJ	2.0	2.0	U	2.0
Aldrin	1.77	J	0.46	J	2.0	2.0	U	2.0	0.18	NJ	2.0	0.59	J	2.0	0.55	J	2.0	0.85	J	2.0
Heptachlor epoxide	9.0	J	0.35	NJ	2.0	2.0	U	2.0	2.0	U	2.0	0.61	J	2.0	0.32	J	2.0	0.52	J	2.0
Endosulfan I	2.7	U	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
Dieldrin	429	J	0.91	NJ	3.9	0.65	NJ	3.9	1.1	NJ	3.9	3.3	NJ	3.8	2.0	NJ	3.9	1.2	NJ	3.9
4,4'-DDE	5.7	J	2.8	J	3.9	2.8	J	3.9	4.0	J	3.9	0.61	J	3.8	2.4	J	3.9	3.7	J	3.9
Endrin	7.8	J	0.22	NJ	3.9	3.9	U	3.9	3.9	U	3.9	3.8	U	3.8	1.7	J	3.9	3.9	U	3.9
Endosulfan II	11.4	J	0.96	J	3.9	1.6	J	3.9	3.9	U	3.9	1.8	NJ	3.8	270		39	0.74	J	3.9
4,4'-DDD	3.3	J	3.2	J	3.9	2.7	J	3.9	3.4	J	3.9	3.3	J	3.8	6.2		3.9	5.7		3.9
Endosulfan Sulfate	7.2	J	3.9	U	3.9	3.9	U	3.9	3.9	U	3.9	3.8	U	3.8	3.9	U	3.9	3.9	U	3.9
4,4'-DDT	11.4	J	0.24	NJ	3.9	16		3.9	28		3.9	5.9		3.8	13	J	3.9	0.99	J	3.9
Methoxychlor	27	U	1.0	NJ	20	20	U	20	20	U	20	20	U	20	20	U	20	20	U	20
Endrin ketone	5.3	U	3.9	U	3.9	3.9	U	3.9	3.9	U	3.9	3.8	U	3.8	3.9	U	3.9	3.9	U	3.9
Endrin Aldehyde	6.6	J	3.9	U	3.9	3.9	U	3.9	3.9	U	3.9	1.4	J	3.8	3.9	U	3.9	3.9	U	3.9
cis-Chlordane	2.7	U	5.9		2.0	1.8	J	2.0	2.4	J	2.0	1.6	J	2.0	3.0	J	2.0	5.8	J	2.0
trans-Chlordane	2.7	U	5.4	J	2.0	2.4		2.0	3.3		2.0	1.3	NJ	2.0	2.9	J	2.0	6.1	J	2.0
Toxaphene	270	U	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200	200	U	200
Reference			Ref. 47, pp. 80, 330			Ref. 47, pp. 87, 330			Ref. 47, pp. 117, 332			Ref. 47, pp. 93, 330, 331			Ref. 47, pp. 179, 368			Ref. 47, pp. 215, 370		

Sample Purpose:	Source Samples																				
Field Sample ID:	6105-SS05A			6105-S06			6105-SS06A			6105-SS06B			6105-S07			6105-SS07A			6105-SS07B		
CLP ID:	BG5R1			BG5R3			BG5R4			BG5R5			BG5R6			BG5R7			BG5R8		
Date:	6/3/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021			6/3/2021		
Depth Interval (ft bgs):	5.5 - 7			0 - 1.5			1.5 - 2.5			4.8 - 5.8			0 - 2			5 - 7			7 - 8.3		
Comments:																					
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
alpha-BHC	2.0	U	2.0	2.0	U	2.0	1.9	U	1.9	2.1	U	2.1	1.9	U	1.9	2.1	U	2.1	2.2	U	2.2
beta-BHC	2.0	U	2.0	2.0	U	2.0	1.9	U	1.9	2.1	U	2.1	1.9	U	1.9	2.1	U	2.1	2.2	U	2.2
delta-BHC	0.36	J	2.0	0.39	J	2.0	1.6	J	1.9	0.50	NJ	2.1	1.9	U	1.9	0.81	J	2.1	0.47	J	2.2
gamma-BHC (Lindane)	1.6	J	2.0	1.2	J	2.0	4.7	J	1.9	12 (1.0)	J+	2.1	0.33	J	1.9	3.0	J	2.1	1.5	J	2.2
Heptachlor	2.0	U	2.0	2.0	U	2.0	1.9	U	1.9	2.1	U	2.1	1.9	U	1.9	0.11	NJ	2.1	2.2	U	2.2
Aldrin	0.26	J	2.0	0.26	J	2.0	1.9	U	1.9	0.63 (0.04)	J+	2.1	1.9	U	1.9	0.51	J	2.1	0.72	J	2.2
Heptachlor epoxide	0.31	J	2.0	2.0	U	2.0	2.3	J	1.9	2.1	U	2.1	1.9	U	1.9	0.58	J	2.1	1.2	J	2.2
Endosulfan I	2.0	U	2.0	2.0	U	2.0	1.9	U	1.9	2.1	U	2.1	1.9	U	1.9	2.1	U	2.1	2.2	U	2.2
Dieldrin	1.3	NJ	3.9	3.2	J	3.8	0.95	NJ	3.7	2.0	NJ	4.0	0.28	NJ	3.7	5.8	J	4.0	4.3	U	4.3
4,4'-DDE	0.61	J	3.9	0.85	J	3.8	3.6	J	3.7	2.5 (0.25)	J+	4.0	2.6	J	3.7	4.8		4.0	1.1	J	4.3
Endrin	0.33	NJ	3.9	0.73	J	3.8	1.6	J	3.7	4.3 (0.30)	J+	4.0	0.27	NJ	3.7	6.5	J	4.0	4.3	U	4.3
Endosulfan II	1.7	J	3.9	16		3.8	2.2	NJ	3.7	4.0	U	4.0	2.6	J	3.7	3.1	J	4.0	4.3	U	4.3
4,4'-DDD	3.3	J	3.9	3.8	J	3.8	5.9	J	3.7	12 (1.2)	J+	4.0	1.7	J	3.7	4.1	J	4.0	2.8	J	4.3
Endosulfan Sulfate	3.9	U	3.9	3.8	U	3.8	3.7	U	3.7	4.0	U	4.0	3.7	U	3.7	4.0	U	4.0	4.3	U	4.3
4,4'-DDT	4.1	J	3.9	3.8	U	3.8	8.9	J	3.7	19 (1.4)	J+	4.0	0.89	J	3.7	40		4.0	5.0	J	4.3
Methoxychlor	4.2	J	20	2.5	J	20	19	U	19	15 (1.5)	J+	21	19	U	19	21	U	21	22	U	22
Endrin ketone	3.9	U	3.9	3.8	U	3.8	3.7	U	3.7	4.0	U	4.0	3.7	U	3.7	4.0	U	4.0	4.3	U	4.3
Endrin Aldehyde	3.9	U	3.9	3.8	U	3.8	0.97	J	3.7	4.0	U	4.0	3.7	U	3.7	4.0	U	4.0	4.3	U	4.3
cis-Chlordane	0.95	J	2.0	1.9	J	2.0	34		3.8	1.4 (0.14)	J+	2.1	1.5	J	1.9	4.7		2.1	0.72	J	2.2
trans-Chlordane	0.70	NJ	2.0	1.6	NJ	2.0	46		3.8	2.4	NJ	2.1	1.1	NJ	1.9	4.9	NJ	2.1	0.69	NJ	2.2
Toxaphene	200	U	200	200	U	200	190	U	190	210	U	210	190	U	190	210	U	210	220	U	220
Reference	Ref. 47, pp. 185, 368, 369			Ref. 47, pp. 99, 331			Ref. 47, pp. 105, 331			Ref. 47, pp. 111, 331			Ref. 47, pp. 193, 369			Ref. 47, pp. 199, 369			Ref. 47, pp. 209, 369		

Sample Purpose:			Source Samples																	
Field Sample ID:	3x Maximum		6105-S04			6105-SS04A			6105-S08			6105-SS04B			6105-S05			6105-SS08A		
CLP ID:	Background, or		BG5Q7			BG5Q8			BG5S5			BG5Q9			BG5R0			BG5S6		
Date (ft bgs):	Highest Reporting		6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021		
Depth Interval:	Detection Limit		0 - 2			4 - 6			4 - 6			8 - 9.5			0 - 2			0 - 2		
Comments:									Duplicate of 6105-SS04A									Duplicate of 6105-S05		
	Value	Q	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aroclor-1016	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Aroclor-1221	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Aroclor-1232	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Aroclor-1242	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Aroclor-1248	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Aroclor-1254	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Aroclor-1260	22.8	J	39	U	39	39	U	39	39	U	39	38	U	38	14	NJ	39	15	J	39
Aroclor-1262	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Aroclor-1268	53	U	39	U	39	39	U	39	39	U	39	38	U	38	39	U	39	39	U	39
Reference			Ref. 47, pp. 80, 335			Ref. 47, pp. 86, 335			Ref. 47, pp. 116, 336			Ref. 47, pp. 92, 335			Ref. 47, pp. 178, 373			Ref. 47, pp. 214, 374		

Sample Purpose:	Source Samples																				
Field Sample ID:	6105-SS05A			6105-S06			6105-SS06A			6105-SS06B			6105-S07			6105-SS07A			6105-SS07B		
CLP ID:	BG5R1			BG5R3			BG5R4			BG5R5			BG5R6			BG5R7			BG5R8		
Date (ft bgs):	6/3/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021			6/3/2021		
Depth Interval:	5.5 - 7			0 - 1.5			1.5 - 2.5			4.8 - 5.8			0 - 2			5 - 7			7 - 8.3		
Comments:																					
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aroclor-1016	39	U	39	38	U	38	37	U	37	40	U	40	37	U	37	40	U	40	43	U	43
Aroclor-1221	39	U	39	38	U	38	37	U	37	40	U	40	37	U	37	40	U	40	43	U	43
Aroclor-1232	39	U	39	38	U	38	37	U	37	40	U	40	37	U	37	40	U	40	43	U	43
Aroclor-1242	39	U	39	38	U	38	37	U	37	40	U	40	37	U	37	40	U	40	43	U	43
Aroclor-1248	39	U	39	38	U	38	37	U	37	40	U	40	37	U	37	40	U	40	43	U	43
Aroclor-1254	39	U	39	28	J	38	37	U	37	49	J	40	37	U	37	40	U	40	43	U	43
Aroclor-1260	66		39	38	U	38	37	U	37	90		40	8.5	J	37	56	J	40	43	U	43
Aroclor-1262	39	U	39	38	U	38	37	U	37	40	U	40	37	U	37	40	U	40	43	U	43
Aroclor-1268	39	U	39	41	J	38	37	U	37	40	U	40	37	U	37	40	U	40	43	U	43
Reference	Ref. 47, pp. 184, 374			Ref. 47, pp. 98, 335			Ref. 47, pp. 104, 335			Ref. 47, pp. 110, 335			Ref. 47, pp. 192, 374			Ref. 47, pp. 198, 374			Ref. 47, pp. 208, 374		

All results are reported in micrograms per kilogram (µg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref. 47, pp. 2, 158]

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref. 47, pp. 2, 158]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed contamination.

J+ = The result is an estimated quantity, but the result may be biased high [Ref. 47, pp. 2, 158]

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified' and the associated numerical value represents its approximate concentration [Ref. 47, pp. 2, 158]

Values in parentheses have been adjusted per EPA Fact Sheet *Using Quaified Data to Document an Observed Release and Observed Contamination* [Ref. 60, pp. 7-9]
YELLOW HIGHLIGHT indicates that the result meets observed release/observed contamination criteria (≥ 3x maximum background, or ≥ highest RDL if no background detections)

TABLE 2D
SOIL ANALYTICAL DATA - INORGANICS
T & J SALVAGE

Sample Purpose:	Background Samples																				
Field Sample ID:	6100B-S01			6100B-SS01A			6100B-SS01B			6100B-S02			6100B-S03			6100B-SS02A			6100B-SS02B		
CLP ID:	BG5H8			BG5J1			BG5J2			BG5H9			BG5J0			BG5J3			BG5J4		
Date:	6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021			6/7/2021		
Depth Interval (ft bgs):	0 - 2			5 - 6.5			7 - 8.5			0 - 2			0 - 2			5 - 6			6 - 7.5		
Comments:													Duplicate of 6100B-S02								
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aluminum	*13000*		20	10000		21	6300		19	12000		20	13000		21	9300		22	6000		20
Antimony	1.4 (2.7)	J-	5.9	0.76	J	6.3	5.8	U	5.8	3.0	J	6.1	*3.3*	J	6.4	2.5	J	6.7	0.86	J	6.0
Arsenic	**10**		0.99	**6.5**		1.1	**9.9**		0.97	**11**		1.0	**10**		1.1	**9.4**		1.1	***23***		1.0
Barium	650	J	20	*790*		21	110		19	210		20	180		21	230		22	150		20
Beryllium	0.37	J	0.49	0.26	J	0.53	*0.59*		0.48	0.39	J	0.51	0.35	J	0.54	0.51	J	0.56	0.45	J	0.50
Cadmium	*0.57*		0.49	0.36	J	0.53	0.12	J	0.48	0.51		0.51	0.50	J	0.54	0.37	J	0.56	0.16	J	0.50
Calcium	19000	J	490	*58000*		1600	3500		480	2800		510	2600		540	4800		560	4800		500
Chromium	22	J	0.99	22		1.1	11		0.97	21		1.0	23		1.1	18		1.1	*54*		1.0
Cobalt	8.4		4.9	9.1		5.3	8.1		4.8	8.4		5.1	8.0		5.4	*10*		5.6	9.5		5.0
Copper	65		2.5	44		2.6	110		2.4	69		2.5	67		2.7	*1800*		11	120		2.5
Iron	*20000*	J	9.9	13000		11	9500		9.7	19000		10	19000		11	15000		11	12000		10.0
Lead	**1000**	J	3.0	***1000***		3.2	180		0.97	370		1.0	380		1.1	390		1.1	400		1.00
Magnesium	3300		490	*3600*		530	580		480	2500		510	2600		540	1500		560	550		500
Manganese	*450*		1.5	300		1.6	180		1.5	350		1.5	400		1.6	290		1.7	180		1.5
Nickel	23		4.0	*45*		4.2	16		3.9	27		4.1	26		4.3	24		4.4	19		4.0
Potassium	1000		490	*1200*		530	740		480	850		510	950		540	870		560	760		500
Selenium	0.83	J	3.5	3.7	UJ	3.7	1.7	J	3.4	3.5	UJ	3.5	3.7	UJ	3.7	0.87	J	3.9	*2.0*	J	3.5
Silver	0.99	U	0.99	1.1	U	*1.1*	0.97	U	0.97	1.0	U	1.0	1.1	U	*1.1*	1.1	U	*1.1*	1.0	U	1.0
Sodium	130	J	490	400	J	530	*1100*		480	510	U	510	540	U	540	250	J	560	280	J	500
Thallium	***2.4***	J	2.5	**1.5**	J	2.6	0.74	J	2.4	**1.4**	J	2.5	**1.8**	J	2.7	**1.2**	J	2.8	**1.3**	J	2.5
Vanadium	*38*		4.9	25		5.3	23		4.8	32		5.1	35		5.4	30		5.6	27		5.0
Zinc	*440*		5.9	410		6.3	180		5.8	330		6.1	280		6.4	390		6.7	220		6.0
Mercury	0.38	J	0.11	0.34	J	0.11	0.17	J	0.12	0.26	J	0.12	0.23	J	0.098	*0.45*	J	0.12	0.43	J	0.12
Reference	Ref. 62, pp. 12, 13, 45, 48			Ref. 62, pp. 29, 30, 46, 48			Ref. 62, pp. 32, 33, 46, 48			Ref. 62, pp. 23, 24, 45, 48			Ref. 62, pp. 26, 27, 46, 48			Ref. 62, pp. 35, 36, 47, 48			Ref. 62, pp. 38, 39, 47, 48		

Sample Purpose:				Source Samples																				
Field Sample ID:	3x Maximum Background, or Highest Reporting Detection Limit		EPA Regional Screening Level (RSL) for Industiral Soil	6105-S01			6105-SS01A			6105-S02			6105-SS02A			6105-SS02B			6105-S03			6105-SS03A		
CLP ID:				BG5P8			BG5P9			BG5Q1			BG5Q2			BG5Q3			BG5Q4			BG5Q5		
Date:				6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021		
Depth Interval (ft bgs):				0 - 2			8.5 - 10			0 - 2			6.5 - 7.5			7.5 - 8.6			0 - 2			5.5 - 6.5		
	Value	Q		Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aluminum	39000		110000	18000		19	11000		22	11000		18	9600		22	8800		24	14000		18	7700		16
Antimony	9.9	J	47	5.7	R	5.7	0.88	J	6.7	5.4	U	5.4	3.4	J	6.6	10		7.3	5.4	U	5.4	6.5		4.8
Arsenic	69		3	**8.3**		0.95	**7.7**		1.1	**7.5**		0.89	**15**		1.1	**24**		1.2	**7.0**		0.91	**19**		0.81
Barium	2370		22000	100		19	490		22	98		18	430		22	1500		73	150		18	2300		81
Beryllium	1.77		230	0.65		0.47	0.48	J	0.55	0.46		0.45	0.61		0.55	0.51	J	0.61	0.61		0.45	0.39	J	0.40
Cadmium	1.71		98	0.35	J	0.47	0.56		0.55	0.39	J	0.45	4.1		0.55	3.6		0.61	0.69		0.45	7.0		0.40
Calcium	174000		NL	4900	J	470	26000		550	11000		450	14000		550	10000		610	8300		450	26000		2000
Chromium	162		180000**	22		0.95	41		1.1	27		0.89	39		1.1	61		1.2	30		0.91	69		0.81
Cobalt	30		35	8.9		4.7	8.9		5.5	7.4		4.5	8.5		5.5	9.5		6.1	11		4.5	12		4.0
Copper	5400		4700	58	J	2.4	260		2.8	50		2.2	220		2.8	1200		9.1	65		2.3	300		2.0
Iron	60000	J	82000	23000		9.5	32000		11	17000		8.9	31000		33	51000		36	23000		9.1	45000		40
Lead	3000		800	180		0.95	520		2.2	290		0.89	**1200**		3.3	**4100**		12	260		0.91	**5900**		16
Magnesium	10800		NL	3500		470	5300		550	4700		450	7900		550	1900		610	4500		450	4000		400
Manganese	1350		2600	290		1.4	340		1.7	220		1.3	210		1.7	330		1.8	580		1.4	360		1.2
Nickel	135		2200	22		3.8	51		4.4	38		3.6	51		4.4	26		4.9	51		3.6	60		3.2
Potassium	3600		NL	1300		470	1300		550	1300		450	1000		550	1000		610	1400		450	1100		400
Selenium	6.0	J	580	1.3	J	3.3	1.9	J	3.9	1.3	J	3.1	12	U	12	2.1	J	13	1.7	J	3.2	14	U	14
Silver	1.1	U	580	0.95	U	0.95	1.1	U	1.1	0.89	U	0.89	0.85	J	1.1	2.2		1.2	0.91	U	0.91	3.2		0.81
Sodium	3300		NL	200	J	470	760		550	860		450	750		550	1900		610	300	J	450	310	J	400
Thallium	7.2	J	1.2	2.4	U	2.4	**1.4**	**J**	2.8	2.2	U	2.2	**1.2**	**J**	2.8	**2.9**	**J**	3.0	1.1	J	2.3	**1.7**	**J**	2.0
Vanadium	114		580	36		4.7	33		5.5	30		4.5	39		5.5	20		6.1	34		4.5	39		4.0
Zinc	1320		35000	150		5.7	730		6.7	210		5.4	1100		6.6	2100		22	200		5.4	3000		24
Mercury	1.35	J	4.6	0.35	J-	0.11	0.36		0.13	0.14		0.10	1.3		0.11	2.5		0.14	0.27		0.10	1.0		0.11
Reference			Ref. 56, pp. 8-18	Ref. 48, pp. 9, 10, 105, 111			Ref. 48, pp. 17, 18, 105, 111			Ref. 48, pp. 19, 20, 106, 111			Ref. 48, pp. 21, 22, 106, 111			Ref. 48, pp. 23, 24, 106, 111			Ref. 48, pp. 25, 26, 107, 111			Ref. 48, pp. 27, 28, 107, 111		

All concentrations presented in milligrams per kilogram (mg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation Limit (ACRQL)
NL = Not Listed
Q = Validation Qualifier
Data Qualifiers:

- U = The analyte was analyzed for, but was not detected above the level of the reported quantitation limit [Ref. 48, p. 2; 62, p. 2]
- J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample [Ref. 48, p. 2; 62, p. 2]
- J- = The result is an estimated quantity, but the result may be biased low [Ref. 48, p. 2; 62, p. 2]
- UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise [Ref. 48, p. 2; 62, p. 2]
- R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample [Ref. 48, p. 2]

Values in parentheses have been adjusted per EPA Fact Sheet *Using Quaified Data to Document an Observed Release and Observed Contamination* [Ref. 60, pp. 7-9]
*Screening levels are based on the generic Regional Screening Level (RSL) for industrial soil from the May 2021 summary table for target hazard quotients (THQ) of 0.1, unless otherwise noted [56, pp. 8-18]
**The generic RSL table does not include an industrial soil RSL for total chromium; the maximum contaminant level (MCL)-based soil screening level (SSL) for protection of groundwater is used [Ref. 56, p. 9]
BOLD indicates detections of an analyte that exceed the Risk Assessment RSL for industrial soil.
ITALICS indicate the highest background detection for each analyte (or highest RDL if no detections)
YELLOW HIGHLIGHT indicates that the result meets observed release/obesrved contamination criteria (≥ 3x maximum background, or ≥ highest RDL if no background detections)

TABLE 2D
SOIL ANALYTICAL DATA - INORGANICS
T & J SALVAGE
Page 2 of 2

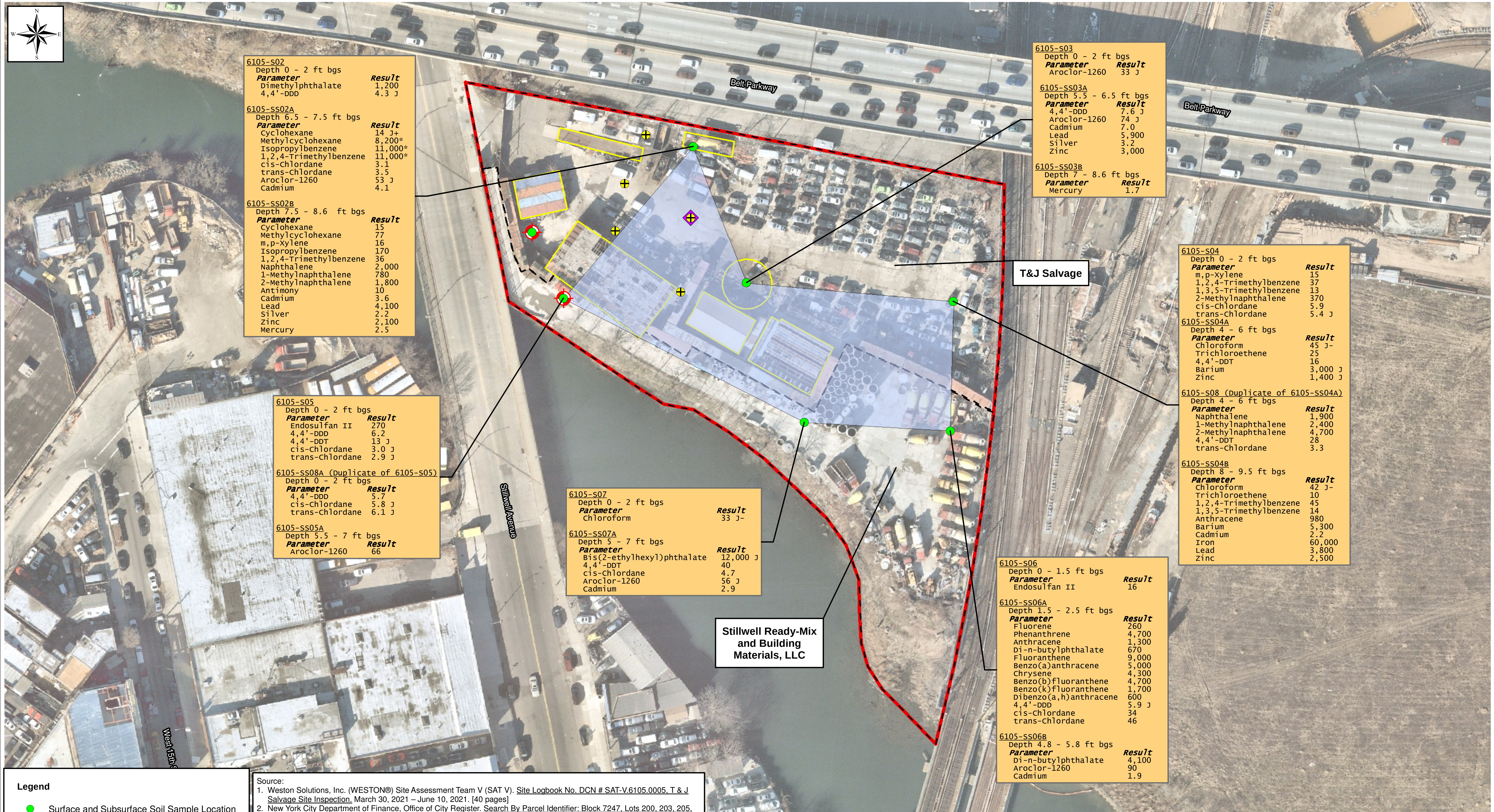
Sample Purpose:	3x Maximum Background, or Highest Reporting Detection Limit		EPA Regional Screening Level (RSL) for Industrial Soil	Source Samples																				
Field Sample ID:				6105-SS03B			6105-S04			6105-SS04A			6105-S08			6105-SS04B			6105-S05			6105-SS08A		
CLP ID:				BG5Q6			BG5Q7			BG5Q8			BG5S5			BG5Q9			BG5R0			BG5S6		
Date:				6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021		
Depth Interval (ft bgs):				7 - 8.6			0 - 2			4 - 6			4 - 6			8 - 9.5			0 - 2			0 - 2		
Comments:													Duplicate of 6105-SS04A									Duplicate of 6105-S05		
	Value	Q		Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aluminum	39000		110000	7100		20	10000		20	8700		16	7900		17	8000		21	10000		21	9500		21
Antimony	9.9	J	47	4.8	J	5.9	5.9	U	5.9	4.9	U	4.9	5.0	U	5.0	3.9	J	6.4	6.3	U	6.3	6.3	U	6.3
Arsenic	69		3	**15**		0.99	**8.1**		0.99	**7.4**	**J**	0.81	**6.3**	**J**	0.84	**12**		1.1	8.4 (4.8)	J+	1.0	8.1 (4.6)	J+	1.0
Barium	2370		22000	290		20	180		20	3000	J	81	830	J	17	5300		210	89		21	87		21
Beryllium	1.77		230	0.32	J	0.49	0.50		0.50	0.35	J	0.41	0.33	J	0.42	0.29	J	0.53	0.47	J	0.52	0.41	J	0.52
Cadmium	1.71		98	1.1		0.49	0.64		0.50	1.7		0.41	1.1		0.42	2.2		0.53	0.98		0.52	0.60		0.52
Calcium	174000		NL	16000		490	18000		500	64000		2000	46000		1300	51000		1600	12000	J	520	22000	J	520
Chromium	162		180000**	63		0.99	25		0.99	28	J	0.81	22	J	0.84	56		1.1	26		1.0	31		1.0
Cobalt	30		35	6.5		4.9	6.8		5.0	6.3		4.1	4.6		4.2	11		5.3	6.8		5.2	6.1		5.2
Copper	5400		4700	200		2.5	68		2.5	48	J	2.0	30	J	2.1	87		2.7	52		2.6	46		2.6
Iron	60000	J	82000	34000		20	19000		9.9	14000	J	8.1	11000	J	8.4	60000		32	18000		10	15000		10
Lead	3000		800	**1400**		3.9	270		0.99	**2800**	**J**	8.1	790	J	2.5	**3800**		11	180		1.0	150		1.0
Magnesium	10800		NL	3200		490	5100		500	7400		410	3100		420	3800		530	4500		520	7100		520
Manganese	1350		2600	320		1.5	260		1.5	230	J	1.2	240	J	1.3	480		1.6	260		1.6	230		1.6
Nickel	135		2200	24		3.9	30		4.0	74	J	3.2	26	J	3.4	58		4.3	34		4.2	26		4.2
Potassium	3600		NL	1700		490	1400		500	1300		410	1200		420	1100		530	1100		520	1200		520
Selenium	6.0	J	580	2.4	J	6.9	1.6	J	3.5	2.8	U	2.8	1.3	J	2.9	11	U	11	1.0	J	3.7	3.7	U	3.7
Silver	1.1	U	580	0.28	J	0.99	0.99	U	0.99	0.20	J	0.81	0.84	U	0.84	0.29	J	1.1	1.0	UJ	1.0	1.0	UJ	1.0
Sodium	3300		NL	540		490	250	J	500	320	J	410	310	J	420	560		530	250	J	520	180	J	520
Thallium	7.2	J	1.2	0.64	J	2.5	2.5	U	2.5	0.89	J	2.0	0.90	J	2.1	**3.6**		2.7	2.6	U	2.6	2.6	U	2.6
Vanadium	114		580	21		4.9	31		5.0	22		4.1	19		4.2	21		5.3	28		5.2	29		5.2
Zinc	1320		35000	700		5.9	220		5.9	1400	J	24	950	J	15	2500		19	360	J	6.3	170	J	6.3
Mercury	1.35	J	4.6	1.7		0.11	0.26		0.10	0.37		0.11	0.33		0.098	0.34		0.11	0.19		0.12	0.20		0.11
Reference			Ref. 56, pp. 8-18	Ref. 48, pp. 29, 30, 107, 111			Ref. 48, pp. 31, 32, 108, 111			Ref. 48, pp. 33, 34, 108, 111			Ref. 48, pp. 43, 44, 110, 111			Ref. 48, pp. 35, 36, 108, 111			Ref. 48, pp. 57, 58, 112, 115			Ref. 48, pp. 73, 74, 114, 115		

Sample Purpose:	Source Samples																				
Field Sample ID:	6105-SS05A			6105-S06			6105-SS06A			6105-SS06B			6105-S07			6105-SS07A			6105-SS07B		
CLP ID:	BG5R1			BG5R3			BG5R4			BG5R5			BG5R6			BG5R7			BG5R8		
Date:	6/3/2021			6/2/2021			6/2/2021			6/2/2021			6/3/2021			6/3/2021			6/3/2021		
Depth Interval (ft bgs):	5.5 - 7			0 - 1.5			1.5 - 2.5			4.8 - 5.8			0 - 2			5 - 7			7 - 8.3		
Comments:																					
	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL	Result	Q	RDL
Aluminum	10000		19	11000		18	10000		17	4100		21	4200		17	4300		18	2800		24
Antimony	5.7	U	5.7	0.84	J	5.3	0.58	J	5.2	1.0	J	6.3	5.1	U	5.1	3.0	J-	5.3	3.1	J	7.1
Arsenic	8.8 (5.0)	J+	0.94	**12**		0.88	**9.2**		0.87	**5.4**		1.1	4.0 (2.2)	J+	0.86	10 (5.7)	J+	0.89	8.9 (5.1)	J+	1.2
Barium	190		19	210		18	2000		87	790		21	61		17	890	J	71	230		24
Beryllium	0.58		0.47	0.50		0.44	0.44		0.43	0.22	J	0.53	0.11	J	0.43	0.19	J	0.44	0.15	J	0.59
Cadmium	1.7		0.47	1.1		0.44	1.1		0.43	1.9		0.53	0.81		0.43	2.9		0.44	0.52	J	0.59
Calcium	7100		470	12000		440	16000		430	11000		530	81000		1700	19000	J	440	850		590
Chromium	23		0.94	23		0.88	25		0.87	30		1.1	14		0.86	120		0.89	59		1.2
Cobalt	6.6		4.7	7.6		4.4	8.1		4.3	5.5		5.3	3.5	J	4.3	6.0		4.4	3.0	J	5.9
Copper	90		2.4	62		2.2	61		2.2	80		2.6	27		8.6	150	J	2.2	87		3.0
Iron	20000		9.4	21000		8.8	19000		8.7	17000		11	14000		8.6	31000		35	32000		12
Lead	320		0.94	380		0.88	**1200**		4.3	**810**		3.2	130		0.86	**1100**	J	3.5	650		2.4
Magnesium	3700		470	4600		440	5400		430	2500		530	40000		1700	9500	J	440	1300		590
Manganese	200		1.4	240		1.3	250		1.3	190		1.6	220		1.3	280	J	1.3	140		1.8
Nickel	25		3.8	27		3.5	30		3.5	24		4.2	22		3.4	43	J	3.5	15		4.7
Potassium	1200		470	1200		440	1200		430	720		530	750		430	700		440	520	J	590
Selenium	1.1	J	3.3	1.0	J	3.1	1.2	J	3.0	0.85	J	3.7	0.92	J	3.0	12	U	12	1.1	J	4.1
Silver	0.94	UJ	0.94	0.88	U	0.88	0.87	U	0.87	0.37	J	1.1	0.18	J	0.86	0.45	J	0.89	1.2	UJ	1.2
Sodium	500		470	160	J	440	180	J	430	150	J	530	190	J	430	210	J	440	900		590
Thallium	2.4	U	2.4	1.1	J	2.2	0.87	J	2.2	2.6	U	2.6	2.1	U	2.1	2.2	UJ	2.2	3.0	U	3.0
Vanadium	34		4.7	29		4.4	29		4.3	23		5.3	30		4.3	30		4.4	14		5.9
Zinc	350		5.7	690		5.3	430		5.2	970		6.3	180		5.1	1100		21	540		7.1
Mercury	0.56		0.11	1.3		0.11	0.27		0.11	0.12		0.12	0.044	J	0.094	0.57		0.12	0.52		0.12
Reference	Ref. 48, pp. 59, 60, 112, 115			Ref. 48, pp. 37, 38, 109, 111			Ref. 48, pp. 39, 40, 109, 111			Ref. 48, pp. 41, 42, 109, 111			Ref. 48, pp. 61, 62, 113, 115			Ref. 48, pp. 63, 64, 113, 115			Ref. 48, pp. 71, 72, 113, 115		

All concentrations presented in milligrams per kilogram (mg/kg)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation Limit (ACRQL)
NL = Not Listed
Q = Validation Qualifier
Data Qualifiers:

- U = The analyte was analyzed for, but was not detected above the level of the reported quantitation limit [Ref. 48, p. 2]
- J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample [Ref. 48, p. 2]
- J+ = The result is an estimated quantity, but the result may be biased high [Ref. 48, p. 2]
- J- = The result is an estimated quantity, but the result may be biased low [Ref. 48, p. 2]
- UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise [Ref. 48, p. 2]

Values in parentheses have been adjusted per EPA Fact Sheet *Using Quaified Data to Document an Observed Release and Observed Contamination* [Ref. 60, pp. 7-9]
*Screening levels are based on the generic Regional Screening Level (RSL) for industrial soil from the May 2021 summary table for target hazard quotients (THQ) of 0.1, unless otherwise noted [Ref. 56, pp. 8-18]
**The generic RSL table does not include an industrial soil RSL for total chromium; the maximum contaminant level (MCL)-based soil screening level (SSL) for protection of groundwater is used [Ref. 56, p. 9]
BOLD indicates detections of an analyte that exceed the Risk Assessment RSL for industrial soil.
YELLOW HIGHLIGHT indicates that the result meets observed release/observed contamination (≥ 3x maximum background, or ≥ highest RDL if no background detection)



6105-S02 — Depth 0 - 2 ft bgs

Parameter	Result
Dimethylphthalate	1,200
4,4'-DDD	4.3 J

6105-SS02A — Depth 6.5 - 7.5 ft bgs

Parameter	Result
Cyclohexane	14 J+
Methylcyclohexane	8,200*
Isopropylbenzene	11,000*
1,2,4-Trimethylbenzene	11,000*
cis-Chlordane	3.1
trans-Chlordane	3.5
Aroclor-1260	53 J
Cadmium	4.1

6105-SS02B — Depth 7.5 - 8.6 ft bgs

Parameter	Result
Cyclohexane	15
Methylcyclohexane	77
m,p-Xylene	16
Isopropylbenzene	170
1,2,4-Trimethylbenzene	36
Naphthalene	2,000
1-Methylnaphthalene	780
2-Methylnaphthalene	1,800
Antimony	10
Cadmium	3.6
Lead	4,100
Silver	2.2
Zinc	2,100
Mercury	2.5

6105-S03 — Depth 0 - 2 ft bgs

Parameter	Result
Aroclor-1260	33 J

6105-SS03A — Depth 5.5 - 6.5 ft bgs

Parameter	Result
4,4'-DDD	7.6 J
Aroclor-1260	74 J
Cadmium	7.0
Lead	5,900
Silver	3.2
Zinc	3,000

6105-SS03B — Depth 7 - 8.6 ft bgs

Parameter	Result
Mercury	1.7

6105-S04 — Depth 0 - 2 ft bgs

Parameter	Result
m,p-Xylene	15
1,2,4-Trimethylbenzene	37
1,3,5-Trimethylbenzene	13
2-Methylnaphthalene	370
cis-Chlordane	5.9
trans-Chlordane	5.4 J

6105-SS04A — Depth 4 - 6 ft bgs

Parameter	Result
Chloroform	45 J-
Trichloroethene	25
4,4'-DDT	16
Barium	3,000 J
Zinc	1,400 J

6105-S08 (Duplicate of 6105-SS04A) — Depth 4 - 6 ft bgs

Parameter	Result
Naphthalene	1,900
1-Methylnaphthalene	2,400
2-Methylnaphthalene	4,700
4,4'-DDT	28
trans-Chlordane	3.3

6105-SS04B — Depth 8 - 9.5 ft bgs

Parameter	Result
Chloroform	42 J-
Trichloroethene	10
1,2,4-Trimethylbenzene	45
1,3,5-Trimethylbenzene	14
Anthracene	980
Barium	5,300
Cadmium	2.2
Iron	60,000
Lead	3,800
Zinc	2,500

6105-S05 — Depth 0 - 2 ft bgs

Parameter	Result
Endosulfan II	270
4,4'-DDD	6.2
4,4'-DDT	13 J
cis-Chlordane	3.0 J
trans-Chlordane	2.9 J

6105-SS08A (Duplicate of 6105-S05) — Depth 0 - 2 ft bgs

Parameter	Result
4,4'-DDD	5.7
cis-Chlordane	5.8 J
trans-Chlordane	6.1 J

6105-SS05A — Depth 5.5 - 7 ft bgs

Parameter	Result
Aroclor-1260	66

6105-S07 — Depth 0 - 2 ft bgs

Parameter	Result
Chloroform	33 J-

6105-SS07A — Depth 5 - 7 ft bgs

Parameter	Result
Bis(2-ethylhexyl)phthalate	12,000 J
4,4'-DDT	40
cis-Chlordane	4.7
Aroclor-1260	56 J
Cadmium	2.9

6105-S06 — Depth 0 - 1.5 ft bgs

Parameter	Result
Endosulfan II	16

6105-SS06A — Depth 1.5 - 2.5 ft bgs

Parameter	Result
Fluorene	260
Phenanthrene	4,700
Anthracene	1,300
Di-n-butylphthalate	670
Fluoranthene	9,000
Benzo(a)anthracene	5,000
Chrysene	4,300
Benzo(b)fluoranthene	4,700
Benzo(k)fluoranthene	1,700
Dibenzo(a,h)anthracene	600
4,4'-DDD	5.9 J
cis-Chlordane	34
trans-Chlordane	46

6105-SS06B — Depth 4.8 - 5.8 ft bgs

Parameter	Result
Di-n-butylphthalate	4,100
Aroclor-1260	90
Cadmium	1.9

Legend

- Surface and Subsurface Soil Sample Location
- Groundwater Sample Location
- Stormwater Sample Location
- Catch Basin Drain
- Contaminated Soil Source (35,365 sq feet)
- Site Features
- Site Division
- Approximate Site Extent

Source:
1. Weston Solutions, Inc. (WESTON®) Site Assessment Team V (SAT V). Site Logbook No. DCN # SAT-V.6105.0005, T & J Salvage Site Inspection. March 30, 2021 – June 10, 2021. [40 pages]
2. New York City Department of Finance, Office of City Register. Search By Parcel Identifier: Block 7247, Lots 200, 203, 205, 206, 211, and 213. Accessed from http://gis.nyc.gov/taxmap/map.htm on June 10, 2021.
3. Nearmap Limited. High Resolution Aerial Imagery of Brooklyn, NY. Accessed from https://www.nearmap.com/us/en on February 26, 2021.
4. Arnone, Russell, and Narendra Kumar, USEPA/R2/HWSB/HWSS. Executive Narrative, Case No.: 49463, SDG Nos.: BG5P8 and BG5R0; with attached analytical data. July 2021. [376 pages] pp. 41, 44, 46–48, 50, 52, 56, 58, 60, 64, 66, 67, 70, 78, 81–82, 84, 87, 90, 94, 96, 99, 102, 105–107, 110, 113, 117–118, 179, 182, 184, 188, 196, 198–199, 201, 218
5. Kumar, Narendra, USEPA/R2/HWSB/HWSS. Executive Narrative, Case No.: 49463, SDG Nos.: BG5P8-M and BG5R0-M; with attached analytical data. July 2021. [119 pages] pp. 22–24, 28–29, 34, 36, 42, 64

Notes:
1. Depth in feet below ground surface (bgs).
2. Resuts for organic constituents presented in micrograms per kilogram (µg/kg).
3. Results for inorganic constituents presented in milligrams per kilogram (mg/kg).
4. J - estimated concentration.
5. The contaminated soil source is shaded. The calculated surface area beneath the concrete is 35,365 square feet.
6. Only showing locations/results that meet the criteria for observed contamination (≥3x maximum background, or ≥ highest RDL if no background detections).

SCALE:

0 40 80 160

Scale in Feet

TITLE:

CONTAMINANT LEVELS AT T & J SALVAGE BROOKLYN, KINGS COUNTY, NY

PROJECT: T & J Salvage SI

CLIENT NAME: EPA

WESTON SOLUTIONS SM

DATE: December 2021

FIGURE #: 5

Acetone and 2-butanone were detected in multiple soil samples at maximum concentrations of 170 μg/kg and 23 μg/kg, respectively [Ref. 47, pp. 44, 50, 58, 64, 70, 78, 82, 90, 96, 102, 182, 188, 196, 218]. Both acetone and 2-butanone are known common laboratory contaminants; therefore, the detections of these two VOCs in soil are not considered part of the contaminated soil source [Ref. 53, pp. 7–8].

The SVOCs fluorene (260 μg/kg), phenanthrene (4,700 μg/kg), anthracene (1,300 μg/kg), fluoranthene (9,000 μg/kg), benzo(a)anthracene (5,000 μg/kg), chrysene (4,300 μg/kg), benzo(b)fluoranthene (4,700 μg/kg), benzo(k)-fluoranthene (1,700 μg/kg), and dibenzo(a,h)anthracene (600 μg/kg) were detected at concentrations greater than or equal to 3x the maximum background levels in subsurface soil sample 6105-SS06A, which was collected near the filled tidal wetlands in the southeastern portion of the site [Ref. 29, pp. 3–4; 47, pp. 106–107]. Anthracene was also detected at concentrations greater than 3x the maximum background level in subsurface sample 6105-SS04B (980 μg/kg) [Ref. 47, p. 94]. Bis(2-ethylhexyl)phthalate and dimethylphthalate were detected at concentrations three times above the maximum background concentration in soil samples 6105-SS07A (12,000 J μg/kg) and 6105-S02 (1,200 μg/kg), respectively [Ref. 47, pp. 42–43, 200–202]. Di-n-butylphthalate was detected at concentrations greater than the highest background RDL in subsurface soil samples 6105-SS06A (670 μg/kg) and 6105-SS06B (4,100 μg/kg) [Ref. 47, pp. 107, 113]. Naphthalene (2,000 μg/kg), 1-methylnaphthalene (780 μg/kg), and 2-methylnaphthalene (1,800 μg/kg) were detected at concentrations above the RDL in subsurface soil sample 6105-SS02B [Ref. 47, p. 56]. 2-methylnaphthalene was also detected in surface soil sample 6105-S04, at a concentration of 370 μg/kg [Ref. 47, p. 82].

The pesticide endosulfan II was detected at concentrations greater than 3x the maximum background level in surface soil samples 6105-S05 (270 μg/kg) and 6105-S06 (16 μg/kg) [Ref. 47, pp. 99, 179]. 4,4'-DDT was detected at concentrations three times above the maximum background concentration in 6105-SS04A (16 μg/kg) and 6105-S05 (13 J μg/kg) [Ref. 47, pp. 87, 179]. 4,4'-DDD was detected at concentrations greater than the RDL in soil samples 6105-S02, 6105-SS03A, 6105-S05, and 6105-SS06A, at a maximum concentration of 7.6 μg/kg [Ref. 47, pp. 41, 67, 105, 179]. Cis- and trans-chlordane were detected at concentrations greater than the highest background RDL in soil samples 6105-SS02A, 6105-S04, 6105-S05, and 6105-SS06A (maximum concentration of 34 μg/kg and 46 μg/kg, respectively) [Ref. 47, pp. 47, 81, 105, 179]. These endosulfan II, 4,4'-DDT, 4,4'-DDD, cis-chlordane, and trans-chlordane detections are more than two orders of magnitude below the EPA's 2021 Regional Screening Levels (RSL) for industrial soil (700,000 μg/kg [endosulfan II], 8,500 μg/kg [4,4'-DDT], 2,500 μg/kg [4,4'-DDD], and 50,000 μg/kg [cis-chlordane and trans-chlordane]) [Ref. 56, pp. 9–11].

The PCB Aroclor-1260 was detected at concentrations greater than 3x the maximum background level in soil samples 6105-SS02A (53 J μg/kg), 6105-SS03A (74 J μg/kg), 6105-SS05A (66 μg/kg), 6105-SS06B (90 μg/kg), and 6105-SS07A (56 J μg/kg) [Ref. 47, pp. 46, 60, 66, 110, 184, 198]. No other Aroclor was detected at concentrations greater than or equal to 3x the maximum background, or greater than the highest RDL when all background results were non-detect.

Lead was detected at concentrations above 3x the maximum background level in subsurface soil samples 6105-SS02B (4,100 mg/kg), 6105-SS03A (5,900 mg/kg), and 6105-SS04B (3,800 mg/kg)

[Ref. 48, pp. 24, 28, 36]. These lead detections were also above the EPA's RSL for industrial soil (800 mg/kg) [Ref. 56, p. 13]. Cadmium was detected at concentrations greater than 3x the maximum background level in samples 6105-SS02A, 6105-SS02B, 6105-SS03A, 6105-SS04B, 6105-SS06B, and 6105-SS07A (maximum concentration of 7.0 mg/kg) [Ref. 48, pp. 22, 24, 28 36, 42, 64]. In addition to lead (4,100 mg/kg) and cadmium (3.6 mg/kg), antimony (10 mg/kg), silver (2.2 mg/kg), zinc (2,100 mg/kg), and mercury (2.5 mg/kg) were also at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, in subsurface soil sample 6105-SS02B (7.5 – 8.6 feet bgs), which was collected in the northern portion of the site, near the automobile crusher [Ref. 40, pp. 2, 5; 48, pp. 23–24]. Silver and mercury were also detected at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, in subsurface soil samples 6105-SS03A (3.2 mg/kg) and 6105-SS03B (1.7 mg/kg), respectively [Ref. 48, pp. 27–30]. Zinc was detected in three other soil samples (6105-SS03A, 6105-SS04A, and 6105-SS04B) at a maximum concentration of 3,000 mg/kg [Ref. 48, pp. 28, 34, 36]. Barium was detected at concentrations greater than 3x the maximum background level in soil samples 6105-SS04A and 6105-SS04B (maximum concentration of 5,300 mg/kg) [Ref. 48, pp. 34, 36]. Iron was detected at concentrations three times above the maximum background level in soil sample 6015-SS04B (60,000 mg/kg) [Ref. 48, p. 36]. All detections for antimony, barium, cadmium, iron, silver, zinc, and mercury were below the applicable RSLs for industrial soil (47 mg/kg, 22,000 mg/kg, 98 mg/kg, 82,000 mg/kg, 580 mg/kg, 35,000 mg/kg, and 4.6 mg/kg, respectively) [Ref. 56, pp. 8–9, 12–13, 16, 18].

Magnesium was detected at concentrations three times above the maximum background level in soil samples 6105-S07 (40,000 mg/kg) [Ref. 48, p. 62]. Magnesium is a naturally occurring mineral with wide ranges of concentrations in natural soils and no corresponding EPA RSL for industrial soil; therefore, the detection of magnesium is not considered part of the contaminated soil source [Ref. 48, p. 62; 58, p. 1].

Stormwater analytical results document the presence of an on-site contaminated stormwater source consisting of the VOCs cyclohexane (5.7 micrograms per liter [μg/L]), methylcyclohexane (5.0 μg/L), toluene (23 μg/L), ethylbenzene (8.2 μg/L), o-xylene (26 μg/L), m,p-xylene (64 μg/L), 1,2,4-trimethylbenzene (41 μg/L), and 1,3,5-trimethylbenzene (11 μg/L); and metals copper (39 μg/L), iron (380 μg/L), and manganese (26 μg/L) [Ref. 47, p. 248; 48, p. 98]. The VOC acetone (27 μg/L) and the inorganic analytes calcium (24,000 μg/L), potassium 5,400 μg/L), and sodium (19,000 μg/L) were detected in the stormwater sample; however, they are not considered to be part of the contaminated stormwater source [Ref. 47, p. 248; 48, p. 98]. Acetone is a common laboratory contaminant [Ref. 53, p. 7]. The inorganic analytes calcium, potassium, and sodium are ubiquitous naturally-occurring minerals. No SVOCs, pesticides, and PCBs were detected above the applicable RDLs in the stormwater sample. Stormwater analytical results are presented in **Tables 3A through 3D**.

Analytical results for groundwater samples collected in support of the SI do not establish an observed release to the groundwater migration pathway (i.e., there were no detections of site-attributable contaminants that meet the criteria for an observed release; non-attributable detections are discussed below). Groundwater analytical results are presented in **Tables 3A through 3D**.

TABLE 3A
AQUEOUS ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
T & J Salvage
Page 1 of 1

Sample Purpose:	**Background Samples**								**Groundwater Samples**									**Stormwater Sample***		
Field Sample ID:	**6100B-GW01**			**6100B-GW03**			**3x Maximum Background, or Highest Reporting Detection Limit**		**6105-GW01**			**6105-GW05**			**6105-GW08**			**6105-CBW01***		
CLP ID:	**B0AA7**			**B0AA9**					**BG5S8**			**BG5T2**			**BG5T5**			**BG5W0**		
Date:	**6/8/2021**			**6/8/2021**					**6/3/2021**			**6/3/2021**			**6/3/2021**			**6/3/2021**		
Screened Interval (ft bgs):	**0 - 10**			**0 - 10**					**0 - 10**			**0 - 10**			**0 - 10**			**Stormwater runoff catch basin**		
Comments:				**Duplicate of 6100B-GW01**											**Duplicate of 6105-GW05**					
Analyte	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Value**	**Q**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**
Dichlorodifluoromethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Chloromethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Vinyl chloride	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Bromomethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Chloroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Trichlorofluoromethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,1-Dichloroethene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	UJ	5.0	5.0	UJ	5.0	5.0	UJ	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Acetone	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	27		10
Carbon disulfide	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	0.85	J-	5.0	5.0	U	5.0	1.3	J	5.0	5.0	U	5.0
Methyl Acetate	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Methylene chloride	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
trans-1,2-Dichloroethene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	UJ	5.0	5.0	UJ	5.0	5.0	UJ	5.0
Methyl tert-butyl Ether	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,1-Dichloroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
cis-1,2-Dichloroethene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	UJ	5.0	5.0	UJ	5.0	5.0	UJ	5.0
2-Butanone	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	8.5	J	10
Bromochloromethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Chloroform	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,1,1-Trichloroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Cyclohexane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.7		5.0
Carbon tetrachloride	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Benzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	1.1	J	5.0
1,2-Dichloroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Trichloroethene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Methylcyclohexane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0		5.0
1,2-Dichloropropane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Bromodichloromethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
cis-1,3-Dichloropropene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
4-Methyl-2-pentanone	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	5.8	J	10
Toluene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	1.0	J	5.0	0.81	J	5.0	23		5.0
trans-1,3-Dichloropropene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,1,2-Trichloroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Tetrachloroethene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2-Hexanone	10	U	*10*	10	U	*10*	10	U	10	U	10	4.0	J	10	10	U	10	10	U	10
Dibromochloromethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,2-Dibromoethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Chlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Ethylbenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	8.2		5.0
o-Xylene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	26		5.0
m,p-Xylene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	64		5.0
Styrene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Bromoform	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Isopropylbenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	0.90	J	5.0
1,2,3-Trichloropropane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,1,2,2-Tetrachloroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,3-Dichlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,4-Dichlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,2-Dichlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,2-Dibromo-3-chloropropane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,2,4-Trimethylbenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	41		5.0
1,3,5-Trimethylbenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	11		5.0
1,2,4-trichlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,2,3-Trichlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Reference	Ref. 61, pp. 25, 26, 108, 109			Ref. 61, pp. 35, 36, 109, 110					Ref. 47, pp. 226, 227, 344, 345			Ref. 47, pp. 236, 237, 345			Ref. 47, pp. 242, 243, 345, 346			Ref. 47, pp. 248, 249, 346, 347		

All results are reported in micrograms per liter (µg/L)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref. 47, p. 158; 61, p. 2]
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref. 47, p. 158; 61, p. 2]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed release.
J- = The result is an estimated quantity, but the result may be biased low [Ref. 47, p. 158; 61, p. 2]
UJ = The analyte was not detected at a level greater than or equal to the ACRQL. However, the reported ACRQL is approximate and may be innacurate or imprecise [Ref. 47, p. 158; 61, p. 2]

ITALICS indicate the highest background detection for each analyte (or highest RDL if no detections)
ORANGE HIGHLIGHT indicates that the result is greater than the RDL; there is no background sample for the matrix for comparison
*Sample is not compared to background concentrations, as sample is an unlike matrix; analytical results do not establish an observed release

TABLE 3B
AQUEOUS ANALYTICAL DATA - SEMIVOLATILE ORGANIC COMPOUNDS
T & J Salvage

Sample Purpose:	**Background Samples**								**Groundwater Samples**									**Stormwater Sample***		
Field Sample ID:	**6100B-GW01**			**6100B-GW03**			**3x Maximum**		**6105-GW01**			**6105-GW05**			**6105-GW08**			**6105-CBW01***		
CLP ID:	**B0AA7**			**B0AA9**			**Background, or**		**BG5S8**			**BG5T2**			**BG5T5**			**BG5W0**		
Date:	**6/8/2021**			**6/8/2021**			**Highest Reporting**		**6/3/2021**			**6/3/2021**			**6/3/2021**			**6/3/2021**		
Screened Interval (ft bgs):	**0 - 10**			**0 - 10**			**Detection Limit**		**0 - 10**			**0 - 10**			**0 - 10**			**Stormwater runoff catch**		
Comments:				**Duplicate of 6100B-GW01**											**Duplicate of 6105-GW05**			**basin**		
	Result	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Value**	**Q**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**
1,4-Dioxane	2.0	U	*2.0*	2.0	U	*2.0*	2.0	U	2.0	UJ	2.0	2.0	U	2.0	2.0	U	2.0	2.0	U	2.0
Benzaldehyde	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Phenol	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Bis(2-Chloroethyl)ether	10	U	*10*	10	U	*10*	10	U	10	UJ	10	10	U	10	10	U	10	10	U	10
2-Chlorophenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2-Methylphenol	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
2,2-oxybis(1-Chloropropane)	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Acetophenone	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	1.7	J	10
4-Methylphenol	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
N-Nitroso-di-n-propylamine	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Hexachloroethane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Nitrobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Isophorone	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2-Nitrophenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2,4-Dimethylphenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Bis(2-Chloroethoxy)methane	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	UJ	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2,4-Dichlorophenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Naphthalene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
4-Chloroaniline	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	UJ	10
Hexachlorobutadiene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Caprolactam	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
4-Chloro-3-methylphenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1-Methylnaphthalene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2-Methylnaphthalene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Hexachlorocyclopentadiene	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	UJ	10
2,4,6-Trichlorophenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2,4,5-Trichlorophenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,1-Biphenyl	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2-Chloronaphthalene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2-Nitroaniline	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Dimethylphthalate	5.0	U	5.0	*1.8*	J	5.0	5.4	J	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2,6-Dinitrotoluene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Acenaphthylene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
3-Nitroaniline	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Acenaphthene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2,4-Dinitrophenol	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
4-Nitrophenol	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Dibenzofuran	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2,4-Dinitrotoluene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Diethylphthalate	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Fluorene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
4-Chlorophenyl-phenylether	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
4-Nitroaniline	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
4,6-Dinitro-2-methylphenol	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
N-Nitrosodiphenylamine	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
1,2,4,5-Tetrachlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
4-Bromophenyl-phenylether	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Hexachlorobenzene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Atrazine	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Pentachlorophenol	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Phenanthrene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Anthracene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Carbazole	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Di-n-butylphthalate	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Fluoranthene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Pyrene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Butylbenzylphthalate	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	UJ	5.0	5.0	UJ	5.0	5.0	UJ	5.0
3,3-Dichlorobenzidine	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	UJ	10
Benzo(a)anthracene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Chrysene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Bis(2-ethylhexyl)phthalate	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	UJ	5.0	5.0	UJ	5.0	4.4	J	5.0
Di-n-octyl phthalate	10	U	*10*	10	U	*10*	10	U	10	U	10	10	U	10	10	U	10	10	U	10
Benzo(b)fluoranthene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Benzo(k)fluoranthene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Benzo(a)pyrene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Indeno(1,2,3-cd)pyrene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Dibenzo(a,h)anthracene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Benzo(g,h,i)perylene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
2,3,4,6-Tetrachlorophenol	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Reference	Ref. 61, pp. 23, 24, 119, 120			Ref. 61, pp. 33, 34, 120, 121					Ref. 47, pp. 224, 225, 360, 361			Ref. 47, pp. 234, 235, 361, 362			Ref. 47, pp. 240, 241, 362, 363			Ref. 47, pp. 246, 247, 363, 364		

All results are reported in micrograms per liter (µg/L)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref. 47, p. 158; 61, p. 2]
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref.47, p. 158; 61, p. 2]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed release.
UJ = The analyte was not detected at a level greater than or equal to the ACRQL. However, the reported ACRQL is approximate and may be innacurate or imprecise [Ref. 47, p. 158; 61, p. 2]

ITALICS indicate the highest background detection for each analyte (or highest RDL if no detections)
*Sample is not compared to background concentrations, as sample is an unlike matrix

TABLE 3C
AQUEOUS ANALYTICAL DATA - PESTICIDES AND AROCLORS
T & J Salvage

Sample Purpose:	**Background Samples**								**Groundwater Samples**									**Stormwater Sample***		
Field Sample ID:	**6100B-GW01**			**6100B-GW03**			**3x Maximum**		**6105-GW01**			**6105-GW05**			**6105-GW08**			**6105-CBW01***		
CLP ID:	**B0AA7**			**B0AA9**			**Background, or**		**BG5S8**			**BG5T2**			**BG5T5**			**BG5W0**		
Date:	**6/8/2021**			**6/8/2021**			**Highest Reporting**		**6/3/2021**			**6/3/2021**			**6/3/2021**			**6/3/2021**		
Screened Interval (ft bgs):	**0 - 10**			**0 - 10**			**Detection Limit**		**0 - 10**			**0 - 10**			**0 - 10**			**Stormwater runoff**		
Comments:				**Duplicate of 6100B-GW01**											**Duplicate of 6105-GW05**			**catch basin**		
	Result	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Value**	**Q**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**
alpha-BHC	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050
beta-BHC	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050
delta-BHC	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.015	J	0.050
gamma-BHC (Lindane)	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.026	J	0.050
Heptachlor	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.023	NJ	0.050
Aldrin	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.021	J	0.050
Heptachlor epoxide	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.031	NJ	0.050
Endosulfan I	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.050	U	0.050	0.050	U	0.050	0.023	J	0.050
Dieldrin	0.10	U	0.10	*0.011*	J	0.10	0.033	J	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10
4,4'-DDE	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.0038	J	0.10	0.10	U	0.10	0.10	U	0.10
Endrin	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10
Endosulfan II	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10
4,4'-DDD	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.0095	J	0.10	0.0062	J	0.10	0.10	U	0.10
Endosulfan Sulfate	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10
4,4'-DDT	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.0073	J	0.10	0.0062	J	0.10	0.10	U	0.10
Methoxychlor	0.50	U	*0.50*	0.50	U	*0.50*	0.50	U	0.50	U	0.50	0.50	U	0.50	0.50	U	0.50	0.50	U	0.50
Endrin ketone	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10
Endrin Aldehyde	0.10	U	*0.10*	0.10	U	*0.10*	0.10	U	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10	0.10	U	0.10
cis-Chlordane	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.0083	J	0.050	0.0056	NJ	0.050	0.050	U	0.050
trans-Chlordane	0.050	U	*0.050*	0.050	U	*0.050*	0.050	U	0.050	U	0.050	0.0077	J	0.050	0.0057	NJ	0.050	0.050	U	0.050
Toxaphene	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Reference	Ref. 61, pp. 22, 133			Ref. 61, pp. 32, 133					Ref. 47, pp. 223, 370			Ref. 47, pp. 233, 370			Ref. 47, pp. 239, 370, 371			Ref. 47, pp. 245, 371		

Sample Purpose:	**Background Samples**								**Groundwater Samples**									**Stormwater Sample***		
Field Sample ID:	**6100B-GW01**			**6100B-GW03**			**3x Maximum**		**6105-GW01**			**6105-GW05**			**6105-GW08**			**6105-CBW01***		
CLP ID:	**B0AA7**			**B0AA9**			**Background, or**		**BG5S8**			**BG5T2**			**BG5T5**			**BG5W0**		
Date (ft bgs):	**6/8/2021**			**6/8/2021**			**Highest Reporting**		**6/3/2021**			**6/3/2021**			**6/3/2021**			**6/3/2021**		
Depth Interval:	**0 - 10**			**0 - 10**			**Detection Limit**											**Stormwater runoff**		
Comments:				**Duplicate of 6100B-GW01**														**catch basin**		
	Result	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Value**	**Q**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**
Aroclor-1016	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1221	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1232	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1242	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1248	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1254	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1260	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	0.12	J	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1262	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Aroclor-1268	1.0	U	*1.0*	1.0	U	*1.0*	1.0	U	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Reference	Ref. 61, pp. 21, 138			Ref. 61, pp. 31, 138					Ref. 47, pp. 222, 374			Ref. 47, pp. 232, 374			Ref. 47, pp. 238, 374			Ref. 47, pp. 244, 375		

All results are reported in micrograms per liter (µg/L)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the ACRQL for sample and method [Ref. 47, p. 158; 61, p. 2]
J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL) [Ref. 47, p. 158; 61, p. 2]. Values qualified J due to issues of quality control as determined by the Data Validator are not considered for selection of 3x background or for evaluation of observed release.
NJ = The analysis indicates the presence of an analyte that has been "tentatively identified' and the associated numerical value represents its approximate concentration [Ref. 47, p. 158]

ITALICS indicate the highest background detection for each analyte (or highest RDL if no detections)
*Sample is not compared to background concentrations, as sample is an unlike matrix

TABLE 3D
GROUNDWATER ANALYTICAL DATA - INORGANICS
T & J SALVAGE

Sample Purpose:	Background Samples						3x Maximum Background, or Highest Reporting Detection Limit		EPA Maximum Contaminant Level (MCL) [µg/L]	EPA National Secondary Maximum Contaminant Level (SMCL) [µg/L]	Release Samples									Stormwater Sample*		
Field Sample ID:	6100B-GW01			6100B-GW03							6105-GW01			6105-GW05			6105-GW08			6105-CBW01*		
CLP ID:	B0AA7			B0AA9							BG5S8			BG5T2			BG5T5			BG5W0		
Date:	6/8/2021			6/8/2021							6/3/2021			6/3/2021			6/3/2021			6/3/2021		
Screened Invertal (ft bgs):	0 - 10			0 - 10							0 - 10			0 - 10			0 - 10			Stormwater runoff catch basin		
Comments:				Duplicate of 6100B-GW01													Duplicate of 6105-GW05					
Analyte	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Value**	**Q**			**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**	**Result**	**Q**	**RDL**
Aluminum	*39*	J	200	200	U	200	117	J	NL	50	200	U	200	200	U	200	**380**		200	200	U	200
Antimony	60	U	*60*	60	U	*60*	60	U	6	NA	60	U	60	60	U	60	60	U	60	60	U	60
Arsenic	*3.3*	J	10	10	UJ	10	9.9	J	10	NA	10	U	10	10	U	10	10	U	10	10	U	10
Barium	*130*	J	200	120	J	200	390	J	2,000	NA	140	J	200	150	J	200	150	J	200	200	U	200
Beryllium	5.0	U	*5.0*	5.0	U	*5.0*	5.0	U	4	NA	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Cadmium	*1.3*	J	5.0	1.2	J	5.0	3.9	J	5	NA	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0
Calcium	*270000*		5000	260000		5000	810000		NL	NL	100000		5000	79000		5000	79000		5000	24000		5000
Chromium	10	U	*10*	10	U	*10*	10	U	100	NA	10	U	10	10	U	10	1.3	J	10	1.5	J	10
Cobalt	50	U	*50*	50	U	*50*	50	U	NL	NL	50	U	50	50	U	50	50	U	50	50	U	50
Copper	*13*	J	25	8.7	J	25	39	J	1,300	1,000	25	U	25	25	U	25	25	U	25	39		25
Iron	3300		100	*3600*		100	10800		NL	300	100	U	100	1700		100	2000		100	380		100
Lead	***21***		10	***21***		10	63		15	NA	10	U	10	10	U	10	10	U	10	10	U	10
Magnesium	*450000*		15000	430000		15000	1350000		NL	NL	35000		5000	37000		5000	36000		5000	1400	J	5000
Manganese	***550***		15	**520**		15	1650		NL	500	11	J	15	130		15	140		15	26		15
Nickel	*6.7*	J	40	6.3	J	40	20.1	J	NL	NL	40	U	40	40	U	40	40	U	40	40	U	40
Potassium	*160000*		5000	*160000*		5000	480000		NL	NL	15000		5000	17000		5000	17000		5000	5400		5000
Selenium	35	U	*35*	35	U	*35*	35	U	50	NA	35	U	35	35	U	35	35	U	35	35	U	35
Silver	10	U	*10*	10	U	*10*	10	U	NL	100	10	U	10	10	U	10	10	U	10	10	U	10
Sodium	*3800000*	J	100000	3600000		100000	11400000	J	NL	NL	270000		10000	280000		10000	280000		10000	19000		5000
Thallium	25	U	25	***9.2***	**J**	25	27.6	J	2	NA	25	U	25	25	U	25	25	U	25	25	U	25
Vanadium	50	U	*50*	50	U	*50*	50	U	NL	NL	50	U	50	50	U	50	50	U	50	50	U	50
Zinc	*250*		60	230		60	750		NL	5,000	88		60	60	U	60	13	J	60	54	J	60
Mercury	0.20	UJ	*0.20*	0.20	UJ	*0.20*	0.20	U	2	NA	0.20	U	0.20	0.20	U	0.20	0.20	U	0.20	0.20	U	0.20
Reference	Ref. 63, pp. 8, 9, 21, 22, 23			Ref. 63, pp. 15, 16, 21, 22, 23					Ref. 65, pp. 5-10	Ref. 64, pp. 2, 3	Ref. 48, pp. 86, 87, 116, 118			Ref. 48, pp. 93, 94, 117, 118			Ref. 48, pp. 95, 96, 117, 119			Ref. 48, pp. 97, 98, 117, 119		

All concentrations presented in milligrams per liter (µg/L)
ft bgs = feet below ground surface
RDL = Reporting Detection Limit, equivalent to the adjusted Contract Required Quantitation Limit (ACRQL)
Q = Validation Qualifier
Data Qualifiers:
U = The analyte was analyzed for, but was not detected above the level of the reported quantitation limit [Ref. 63, p. 2]
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample [Ref. 63, p. 2]
UJ = The analtye was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise [Ref. 63, p. 2]
Screening levels are based on the EPA Maximum Contaminant Levels (MCL) and EPA National Secondary Maximum Contaminant Level (SMCL) [Ref. 64, pp. 2-3; 65, pp. 5-10]
BOLD indicates detection of an analyte exceeds a screening level (EPA MCL or SMCL)
ITALICS indicate the highest background detection for each analyte (or highest RDL if no detections)
ORANGE HIGHLIGHT indicates the results is greater than the RDL; there is no background samplefor the matrix for comparison
*Sample is not compared to background concentrations, as sample is an unlike matrix; analytical results do not establish an observed release

The VOCs carbon disulfide in groundwater samples 6105-GW01 and 6105-GW08 (duplicate of 6105-GW05), toluene in duplicate samples 6105-GW05 and 6105-GW08, and 2-hexanone in sample 6105-GW05, were detected at estimated concentrations below reporting detection limits [Ref. 40, p. 2; 47, pp. 226, 236, 242, 344–346]. These VOCs were not detected at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect, in the contaminated soil source, nor were they detected above RDLs in the stormwater source. Additionally, their concentrations were below the highest background groundwater RDLs (5.0 U µg/L [carbon disulfide and toluene] and 10 U µg/L [2-hexanone]) [Ref. 61, p. 109].

There were no detections of SVOCs in groundwater samples. The pesticides 4,4'-DDE, 4,4'-DDD, 4,4'-DDT, cis-chlordane, and trans-chlordane were detected at relatively low concentrations (0.0038 J µg/L, 0.0095 J µg/L, 0.0073 J µg/L, 0.0083 µg/L, and 0.0077 µg/L, respectively) in groundwater sample 6105-GW05 [Ref. 47, p. 233]. The PCB Aroclor-1260 was detected in sample 6105-GW05 at a concentration of 0.12 J µg/L [Ref. 47, p. 232].

Barium, calcium, magnesium, manganese, potassium, and sodium were detected in all groundwater samples at maximum concentrations of 150 J µg/L, 100,000 µg/L, 37,000 µg/L, 130 µg/L, 17,000 µg/L, and 280,000 µg/L, respectively [Ref. 48, pp. 87, 94, 96]. Aluminum (380 µg/L), chromium (1.3 J µg/L), and zinc (13 J µg/L) were detected in environmental duplicate sample 6105-GW08, but not in the corresponding sample of the field duplicate, 6105-GW05 [Ref. 48, p. 96]. Zinc was also detected in sample 6105-GW01 (88 µg/L) [Ref. 48, p. 87]. Iron was detected in 6105-GW05 (1,700 µg/L) and in its environmental duplicate sample, 6105-GW08 (2,000 µg/L) [Ref. 48, pp. 94, 96].

PART IV: HAZARD ASSESSMENT

GROUNDWATER MIGRATION PATHWAY

1. Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence and relationship to background.

A release of on-site contamination to the groundwater pathway is neither observed nor suspected. As discussed in **Part III**, groundwater was encountered at locations 6105-S01 (i.e., Borehole 1) and 6105-S05 (i.e., Borehole 5) during the June 2021 SI sampling event. Region 2 SAT V installed a 1-inch PVC temporary well for groundwater sample collection at each of these two locations. Analytical results for the groundwater samples collected from the temporary wells in support of the SI do not show detections of site-attributable contaminants that meet the criteria for an observed release.

Ref. 24, p. 4, 8, pp. 27–28, 39–40; 40, Figure 5; 47, pp. 222–227, 232–243; 48, pp. 86–87, 93–96.

2. Describe the aquifer of concern; include information such as depth, thickness, geologic composition, areas of karst terrain, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.

The T & J site is located within the Atlantic Coastal Plain physiographic province of NY State, which is characterized by low relief with elevations ranging from sea level to almost 400 feet above mean sea level. The stratigraphy of the province consists of Late Cretaceous- and Pleistocene-age unconsolidated deposits that overlie a southeastward sloping surface of Precambrian crystalline bedrock. The unconsolidated deposits form six distinct hydrogeologic units (four aquifers and two confining layers). The regional hydrogeologic units, in ascending order, are the Lloyd aquifer, Raritan Formation confining unit, Magothy aquifer, Jameco aquifer, Gardiners clay confining unit, and upper glacial aquifer; these units are not all continuous throughout the region.

Based on borings performed at and near the T & J site by Region 2 SAT V, the site is underlain by fill material and the upper glacial aquifer. This aquifer consists of Pleistocene glacial outwash deposits composed mostly of fine to coarse sand and gravel in Kings County, NY. The hydraulic conductivity of these Pleistocene outwash deposits ranges from less than 4.6×10^{-2} centimeters per second (cm/s) to 9.5×10^{-2} cm/s. At the T & J site investigation area, upper glacial units are underlain by the Gardiners clay at an approximate depth of 40 to 120 feet bgs and the Jameco aquifer at an approximate depth of 80 to 140 feet bgs. The Gardiners clay is recognized as a confining unit. It is composed of clay and few sand and silt beds. The hydraulic conductivity of this confining unit is less than 10^{-6} cm/s. The Jameco aquifer lies unconformably beneath the Gardiners clay throughout Kings County, NY. This aquifer consists of fine to coarse sand and gravel and has an estimated hydraulic conductivity of 9.4×10^{-2} cm/s. Based on these considerations, the upper glacial aquifer is the aquifer of concern at the T & J site; however, there are no known drinking water or resource uses of groundwater in New York City.

The water table surface occurs in the upper glacial aquifer from approximately 4 to 10 feet bgs in Kings County, NY. In general, groundwater flow is to the east and northeast in the Upper Glacial aquifer.

Geologic Unit	Depth (Approximate)	Thickness (Approximate)
Upper glacial aquifer	0 feet	40-120 feet
Gardiners clay	40-120 feet	0-90 feet
Jameco aquifer	80-140 feet	0-100 feet

Ref. 24, pp. 5–9; 27, p. 1; 36, pp. 7–9; 37, pp. 6, 9–10; 38, p. 2; 40, Figure 6.

3. What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?

Analytical results for on-site soil and stormwater samples collected by Region 2 SAT V in June 2021 document on-site contaminated sources (i.e., soil and stormwater). Subsurface soil sample 6105-SS04B (deepest sample collected during the SI sampling event) showed detections of chloroform, TCE, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and anthracene at concentrations greater than or equal to 3x the maximum background concentration, or greater than the highest RDL when all background results were non-detect. This sample was collected from 8–9.5 feet bgs.

During the June 2021 sampling event, groundwater was encountered at Borehole 1 and Borehole 5 at depths of 7.55 feet bgs and 7.82 feet bgs, respectively. Therefore, the depth from the lowest point of waste disposal/storage (i.e., the contaminated soil source) to the highest seasonal level of the saturated zone of the shallow aquifer is 0 feet.

Ref. 8, pp. 6–12, 39–40; 20, p. 9; 47, pp. 94, 96.

4. What is the permeability value of the least permeable continuous intervening stratum between the ground surface and the top of the aquifer of concern?

Direct-push soil cores were collected and logged as part of the June 2021 SI sampling event. The predominant types of soil observed were fine to coarse sand and gravel. Gravel represents the least permeable continuous intervening stratum between the ground surface and the top of the aquifer of concern. Gravel is assigned a hydraulic conductivity of 10^{-2} cm/s.

Ref. 8, pp. 32–38; 39, p. 7.

5. What is the net precipitation at the site (inches)?

Net precipitation at the site is greater than 15 to 30 inches.

Ref. 39, pp. 5–6.

6. What is the distance to and depth of the nearest well that is currently used for drinking purposes?

The groundwater in New York City is not used as a drinking water supply. Therefore, the nearest well used for drinking purposes is outside the 4-mile target distance limit (TDL).

Ref. 36, p.5; 38, p. 1; 40, Figure 6.

7. If a release to groundwater is observed or suspected, determine the number of people that obtain drinking water from wells that are documented or suspected to be actually contaminated by hazardous substance(s) attributed to an observed release from the site.

A release of on-site contamination to the groundwater pathway is neither observed nor suspected; see the response to Question No. 1 for a description of the likelihood of a release. As discussed in **Part III,** analytical results for groundwater samples collected during the June 2021 SI sampling event did not document an observed release. Additionally, there are no drinking water wells located within 4 miles of the site. The groundwater in New York City is not used as a drinking water supply.

Ref. 36, p.5; 38, p. 1; 40, Figure 6; 47, pp. 222–227, 232–237; 48, pp. 86–87, 93–94.

8. Identify the population served by wells located within 4 miles of the site that draw from the aquifer of concern.

There are no populations served by wells within 4 miles of the site. The groundwater in New York City is not used as a drinking water supply.

Ref. 36, p.5; 38, p. 1; 40, Figure 6.

State whether groundwater is blended with surface water, groundwater, or both before distribution.

The groundwater in the TDL is not used as a drinking water supply. Therefore, there is no groundwater blending or distribution.

Ref. 36, p.5; 38, p. 1; 40, Figure 6.

Is a designated wellhead protection area within 4 miles of the site?

There are no drinking water supply wells and, therefore, no designated wellhead protection areas (WHPA), within 4 miles of the site.

Ref. 40, Figure 6.

Does a waste source overlie a designated or proposed wellhead protection area? If a release to groundwater is observed or suspected, does a designated or proposed wellhead protection area lie within the contaminant boundary of the release?

The groundwater in New York City is not used as a drinking water supply. Therefore, there are no designated or proposed WHPAs within the contaminant boundary of the release.

Ref. 36, p.5; 38, p. 1.

9. Identify one of the following resource uses of groundwater within 4 miles of the site (i.e., commercial livestock watering, ingredient in commercial food preparation, supply for commercial aquaculture, supply for major, or designated water recreation area, excluding drinking water use, irrigation (5-acre minimum) of commercial food or commercial forage crops, unusable).

There are no known resource uses of groundwater within 4 miles of the site.

Ref. 36, pp. 5, 10–14; 40, Figure 6.

SURFACE WATER MIGRATION PATHWAY

10. Describe the likelihood of a release of contaminant(s) to surface water as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence and relationship to background.

A release to surface water is documented by chemical analysis. The nearest surface water body is Coney Island Creek, located immediately south of the T & J site. The site's shoreline along Coney Island Creek mostly consists of a steep, vegetated embankment, with a concrete block retaining wall evident along the southwestern corner of the property. Most of the site and surrounding area is covered by impermeable surfaces such as concrete pavement. The creek's watershed drainage is dominated by shallow groundwater discharge, CSO and MS4 discharges, and overland flow.

As shown in **Figure 3**, the shortest distance from the documented contaminated soil source (i.e., Source 1) and contaminated stormwater source (i.e., Source 2) to Coney Island Creek are 27.5 feet and 144 feet, respectively. The following site-related PAHs were detected at concentrations greater than 3x the maximum background level, or above the highest background RDL when all background results were non-detect, in a sediment sample collected immediately south of the T & J site by Region 2 SAT V in April 2021 in support of a Coney Island Creek SI: phenanthrene (810 μg/kg), fluoranthene (1,300 J μg/kg), and benzo(b)fluoranthene (1,100 μg/kg). Iron was detected in a surface water sample collected at the same location. Phenanthrene, fluoranthene, and benzo(b)fluoranthene were detected in on-site soil sample 6105-S06A (1-2.5 feet bgs) at concentrations of 4,700 μg/kg, 9,000 μg/kg, and 4,700 μg/kg, respectively. Iron was detected at three times the maximum background level in soil sample 6105-SS04B (60,000 mg/kg). All four contaminants are considered part of the contaminated soil source due to the history of automobile salvage operations at the site.

Most of the contaminated soil source is covered by concrete that shows moderate to severe staining from on-site salvage operations and is weathered with cracks and other damage in some areas. Historical aerial photos indicate that automobile salvage operations were conducted on exposed soil from 1940 until at least 1966 along the creek bank. Additionally, the current property owner, M.A.A.T.T. LLC, filled and paved over the tidal wetlands adjacent to the creek without the necessary NYSDEC permits.

The site's stormwater runoff is captured by five catch basins located near the center of the site. These catch basins consist of concrete-lined pits. The stormwater captured by the basins evaporates over time and there is no known connection between the catch basins and the creek. During the March 2021 reconnaissance, Region 2 SAT V observed moderate to severe staining on the on-site concrete pavement. Two of the on-site catch basins were observed to be almost full to capacity with stagnant stormwater. A slight sheen was noticeable on the stagnant stormwater. An aqueous sample from one of these catch basins contained VOCs and metals derived from the automobile salvage operations at the site, including iron. Based on the reconnaissance observations and the finite volume of the catch basins, it is possible for the stormwater in the catch basins to overflow to the surrounding areas, including Coney Island Creek, during significant rainfall events. SPDES Notice of Intent forms submitted by T & J to NYSDEC indicate that site stormwater runoff enters the New York City Municipal Separate Stormwater Sewer System (i.e., roadside drains, swales, ditches, culverts, etc.) and discharges into Coney Island Creek.

Based on these considerations, although there are multiple possible sources of PAHs and iron within the watershed, the release of phenanthrene, fluoranthene, benzo(b)fluoranthene, and iron are considered at least partially attributable to the T & J site.

Ref. 3, pp. 12–13; 4, p. 1; 6, pp. 11–14; 8, pp. 4–5, 15, 19–20; 19, p. 1; 20, pp. 1, 5; 31, p. 1; 40, Figures 5 and 7; 54, p. 20; 59, pp. 2, 4, 6.

11. Identify the nearest downslope surface water. If possible, include a description of possible surface drainage patterns from the site.

The nearest downslope surface water is Coney Island Creek, an arm of the New York-New Jersey (NY-NJ) Harbor estuary. The shortest distance from Source 1 to Coney Island Creek is 27.5 feet. Most of the site and surrounding area is covered by impermeable surfaces such as concrete pavement, and the stormwater runoff in the site is captured by catch basins. It is possible for the stormwater captured by the catch basins to overflow during rainfall events. This would result in the transport of stormwater contaminants to the surrounding areas, including Coney Island Creek.

Coney Island Creek is a tidal inlet that extends for approximately 1.2 miles from the site into Gravesend Bay. The 15-mile TDL extends from that confluence through six bays (Lower New York Bay, Upper New York Bay, Newark Bay, Raritan Bay, Sandy Hook Bay, and Jamaica Bay) and 4 rivers (East River, Hudson River, Kill Van Kull, and Arthur Kill), and terminates in the Atlantic Ocean south of Brooklyn. With the exception of the Atlantic Ocean, the water bodies within the 15-mile TDL are part of the core area of the NY-NJ Harbor estuary, which was designated as an "Estuary of National Significance" by EPA in 1988.

Ref. 8, pp. 4–5, 15, 17, 19–20; 40, Figures 5 and 7; 41, pp. 5, 93.

12. What is the distance in feet to the nearest downslope surface water? Measure the distance along a course that runoff can be expected to follow.

The distances from Source 1 and Source 2 to the nearest downslope surface water (i.e., Coney Island Creek) are approximately 27.5 feet and 144 feet, respectively. Source 1 is covered by an impermeable surface (i.e., concrete pavement) that shows moderate to severe staining from on-site salvage operations and is weathered with cracks and other damage in some areas, thereby making historical drainage pathways to the creek uncertain.

Ref. 8, pp. 15, 17; 40, Figures 5 and 7.

13. Identify all surface water body types within 15 downstream miles.

Most of the water bodies within the TDL are part of the core area of the New York-New Jersey Harbor estuary.

Name	Water Body Type	Flow (cfs)	Salt/Fresh/Brackish
Atlantic Ocean	Moderate depth ocean	N/A	Salt
NY-NJ Harbor Estuary*	Coastal tidal waters	N/A	Salt

*The following New York-New Jersey Harbor estuary water bodies are within the 15-mile TDL: Coney Island Creek, Gravesend Bay, New York Upper Bay, Newark Bay, Raritan Bay, Sandy Hook Bay, Jamaica Bay, East River, Hudson River, Kill Van Kull, and Arthur Kill.

Ref. 39, p. 11; 40, Figure 6 and 7; 41, pp. 5, 93.

14. Determine the 2-yr, 24-hr rainfall (inches) for the site.

The 2-year, 24-hour rainfall for the site location is 3.44 inches.

Ref. 42, p. 1.

15. Determine size of the drainage area (acres) for sources at the site.

Topography in the site area is generally flat with runoff from neighboring properties intercepted by storm drains on adjacent streets. There is no upslope area that can contribute runoff to the site. Therefore, the drainage area for sources at the site is equal to the site area, or 1.79 acres. The contaminated source is currently covered by concrete that routes runoff to the catch basins.

Ref. 8, pp. 4–5, 15, 20; 40, Figure 5.

16. Describe the predominant soil group in the drainage area.

The site and surrounding area are covered predominantly by impermeable surfaces (for example, concrete pavement), which are evaluated under soil group designation D.

Ref. 8, pp. 4–5, 15; 39, p. 9; 43, pp. 10–11.

17. Determine the type of floodplain that the site is located within.

The Federal Emergency Management Agency (FEMA) has designated the northern portion and southern portion of the property to be within Flood Zone X and Flood Zone AE, respectively. Zone X is defined as an area with moderate flood hazard (i.e., 0.2% annual chance of flooding). Zone AE is defined as an area within the base floodplain (i.e., special flood hazard area). The base flood elevation for the southern portion of the property is 10 feet.

Ref. 44, p. 1.

18. Identify drinking water intakes in surface waters within 15 miles downstream of the point of surface water entry. For each intake identify: the name of the surface water body in which the intake is located, the distance in miles from the point of surface water entry, population served, and stream flow at the intake location.

The estuarine waters within the TDL are classified as saline waters that are not used for drinking water supply. There are no drinking water intakes within 15 miles downstream of the site.

Ref. 40, Figure 5.

19. Identify fisheries that exist within 15 miles downstream of the point of surface water entry.

The 15-mile TDL for the site is mostly within the NY-NJ Harbor Estuary, which is used for fishing and is home to more than 100 fish species, including striped bass and bluefish, as well as crabs, clams, mussels, and other invertebrates. Region 2 SAT V personnel observed fishing for human consumption in the western portion of Coney Island Creek at the Kaiser Park fishing pier. Fishing is also known to occur in other parts of the creek.

Fishery Name	Water Body Type	Flow (cfs)	Salt/Fresh/Brackish
Atlantic Ocean	Moderate depth ocean	N/A	Salt
NY-NJ Harbor Estuary	Coastal tidal waters	N/A	Salt

Ref. 4, pp. 2, 14, 21; 39, p. 11; 40, Figure 7; 41, pp. 99–100; 67, pp. 1–2.

20. Identify surface water sensitive environments that exist within 15 miles of the point of surface water entry.

The following HRS- eligible sensitive environments exist along the 15-mile surface water pathway.

- 7 Federally Endangered/Threatened Species Habitats
- 13 State Endangered/Threatened Species Habitats
- 1 National Seashore Recreation Area (including NY Protected Areas Database)
- 2 State Designated Natural Areas (including NYSDEC Critical Environmental Areas, and NYSDEC Natural Heritage Sites)
- 1 Unique Biotic Community (including the Hudson River Significant Biodiversity Area)

There is a designated estuary subject to actual contamination within the creek segment. There is a total of 35.7 miles of wetland frontage along the water bodies within the TDL subject to potential contamination.

Water Body	Water Body Type	Flow (cfs)	Dilution Weight	Wetlands Frontage (miles)
Upper Bay	Coastal tidal waters	N/A	0.0001	1.8
Lower Bay	Coastal tidal waters	N/A	0.0001	0.2
Jamaica Bay	Coastal tidal waters	N/A	0.0001	27.3
Kill Van Kull	Coastal tidal waters	N/A	0.0001	1.0
Newark Bay	Coastal tidal waters	N/A	0.0001	0.0
Arthur Kill	Coastal tidal waters	N/A	0.0001	1.3
Raritan Bay	Coastal tidal waters	N/A	0.0001	2.8
Sandy Hook Bay	Coastal tidal waters	N/A	0.0001	1.3
			Total	35.7

Ref. 40, Figure 7; 41, pp. 1–5, 8, 9, 15, 36, 39, 43, 45, 47, 50, 53, 55, 58, 61, 64–66, 71, 73, 75, 77, 78, 83, 86, 89; 59, pp. 1–2, 6.

21. If a release to surface water is observed or suspected, identify any intakes, fisheries, and sensitive environments from question Nos. 18-20 that are or may be actually contaminated by hazardous substance(s) attributed to an observed release of from the site.

A release to surface water is documented by chemical analysis; see the response to Question No. 10 for a description of the likelihood of a release. The release documented at T & J results in actual contamination of the NY-NJ Harbor Estuary, which is a sensitive environment identified under the National Estuary Program that encompasses all of Coney Island Creek. There is a downstream fishery at Kaiser Park that is subject to potential contamination.

Ref. 4, pp. 2, 14, 21; 40, Figure 7; 41, pp. 99–100.

22. Identify whether the surface water is used for any of the following purposes, such as: irrigation (5 acre minimum) of commercial food or commercial forage crops, watering of commercial livestock, commercial food preparation, recreation, potential drinking water supply.

Surface water within 15 miles of the site is used for primary (swimming and baptisms) and secondary (recreational fishing and boating) contact recreation.

Ref. 41, pp. 103, 120, 126–127; 17, pp. 2–3; 45, p. 2.

SOIL EXPOSURE AND SUBSURFACE INTRUSION PATHWAY

23. Determine the number of people that occupy residences or attend school or day care on or within 200 feet of observed contamination.

Analytical results for soil samples collected by Region 2 SAT V during the June 2021 SI sampling event document the presence of a contaminated soil source at the site; however, the source is completely covered by concrete and is therefore not evaluated as an area of observed soil contamination (AOC). The T & J site consists of an automobile salvage operation. There are no residences, schools, or day care facilities on or within 200 feet of the site. Most of the property is paved with concrete, with narrow strips of vegetated land in some areas. The property is surrounded by other commercial and industrial facilities and is bounded by fencing to the west, north and east, and by Coney Island Creek to the south. Access to the site is through a single manually-operated gate located along Stillwell Avenue.

Ref. 4, p. 1; 40, Figure 5.

24. Determine the number of people that regularly work on or within 200 feet of observed contamination.

T & J Auto Salvage operates in the northern portion of the subject property. There are fewer than five full-time T & J employees. The southern portion of the property, leased by Stillwell

Ready-Mix and Building Materials, is used for the storage of concrete mixing trucks and large-diameter concrete piping. As employee presence is intermittent, the number of workers is unknown but is assumed to be at least one for the purposes of this report. As the contaminated soil source is covered by an impervious surface, there is no AOC at the site and no exposure by site workers.

Ref. 8, pp. 1, 5; 40, Figure 5.

25. Identify terrestrial sensitive environments on or within 200 feet of observed contamination.

The site location is in a long-urbanized area. Current land use within the area is mostly commercial and industrial facilities. Based on these considerations, there are no terrestrial sensitive environments on or within 200 feet of the site.

Ref. 4, p. 1; 40, Figure 5.

26. Identify whether there are any of the following resource uses, such as commercial agriculture, silviculture, livestock production or grazing within an area of observed or suspected soil contamination.

The site is an active salvage yard located is in a long-urbanized area. Current land use within the area is mostly commercial and industrial facilities. There is no resource use of soil on the site.

Ref. 8, pp. 15–21; 40, Figure 5.

27. Is there an area of subsurface contamination (ASC) that could have an impact on regularly occupied structures via subsurface intrusion?

Analytical results for subsurface soil samples collected in June 2021 document the presence of the following VOCs (maximum concentrations): chloroform (45 J- µg/kg), cyclohexane (140 [14] J+ µg/kg), trichloroethene (25 µg/kg), methylcyclohexane (8,200 µg/kg), m,p-xylene (16 µg/kg), isopropylbenzene (11,000 µg/kg), 1,2,4-trimethylbenzene (11,000 µg/kg), and 1,3,5-trimethylbenzene (14 µg/kg). These VOCs were detected at three out of the seven on-site sample locations (Boreholes 2, 4, and 7) at depths ranging from 0 to 9.5 feet bgs. The results suggest that an area of subsurface contamination (ASC) may be present; however, an ASC was not delineated and subsurface intrusion has not been evaluated. Based on these considerations, subsurface intrusion is a possible pathway of concern but is not documented as such.

Ref. 24, pp. 2–4; 40, Figure 5; 47, pp. 50, 58, 84, 90, 96, 196.

28. Describe the likelihood of exposure to contaminant(s) in the subsurface intrusion component as follows: observed exposure, suspected exposure, potential exposure, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed exposure, define the supporting direct observation or analytical evidence and the relationship to background.

There is no known or suspected exposure in the subsurface intrusion component. The 2021 SI sampling results indicate the presence of VOCs in the subsurface; the SI did not include soil gas or indoor air sampling; therefore, it is not known if the ASC would extend beneath the office building, which is the only regularly occupied structure.

Ref. 24, pp. 2–4; 40, Figure 5.

29. Identify the number of individuals residing in or attending school or day care in regularly occupied structures within documented areas of observed exposure (AOE). Also identify the number of individuals residing in or attending school or day care in regularly occupied structures within the ASC but outside the documented AOE(s).

There are no known AOEs associated with the site, and there are no residences, schools, or day care centers where subsurface contamination is documented. Therefore, there are no individuals residing in or attending school or day care in regularly occupied structures within documented ASCs or AOEs.

Ref. 40, Figure 5.

30. Identify the number of full-time workers and the number of part-time workers in regularly occupied structures within the documented AOE(s). Also identify the number of full-time workers and the number of part-time workers in regularly occupied structures within the ASC but outside the documented AOE(s).

There are no known AOEs associated with the site, and the on-site buildings are not known to be within the documented ASC. Therefore, there are no full-time or part-time workers in regularly occupied structures within documented AOEs or ASCs.

Ref. 40, Figure 5.

31. Is there resource use of regularly occupied establishments (e.g., library, church, tribal facility) within either an AOE or an ASC?

There are no known AOEs associated with the site, and there are no libraries, churches, or tribal facilities where subsurface contamination is documented. Therefore, there are no resource uses of regularly occupied structures within documented ASCs or AOEs.

Ref. 8, pp. 5, 15–21; 40, Figure 5.

AIR MIGRATION PATHWAY

32. Describe the likelihood of release of hazardous substances to air as follows: observed release, suspected release, or none. Identify contaminants detected or suspected and provide a rationale for attributing them to the site. For observed release, define the supporting analytical evidence and relationship to background.

A release to air is neither observed nor suspected. The T & J subject property has been utilized for automobile salvage activities since at least 1940. There are no active emissions of CERCLA-eligible hazardous substances reported at the site.

During the June 2021 SI sampling event, Region 2 SAT V conducted air monitoring and screening of soil cores with a PID. There were PID readings above background in surface soil at Borehole 2 (maximum concentration 23 ppm), Borehole 3 (5.6 ppm), and Borehole 4 (31.6 ppm); however, there were no readings above background in ambient air. The SVOC dimethylphthalate was detected greater than 3x the maximum background level in surface soil sample 6105-S02. The VOCs m,p-xylene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene; and the SVOC 2-methylnaphthalene were detected above the highest background RDLs (all background results were non-detect) in surface soil sample 6105-S04. Both Borehole 2 and Borehole 4 are in an area covered by concrete. Based on these considerations, the current potential for gaseous and particulate (i.e., contaminated fugitive dust) air release from the contaminated soil source is unlikely. Historical releases may have occurred as the site operated on exposed soil until from 1940 to 1966.

Ref. 5, pp. 35–36; 6, pp. 14–15; 7, p. 5; 8, p. 24; 24, pp. 5–6; 40, Figure 5.

33. Determine populations that reside within 4 miles of the site.

The total population residing within 4 miles of the site is 830,707, as follows:

Distance Ring (mi)	Population
On-site	0
>0 - ¼	1,315
>¼ - ½	13,218
>½ - 1	69,167
>1 - 2	208,197
>2 - 3	225,308
>3 - 4	313,008
Total	830,707

Ref. 46, p. 1.

34. Identify sensitive environments, including wetlands and associated wetlands acreage, within 4 miles of the site.

Distance (miles)	Wetlands Acreage	Sensitive Environments
On-site	0	None identified
0–¼	0	NJ-NY Harbor Estuary
¼–½	0	None identified
>½–1	0	None identified
>1–2	0	NYSDEC Critical Environmental Area
>2–3	7.5	Gateway National Recreation Area NYSDEC-designated Natural Heritage Site Hudson River Significant Biodiversity Area
>3 – 4	51.0	4 Federal-listed endangered/threated species habitats 8 State-listed endangered/threatened species habitats
Total Acreage	58.5	

Ref. 40, Figure 6; 41, p. 3.

35. If a release to air is observed or suspected, determine the number of people that reside or are suspected to reside within the area of air contamination from the release.

See the response to Question No. 32 for a description of the likelihood of a release.

36. If a release to air is observed or suspected, identify any sensitive environments, listed in question No. 34, that are or may be located within the area of air contamination from the release.

See the response to Question No. 32 for a description of the likelihood of a release.

REFERENCES

1. U.S. Environmental Protection Agency (EPA). Superfund Site Information: Site Information – T&J Salvage (EPA ID: NYN000203544). Accessed and downloaded from https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm?id=0203544 on June 15, 2021. [1 page]

2. T&J Auto Salvage (T&J). T&J Auto Salvage Home Webpage. Accessed from https://www.tandjsalvage.com/ (website currently inactive) on April 1, 2020. [1 page]

3. Weston Solutions, Inc. (WESTON®). Final Pre-CERLCA Screening/Site Discovery Summary of Findings Report, TDD No.: 0004/2003-04, Coney Island Creek (excerpts). August 12, 2020. [13 pages]

4. Snyder, Scott, WESTON. Abbreviated Preliminary Assessment Checklist – T&J Auto Salvage, Brooklyn, New York. September 2020. [23 pages]

5. Environmental Data Resources (EDR). Certified Sanborn® Map Report, T&J Auto Salvage, Inquiry Number: 6175983.3. September 1, 2020. [38 pages]

6. EDR. The EDR Aerial Photo Decade Package, T&J Auto Salvage, Inquiry Number: 6175983.8. September 1, 2020 [15 pages]

7. EDR. The EDR-City Directory Abstract, T&J Auto Salvage, Inquiry Number: 6175983.5. September 1, 2020. [8 pages]

8. WESTON. T & J Salvage Site Logbook, DCN # SAT-V.6105.0005; with attached photo documentation and field logs. March 30, 2021 – June 10, 2021. [40 pages]

9. New York City Department of Finance (NYC DOF), Office of the City Register. Recording and Endorsement Cover Page, Document ID: 2004071000028001; with attached Deed for Block 7247, Lots 200, 203, 205, 206, 211, and 213. May 21, 2004. [8 pages]

10. NYF DOF, Office of the City Register. ACRIS Search Results By Parcel Identifier, Block 7247, Lots 200, 203, 205, 206, 211, and 213. Accessed from https://a836-acris.nyc.gov/CP/CoverPage/MainMenu on September 1, 2020. [12 pages]

11. New York State Department of Environmental Conservation (NYSDEC). Spill Report Form, Spill Name: T&J Salvage Corp, Spill Number: 0330015. June 18, 2003. [3 pages]

12. NYSDEC. Spill Report Form, Spill Name: T&J Auto Salvage, Spill Number: 0330026. August 12, 2003. [2 pages]

REFERENCES (continued)

13. EDR. The EDR Radius Map™ Report with GeoCheck®, Inquiry Number: 6175983.2s (excerpts). September 1, 2020. [34 pages]

14. NYSDEC. Order on Consent, DEC. File No. R2-20040304-56, T&J Salvage Corporation. April 2004. [6 pages]

15. Key Environmental. Remedial Investigation Report – [Prepared for] T&J Salvage Corporation, 2647 Stillwell Avenue, Brooklyn, New York, DEC Spills #0330026, DEC Order On Consent File #R2-20040304-56. February 18, 2005. [142 pages]

16. Bravo-Ruiz, Habib, WESTON. Project Note to T&J Auto Salvage Site file, Subject: Summary of the T&J Facility Vehicle Dismantling Annual Reports; with attached Vehicle Dismantling Facility, Motor Vehicle Repair Shop and Mobile Vehicle Crusher Annual Reports. July 7, 2021. [67 pages]

17. Strehlau-Howay, Lindsey, et al., Pace University. The NYC Social Assessment: Understanding Waterfront Users, Coney Island Creek Waterfront Profile. 2019. [48 pages]

18. EPA. Enforcement and Compliance History Online (ECHO), Detailed Facility Report, T&J Salvage Corp, 2647 Stillwell Ave, Brooklyn, NY 11223. Accessed and downloaded from https://echo.epa.gov/detailed-facility-report?fid=110030928806 on June 15, 2021. [4 pages]

19. Bravo-Ruiz, Habib, WESTON. Project Note to T&J Auto Salvage Site file, Subject: Summary of State Pollutant Discharge Elimination System Notice of Intent Forms; with attached forms. July 8, 2021 [36 pages].

20. Bravo-Ruiz, Habib, WESTON. Project Note to T&J Auto Salvage Site file, Subject: Phone Conversation Record – Topic: Questions Regarding On-site Catch Basins and National Pollutant Discharge Elimination System Monitoring Point; with attached registration information. June 28, 2021. [7 pages]

21. Bravo-Ruiz, Habib, WESTON. Project Note to T&J Auto Salvage Site file, Subject: Summary of National Pollutant Discharge Elimination System Monitoring Reports; with attached discharge monitoring reports. July 8, 2021. [17 pages]

22. New York City Department of Environmental Protection (NYCDEP). Coney Island Creek (webpage). Accessed and downloaded from https://www1.nyc.gov/site/dep/water/coney-island-creek.page on March 31, 2020. [2 pages]

23. Tuero, Caroline, WESTON. Project Note to Site File, Subject: Coney Island Creek Analytical Data. September 24, 2020. [29 pages]

REFERENCES (continued)

24. Bravo-Ruiz, Habib, WESTON. Letter to Denise Zeno, EPA, Subject: [attached] Sampling Trip Report, T&J Salvage (DCN # SAT-V.6105.0046). June 9, 2021. [27 pages]

25. Bravo-Ruiz, Habib, WESTON. Letter to Denise Zeno, EPA, Subject: [attached] Sampling Trip Report, Background for Coney Island Creek Upland Sites (DCN: SAT-V.6100.0048) (as modified by WESTON to correct CLP Nos. BOAA7 and BOAA9). June 11, 2021. [23 pages]

26. New York State Department of State (NYSDOS). Entity Information, M.A.A.T.T. LLC, Kings County, New York. Accessed and downloaded from https://apps.dos.ny.gov/publicInquiry/EntityDisplay on March 11, 2021. [2 pages]

27. United States Geological Survey (USGS). Coney Island Quadrangle, New York – New Jersey, 7.5-Minute Series (Topographic). 2019. [1 map]

28. Steubing, Kyle, NYSDEC. Letter to Angelo Paolino, T & J Salvage Corp., Re: T & J Salvage Corp – Brooklyn, VDF registration, Registration # 24V50008. February 14, 2020. [2 pages]

29. White, Robert M., AKRF Environmental and Planning Consultants. Letter to John Cryan, NYSDEC, Re: 2647 Stillwell Avenue, Tidal Wetlands Adjacent Area Jurisdictional Determination, Subject Site: Brooklyn, NY (Tax Block 7247, Lots 200, 203, 205, 211, and 213); with attached maps and photos. June 17, 2015. [10 pages]

30. NYSDEC. Notice of Incomplete Application, Applicant: T&J Salvage Corp, 2647 Stillwell Ave, Brooklyn, NY 11223. August 20, 2015. [4 pages]

31. NYSDEC. Notice of Violation, Name: M.A.A.T.T. LLC. October 3, 2016. [1 page]

32. Streeter, Meredith, NYSDEC. Letter to T & J Salvage Corp., Re: Notice of Violation for Failure to Submit the Annual Certification Report (ACR), Facility: T & J Salvage Corp. May 22, 2019. [2 pages]

33. EPA. Envirofacts Facility Registry Service (FRS) Facility Detail Report, T & J Salvage Corp. Accessed and downloaded from https://ofmpub.epa.gov/frs_public2/fii_query_dtl.disp_program_facility?p_registry_id=110030928806; last updated on September 24, 2015. [2 pages]

34. WESTON. Coney Island Creek Site Logbook 1 of 2, DCN # SAT-V.6100.0001 (excerpts); with attached photo documentation and field logs. May 28, 2021 – June 7, 2021. [8 pages]

REFERENCES (continued)

35. WESTON. Coney Island Creek Site Logbook 2 of 2, DCN # SAT-V.6100.0056; with attached photo documentation and field log. June 8, 2021. [4 pages]

36. Chu, Anthony, et al., USGS. Public-Supply Pumpage in Kings, Queens, and Nassau Counties, New York, 1880-1995; Open File Report 97-567 (excerpts). 1997. [15 pages]

37. Doriski, Thomas P. and Franceska Wilde-Katz, USGS. Geology of the "20-foot" Clay and Gardiners Clay in Southern Nassau and Southwestern Suffolk Counties, Long Island, New York; Water Resources Report 82-4056 (excerpts). 1983. [13 pages]

38. USGS. Water-Table Altitude in King and Queens Counties, New York, in March 1997; Fact Sheet FS 134-97. November 1997. [2 pages]

39. EPA. The Hazard Ranking System – 40 CFR 300, Appendix A (excerpts). July 1, 2019. [12 pages]

40. WESTON. Figure 1: Site Location Map; Figure 2: Site Features Map; Figure 3: Site Sample Location Map; Figure 4: Background Sample Location Map; Figure 5: Contaminant Levels at T & J Salvage; Figure 6: 4-Mile Radius Map; and Figure 7: 15-Mile Radius Map, T&J Auto Salvage. December 2021. [7 Maps]

41. Gaffney, Kelly, WESTON. Project Note to T&J Auto Salvage Site file, Subject: Sensitive Environments and Wetlands Calculations; with attachments. August 12, 2021. [128 pages]

42. National Oceanic and Atmospheric Administration (NOAA). NOAA National Weather Service, Atlas 14, Volume 10, Version 3: Point Precipitation Frequency Estimates. Accessed from (Precipitation Frequency Data Server) https://hdsc.nws.noaa.gov/hdsc/pfds/ on June 15, 2021. [4 pages]

43. United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). Part 630 Hydrology National Engineering Handbook – Chapter 7: Hydrologic Soil Groups. May 2007. [14 pages]

44. Federal Emergency Management Agency (FEMA). National Flood Hazard Layer FIRMette, Panel No. 3604970353F. June 15, 2021. [1 page]

45. Spivack, Caroline, Brooklyn Paper. Apartments Dumped 200,000 gallons of Sewage per Day into Coney Island Creek. Accessed and downloaded from https://www.brooklynpaper.com/apartments-dumped-200000-gallons-of-sewage-per-day-into-coney-island-creek/. October 4, 2016. [6 pages]

REFERENCES (continued)

46. Gaffney, Kelly, WESTON. Project Note to T&J Auto Salvage Site file, Subject: Determination of Population within the 4-mile Target Distance Limit of the Site. June 16, 2021. [1 page]

47. Arnone, Russell and Narendra Kumar, USEPA/R2/HWSB/HWSS. Executive Narratives, Case No.: 49463, SDG Nos.: BG5P8 and BG5R0 (Organics); with attached analytical data (as modified by WESTON to indicate Field Sample IDs). July 2021. [376 pages]

48. Kumar, Narendra, USEPA/R2/HWSB/HWSS. Executive Narratives, Inorganics, Case No.: 49463, SDG Nos.: BG5P8, BG5R0 (Inorganics); with attached analytical data (as modified by WESTON to indicate Field Sample IDs). July 2021. [119 pages]

49. Delaware Health and Social Services, Division of Public Health. Frequently Asked Questions, Chloroform. Accessed and downloaded from https://dhss.delaware.gov/dhss/dph/files/chloroformfaq.pdf. September 2013. [2 pages]

50. Chin, Jo-Yu and Stuart A. Batterman, University of Michigan. VOC composition of current motor vehicle fuels and vapors, and collinearity analyses for receptor modeling. National Institute of Health (NIH) Public Access Author Manuscript. Accessed and downloaded from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4324831/. February 11, 2015. [19 pages]

51. Franklin Associates, LTD. (on behalf of EPA). Composition and Management of Used Oil Generated in the United States. September 1984. [36 pages]

52. National Institute of Health (NIH). PubChem Compound Summary: Trichloroethylene. Accessed and downloaded from https://pubchem.ncbi.nlm.nih.gov/compound/6575. July 24, 2021. [1 page]

53. EPA. Guidance for Data Usability in Risk Assessment (Part A), Final (EPA Publication 9285.7-09A) (excerpts). April 1992. [9 pages]

54. Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological Profile for Polycyclic Aromatic Hydrocarbons (excerpts). August 1995. [27 pages]

55. EPA. America's Children and the Environment, Third Edition: Biomonitoring – Phthalates. August 2017. [20 pages]

56. EPA. Risk Assessment Regional Screening Levels (RSLs), Generic Tables as of May 2021 (THQ=0.1). Accessed and downloaded from https://www.epa.gov/risk/regional-screening-levels-rsls on July 31, 2021. [18 pages]

REFERENCES (continued)

57. EPA. Fact Sheet EPA530-F-18-001: Preventing and Detecting PCB Contamination in Used Oil. February 2018. [4 pages]

58. University of Minnesota Extension. Magnesium for crop production. Accessed and downloaded from https://extension.umn.edu/micro-and-secondary-macronutrients/magnesium-crop-production. 2021. [4 pages]

59. Tuero, Caroline, WESTON. Project Note to T&J Salvage site file, Subject: Coney Island Creek Surface Water and Sediment Sampling and Analytical Results; with attached figures, sampling trip report, and analytical data. August 11, 2021. [1113 pages]

60. EPA. Using Qualified Data to Document an Observed Release and Observed Contamination (EPA 540-F-94-028). November 1996. [18 pages]

61. Kumar, Narendra, USEPA/R2/HWSB/HWSS. Executive Narrative, Case No.: 49462, SDG Nos.: BG5H8 (Organics); with attached analytical data. July 2021. [140 pages]

62. Arnone, Russell, USEPA/R2/HWSB/HWSS. Executive Narrative, Case No.: 49462, SDG Nos.: BG5H8 (Inorganics - Soil); with attached analytical data. July 2021. [48 pages]

63. Arnone, Russell, USEPA/R2/HWSB/HWSS. Executive Narrative, Case No.: 49462, SDG Nos.: B0AA7 (Inorganics- Groundwater); with attached analytical data. July 2021. [23 pages]

64. EPA. Drinking Water Regulations and Contaminants. Accessed and downloaded from https://www.epa.gov/sdwa/drinking-water-regulations-and-contaminants. Last updated on January 5, 2021. [5 pages]

65. EPA. National Primary Drinking Water Regulations. Accessed and downloaded from https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations. Last updated on January 5, 2021. [21 pages]

66. Wisconsin Department of Natural Resources. Universal Waste Requirements. Accessed and downloaded from https://dnr.wi.gov/files/PDF/pubs/wa/WA1900.pdf. 2020. [5 pages]

67. Guidesly. Coney Island Creek. Accessed and downloaded from https://guidesly.com/fishing/waterbodies/Coney-Island-Creek-New-York on October 1, 2021. [3 pages]